

CHAPTER 4.0

ERRATA

4.1 INTRODUCTION

This Errata has been prepared in response to additional information that became available subsequent to publication of the Draft EIR for the Drew Solar Project (proposed Project) which was circulated for a 50-day public review period in compliance with Public Resources Code 21091 from May 10 through July 1, 2019.

The minor modifications to the text of the Draft EIR detailed below reflect clarifications that do not constitute significant new information and do not change any of the impact conclusions of the Draft EIR. These minor modifications do not constitute changes to the Project or environmental setting nor would they result in any new significant environmental impacts. In addition, these minor revisions to the text, as described below, would not cause a substantial increase in the severity of any environmental impacts. Rather, these changes merely clarify portions of the text. Amended text is identified by page number. Clarifications to the draft EIR text are shown with underline and text removed from the draft EIR is shown with ~~striketrough~~.

4.2 CHANGES AND EDITS TO THE DRAFT EIR

The following changes and edits represent revisions to information included in the Draft EIR based upon: (1) additional or revised information required to prepare a response to a specific comment; (2) updated information required due to the passage of time; and/or (3) typographical errors. Given the minor changes associated with the document, the information added to the EIR does not meet the requirements for recirculation pursuant to Section 150885.5 of the State CEQA Guidelines.

A brief description of what the change or edit is provided as well as a reference to where the change or edit occurs in the document (page number, paragraph, sentence, table, etc). Changes to the portion of text are included in quotes ("").

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EXECUTIVE SUMMARY

Page ES-2 of the Draft EIR, last bullet describing the Development Agreement has been revised as follows to clarify the length of the CUP:

"A Development Agreement between the County and the Applicant to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. Pursuant to the terms of the Development Agreement, thereafter, the CUPs would be valid for the remaining

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~~period of 40 30 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term.~~

CHAPTER 1.0, INTRODUCTION

Page 1.0-2, the bullet describing the Development Agreement has been revised as follows to clarify the length of the CUP and to add the Water Supply Assessment:

- “A Development Agreement between the County and the Applicant to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. ~~Pursuant to the terms of the Development Agreement, thereafter, the CUPs would be valid for the remaining period of 40 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved.~~ Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term.”
- A Water Supply Assessment has been prepared as required by Senate Bill 610 demonstrating whether project water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.”

Page 1.0-2, the paragraph under 1.8.1 Notice of Preparation has been revised as follows:

“The Notice of Preparation (NOP) for the Drew Solar Project EIR was issued by the Imperial County Department of Planning and Development Services on May 17, 2018. ~~Seven~~ Eight letters were received in response to the NOP from various agencies and individuals.”

CHAPTER 2.0, PROJECT DESCRIPTION

Page 2.0-2 of the Draft EIR, the third full paragraph has been revised as follows:

“The ICPDS Department received the following applications submitted by the Applicant dated December ~~28~~ 29, 2017, January ~~8~~ 9, 2018, July 5, 2018, July 31, 2018, August 28, 2018, January 22, 2019.”

Page 2.0-2 of the Draft EIR, the third bullet describing the Development Agreement has been revised as follows to clarify the length of the CUP:

- “A Development Agreement between the County and the Applicant to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. ~~Pursuant to the terms of the Development Agreement, thereafter, the CUPs would be valid for the remaining period of 40 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved.~~ Pursuant to the terms of the Development Agreement, the CUPs may

have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term."

Page 2.0-4 of the Draft EIR has been revised to acknowledge that two access configurations are proposed;

"Figure 2.0-1 depicts the regional location of the Project. **Figure 2.0-2** shows the Project site and surrounding area. **Figure 2.0-3** is a conceptual phasing configuration plan of the Project for each of the two proposed access configurations. **Figure 2.0-4** is a site plan showing the layout of the Project and its various components."

Page 2.0-5 of the Draft EIR, the second paragraph under Table 2.0-1 has been revised as follows to clarify the length of the CUP:

~~"The Development Agreement would enable the CUPs to be valid for a total of 40 years with commencement of construction starting any time within 10 years of CUP approval. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term."~~

Page 2.0-9 of the Draft EIR has been revised to replace Figure 2.0-3, Project Phasing Plan with two figures showing each of the proposed access configurations: Figure 2.0-3A Project Phasing Plan – Access Configuration #1 and on Page 2.0-10 Figure 2.0-3B Project Phasing Plan Access Configuration #2.



- Project Boundary
- Solar + Storage Gen-tie
- Storage Gen-tie









-  Project Electrical Crossing
 IID Distribution Circuit
 SR 98 Access
 County Road Access
 IID Earthen Lateral Drain
 IID Earthen Drain
 IID Concrete Canal
 IID Earthen Canal

FIGURE 2.0-3
PROJECT PHASING MAP

~~Drew Solar Project~~
~~Draft EIR~~

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Drew Solar Project
Final EIR

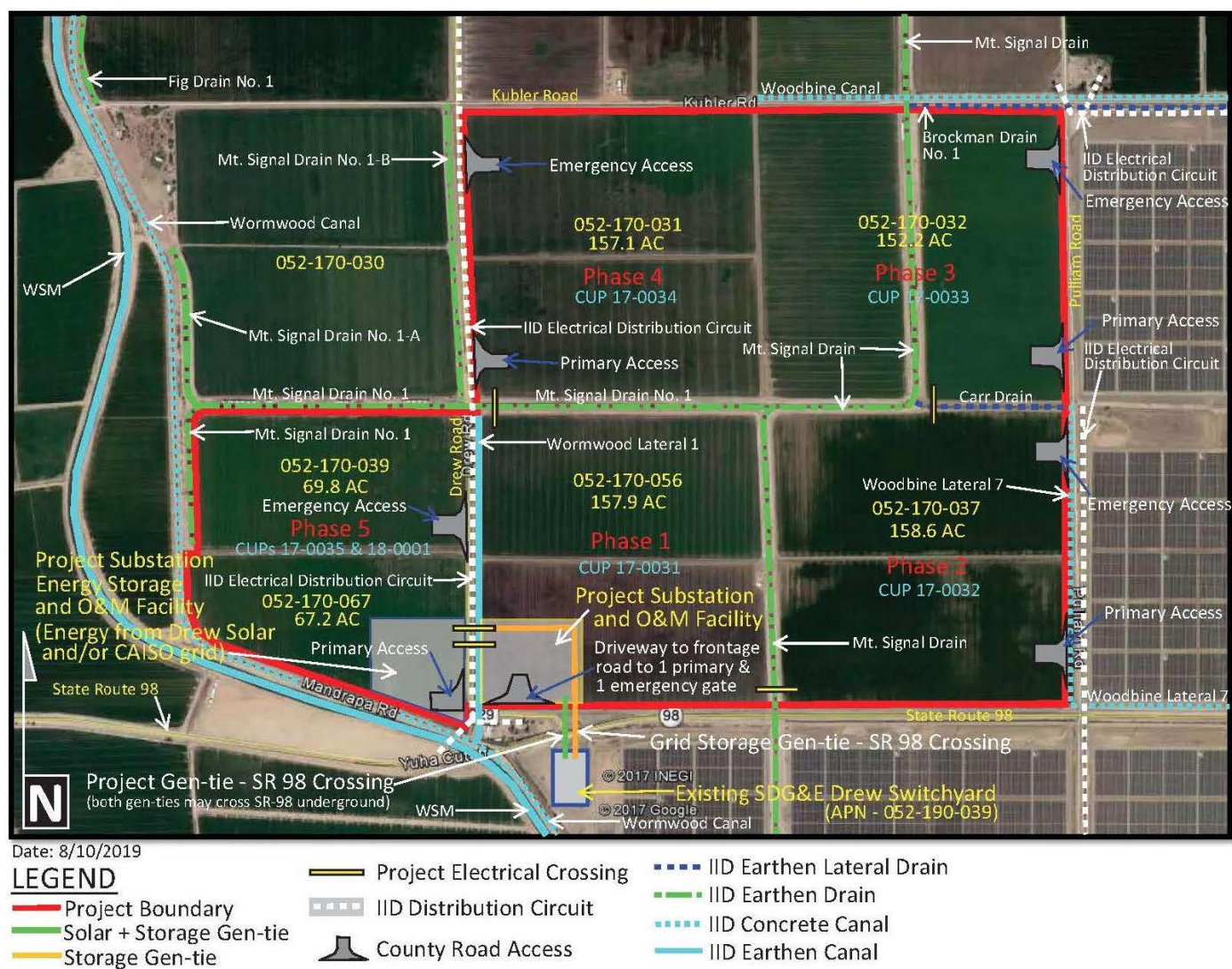


FIGURE 2.0-3A

PROJECT PHASING PLAN - ACCESS CONFIGURATION #1

Source: Drew Solar 2019.

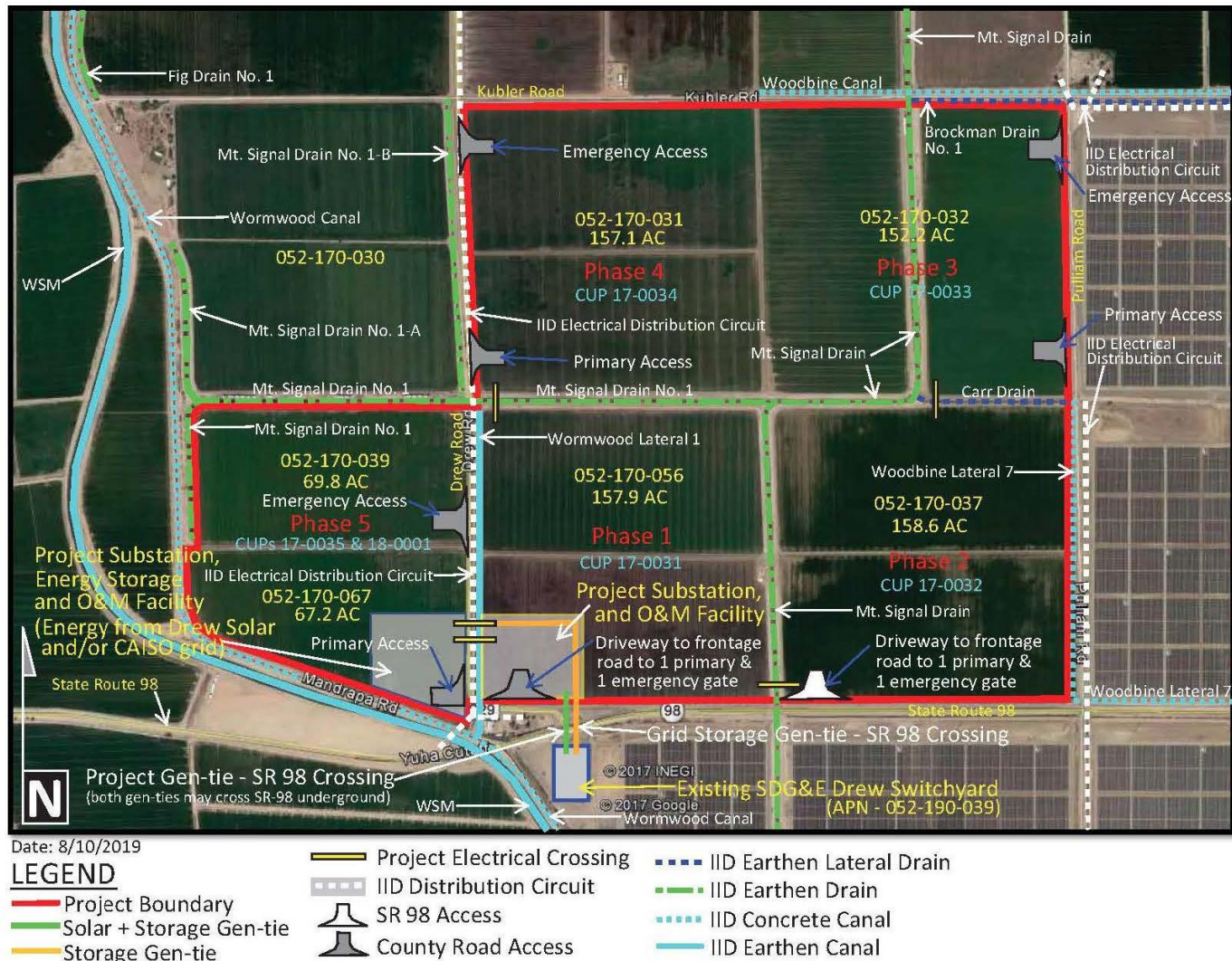
County of Imperial
May 2019Drew Solar Project
Draft EIR

2.0-9

County of Imperial
November 2019Drew Solar Project
Final EIR

4.0-9

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Source: Drew Solar 2019.

FIGURE 2.0-3B
PROJECT PHASING PLAN - ACCESS CONFIGURATION #2

Page 2.0-32 and 2.0-33 of the Draft EIR, the first two paragraphs of “F. Decommissioning and Reclamation Plans,” has been revised as follows to clarify the length of the CUP:

“F. Decommissioning and Reclamation Plans

The Project is processing a Development Agreement with Imperial County to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. Thereafter, the CUPs are valid for the remaining period of ~~40~~ 30 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved. The proposed Project is expected to operate for up to 40 years (10 years from Development Agreement plus 30 years for the CUP). At the end of its useful life, the Applicant proposes to decommission the Project and reclaim the area associated with surface disturbance. Given that decommissioning occurs at the end of the Project life and construction occurs at the beginning of the Project and must occur within the first 10 years, no project-related construction is anticipated to occur at the same time as decommissioning. Roads that benefit agricultural activities would be left in place.

The planned operational life of the facility is approximately 40 years (10 years from Development Agreement plus 30 years for the CUP). However, if the facility continues to be economically viable, it could be operated for a longer period subject to County approval and applicable CEQA review. The Project Reclamation Plan that will be implemented at the end of the Project’s life, and will adhere to Imperial County’s decommissioning/reclamation requirements, including, but not limited to:”

Page 2.0-36 of the Draft EIR, the following revision has been made to the discussion of “General Plan Amendment” to reflect amendments to the Section 91701.01 of Chapter 1 of Title 9, Land Use Code.

“General Plan Amendment

The proposed Project will require approval of a General Plan Amendment (GPA) (17-0006) to the Imperial County General Plan for amendment of the Renewable Energy & Transmission Element to create an Island Overlay for the Project Site. Creation of an “Island Overlay” is permissible via an amendment to the RE Overlay Zone to allow for development of a future renewable energy project that is located adjacent to or within one quarter (1/4) mile of an existing operating solar facility. Three conditions must be met to allow for the amendment: the project must be located adjacent (sharing a common boundary) to an existing transmission source; the project is adjacent to or within one-quarter (1/4) of a mile of an existing operating solar facility; and the project would not result in any significant environmental impacts. The Project shares a common boundary to an existing transmission source (i.e. the existing Drew Switchyard) and is adjacent to the existing Centinela Solar Project. No significant impacts that cannot be mitigated would occur as a result of implementing the Project.”

Page 2.0-36 of the Draft EIR, the following revision has been made to the discussion of the Development Agreement:

“Development Agreement

- The Project is processing a Development Agreement with Imperial County to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total

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permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term. Thereafter, the CUPs are valid for the remaining period of 40 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved."

CHAPTER 3.0, INTRODUCTION TO THE ANALYSIS AND ASSUMPTIONS USED

No revisions.

CHAPTER 4.0, ENVIRONMENTAL ANALYSIS

No revisions.

SECTION 4.1, AESTHETICS

No revisions.

SECTION 4.2, LAND USE

Page 4.2-3 of the Draft EIR, Table 4.2-1, analysis of Goal 2, the text has been modified as follows to clarify the length of the CUP:

"The Project is processing a Development Agreement with Imperial County to enable and control a Phased CUP of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. Thereafter, the CUPs are valid for the remaining period of 40 years from the date of the CUP approval. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term." ~~The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved.~~ The Development Agreement provides for Community Benefit payments to be paid to the County. Therefore, the proposed Project is consistent with this goal for both the Full Build-out Scenario and the Phased CUP Scenario."

Page 4.2-9 of the Draft EIR, Table 4.2-1, analysis of Goal 1, the text has been revised as follows to clarify the length of the CUP:

"As a solar generating energy system, the proposed Project would protect environmental resources through the production of approximately 100 MW of renewable energy that would otherwise be generated by non-renewable fossil fuels. Further, the Project is located on active agricultural land, and would be required to reclaim the acreage to pre-Project conditions at the end of each CUP or a total permitted term of 40 years (up to 10 years from the CUP to commence operation or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional 30-year term) whichever is later. The DEIR recommends mitigation measures to reduce and avoid the Project's impacts, which are incorporated here by reference. Therefore, the proposed Project is consistent with this goal for both the Full Build-out Scenario and the Phased CUP Scenario."

Page 4.2-25 of the Draft EIR, Table 4.2-2, second bullet, the language describing creation of an "Island Overlay" has been revised as follows:

- “Island” Overlay: An amendment may be made to allow for development of future renewable energy project that is ~~not~~ located adjacent to or within one quarter (1/4) mile of an the existing RE Overlay Zone operating solar facility.
 - Is located adjacent (sharing a common boundary) to an existing transmission source
 - Consists of the expansion of an existing renewable energy operation
 - Would not result in any significant environmental impacts (91701.01).”

SECTION 4.3, TRANSPORTATION

Section 4.3 Transportation of the Draft EIR is included in this Errata in its entirety on the following pages to reflect the addition of two access configurations which resulted in changes throughout the section, but no new or significant impacts.

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4.3 TRANSPORTATION

This section discusses the transportation, circulation and access impacts that would occur in association with implementation of the proposed Project. Impacts may occur from introduction of construction-related traffic on local roads, physical changes to roads, and access points created to allow entry and exit from each CUP. Information contained in this section is summarized from the *Drew Solar Farm County of Imperial (SR 98 at Drew Road) Draft Traffic Impact Analysis* prepared by LOS Engineering, Inc. (LOS 2018). This document is provided on the attached CD of Technical Appendices as **Appendix C** of this EIR. In addition, revisions to the analysis were made based on the “Drew Solar Analysis Addressing Caltrans’ 7/1/19 No SR-98 Driveway Comment” (LOS 2019a) and the “Drew Solar Alternative Access #2 with one SR-98 access and no access on Kubler” (LOS 2019b). These memos are included as **Attachment 1** and **Attachment 2** to the Final EIR.

This section of this EIR focuses on traffic impacts from construction and operation of the proposed Project. The construction phase will have the highest number of workers and greatest amount of traffic while the operations phase will have approximately 10 full-time personnel and generate very few trips. This volume of traffic is not representative of the number of workers and traffic generated during construction as the greatest amount of traffic will be generated by the highest concentration of workers in late 2019 (for the near-term scenario) with an average of 250 workers per day during construction, not operations. Therefore, the higher and more conservative construction trip generation was used to determine potential Project impacts. Decommissioning would occur in approximately 40 years (30 years plus one 10-year extension to the CUP, if approved). Accordingly, decommissioning traffic is too speculative for evaluation but is discussed on a qualitative level.

4.3.1 REGULATORY FRAMEWORK

A. STATE

California Department of Transportation

The State of California Department of Transportation (Caltrans) is responsible for the design, construction, maintenance, and operation of the California State Highway System. Caltrans is also responsible for portions of the Interstate Highway System within the state’s boundaries. Caltrans has jurisdiction over state highway right-of-way (ROW) and has the authority to issue permits for work and encroachments (temporary or permanent) in these areas. Likewise, Caltrans is involved in review of traffic control plans, stoppage of traffic for placement of aerial lines, and installation or removal of overhead conductors crossing a highway. The Project proposes to construct a 230-kV Gen-Tie. These segment of the Gen-Tie crossing the Caltrans right-of-way over SR 98 into the existing Drew Switchyard parcel would be approximately 400 feet in length and would be either overhead or underground. These gen-ties and the Project’s proposed SR 98 driveway would require an encroachment permit from Caltrans to encroach into the SR 98 right-of-way.

B. LOCAL

Imperial County General Plan Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element (Imperial County 2008a) is included as part of the Imperial County General Plan pursuant to requirements of law and policies of federal, state, and regional agencies. The purpose of the Element is to provide a comprehensive document which contains the latest information about the transportation needs of the County and the various modes available to meet these needs and to facilitate regional transportation coordination. This Element is also intended to provide a plan to accommodate a pattern of concentrated and coordinated growth providing both regional and local linkage systems between unique communities and the County’s neighboring metropolitan regions.

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Additionally, the purpose of this Element is to provide a means of protecting and enhancing scenic resources within both rural and urban scenic highway corridors.

Table 4.3-1 analyzes the consistency of the proposed Project with the applicable Goal and objectives relating to land use in the County of Imperial General Plan. While this EIR analyzes the Project's consistency with the General Plan pursuant to California Environmental Quality Act (CEQA) Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.3-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goal and Objectives	Consistent with General Plan?	Analysis
CIRCULATION AND SCENIC HIGHWAYS ELEMENT		
Safe, Convenient, and Efficient Transportation System		
Goal 1 The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.	Yes	The proposed Project would rely primarily on County roadways for transport of workers and materials. Mitigation measures MM 4.5.3a thru MM 4.5.3h would minimize impacts to County roads and require that roads damaged by Project-related traffic be repaired. Therefore, the proposed Project is consistent with this goal under both the Full Build-out Scenario and Phased CUP Scenario.
Objective 1.1 Maintain and improve the existing road and highway network, while providing for future expansion and improvement based on travel demand and the development of alternative travel modes.	Yes	As noted in the analysis of Goal 1, mitigation measures 4.5.3a thru MM 4.5.3h would minimize impacts to roads and address roadway damage resulting from construction-related traffic. This is consistent with the County's objective to maintain roadways. Therefore, the proposed Project is consistent with this objective under both the Full Build-out Scenario and Phased CUP Scenario.
Objective 1.2 Require a traffic analysis for any new development which may have a significant impact on County roads. A traffic analysis may not be necessary in every situation, such as when the size or location of the project will not have a significant impact upon and generate only a small amount of traffic. Also, certain types of projects, due to the trip generation characteristics, may add virtually no traffic during peak periods. These	Yes	A Draft Traffic Impact Analysis was prepared for the proposed Project by LOS Engineering, Inc. The analysis examined four scenarios (Year 2017, 2019, 2027, and 2060) to account for the possibility that the Project may be built in phases. Therefore, the proposed Project is consistent with this objective under both the Full Build-out Scenario and Phased CUP Scenario.

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TABLE 4.3-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goal and Objectives	Consistent with General Plan?	Analysis
types of projects may be exempt from the traffic analysis requirements. Whether a particular project qualifies for any exemption will be determined by the Department of Public Works Road Commissioner.		
Objective 1.12 Review new development proposals to ensure that the proposed development provides adequate parking and would not increase traffic on existing roadways and intersection to a level of service (LOS) worse than "C" without providing appropriate mitigations to existing infrastructure. This can include fair share contributions on the part of developers to mitigate traffic impacts caused by such proposed developments.	Yes	The Draft Traffic Impact Analysis examined impacts to intersections, roadway State Route segment and freeway segment level of service (LOS) within the Project study area. The proposed Project would not result in any intersection, roadway segment or freeway segment operating below LOS C under any scenario (Year 2017, 2019, 2027, and 2060). Parking for Project-related vehicles will be provided on-site during construction. Parking for Project-related vehicles will be provided on site during construction. The parking lot may move to adjacent CUPs as new CUPs are constructed. Each O&M building would have its own parking lot with approximately 25 parking spaces (refer to Figure 2.0-11 in Chapter 2.0). Therefore, the proposed Project is consistent with this objective and no mitigation is required under both the Full Build-out Scenario and Phased CUP Scenario..

4.3.2 ENVIRONMENTAL SETTING

Information contained in this section is summarized from the *Drew Solar Farm County of Imperial (SR 98 at Drew Road) Draft Traffic Impact Analysis* prepared by LOS Engineering, Inc. (LOS 2018). The Draft Traffic Impact Analysis is included on the attached CD of Technical Appendices as **Appendix C** of this EIR.

A. EXISTING CIRCULATION NETWORK

The existing roadway system and classifications are described below. The classifications are based on the Imperial County's Circulation Element and valid as of the date (May 27, 2018) of the Project's Notice of Preparation of the EIR. Excerpts are included in Appendix G of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

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Brockman Road between McCabe Road and Kubler Road has a classification of Major Collector in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

Forrester Road between I-8 and McCabe Road has a classification of Prime Arterial in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

Interstate 8 (I-8) between Drew Road and Imperial Avenue is constructed as a 4-lane divided interstate highway with 2 lanes in each direction.

Kubler Road between Pulliam Road and Brockman Road has a classification of Minor Collector in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

McCabe Road between Brockman Road and Forrester Road has a classification of Major Collector in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

Pulliam Road between Kubler Road and Brockman Road has a classification of Minor Collector in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

State Route (SR 98) between Drew Road and Clark Road has a classification of State Highway in the Circulation Element. This roadway is currently constructed as a 2-lane undivided roadway.

The existing roadway conditions are shown in **Figure 4.3-1**.

Level of Service

Intersection LOS

The operating conditions of the study intersections are measured using the Highway Capacity Manual (HCM) LOS designations ranging from A through F. LOS A represents the best operating condition and LOS F denotes the worst operating condition. LOS worsens from A to F based on delay in seconds at the intersection. **Table 4.3-2** shows the delays for each LOS associated with un-signalized and signalized intersections. The individual LOS criteria for each roadway component are described below.

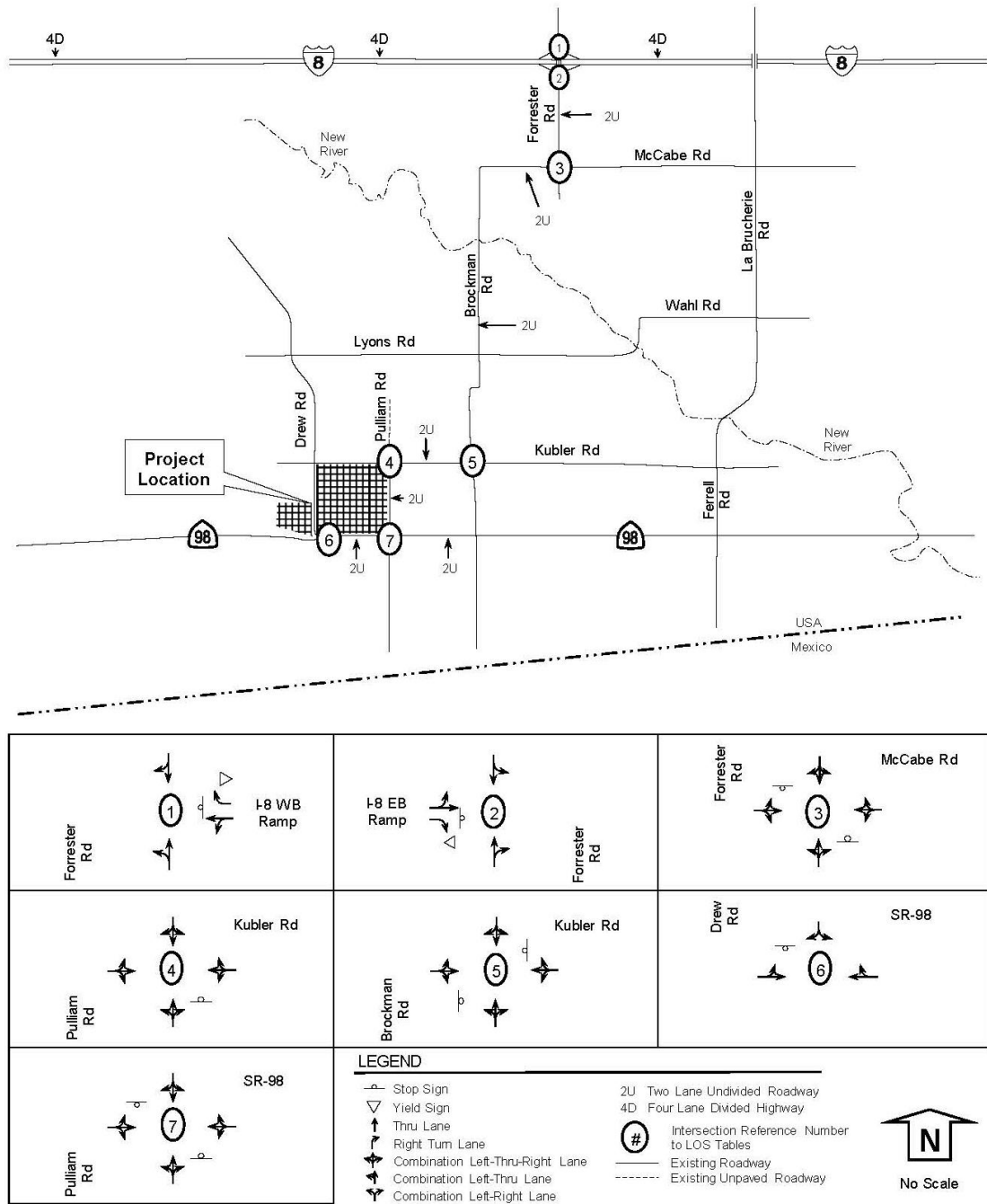
TABLE 4.3-2
UN-SIGNALIZED AND SIGNALIZED INTERSECTION LEVEL OF SERVICE (HCM 2000)

Level of Service	Un-Signalized (RWSC and AWSC) Control Delay (seconds/vehicle)	Signalized Control Delay (seconds/vehicle)
A	0-10	0-10
B	> 10-15	> 10-20
C	> 15-25	> 20-35
D	> 25-35	> 35-55
E	> 35-50	> 55-80
F	> 50	> 80

Source: LOS 2018. TWSC: Two-Way Stop Control.
AWSC: All-Way Stop Control.

According to the California Department of Transportation's (Caltrans) *Guide for the Preparation of Traffic Impact Studies*, December 2002 ("Caltrans Guide"), the accepted methodology for un-signalized intersections is that contained in the most current edition of the HCM (excerpts included in Appendix B of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR). Therefore, all of the study interchanges with un-signalized intersections were analyzed using the most currently used edition of the HCM.

4.3 TRANSPORTATION



Source: LOS 2018.

FIGURE 4.3-1
EXISTING ROADWAY CONDITIONS

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4.3 TRANSPORTATION

Roadway and State Route Segment LOS

The roadway and State Route segments were analyzed based on the functional classification of the roadway using the Imperial County Standard Street Classification capacity lookup table (copy included in Appendix C of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR). The capacity for SR 98 in the project vicinity is based on a “Local Collector” as noted in the Imperial County *Circulation and Scenic Highways Element* dated January 29, 2008 (“Circulation Element”). **Table 4.3-3** summarizes the roadway segment capacity and LOS standards used to analyze roadway segments.

**TABLE 4.3-3
ROADWAY SEGMENT DAILY CAPACITY AND LOS (IMPERIAL COUNTY)**

Circulation Element Road Classification	Cross Section	LOS A	LOS B	LOS C	LOS D	LOS E
Expressway	154/210	<30,000	<42,000	<60,000	<70,000	<80,000
Prime Arterial	106/136	<22,200	<37,000	<44,600	<50,000	<57,000
Minor Arterial	82/102	<14,800	<24,700	<29,600	<33,400	<37,000
Major Collector (Collector)	64/84	<13,700	<22,800	<27,400	<30,800	<34,200
Minor Collector (Local Collector)	40/70	<1,900	<4,100	<7,100	<10,900	<16,200
Local County (Residential)	40/60	*	*	<1,500	*	*
Local County (Residential Cul-de-Sac or Loop Street)	40/60	*	*	<200	*	*
Major Industrial Collector – (Industrial)	76/96	<5,000	<10,000	<14,000	<17,000	<20,000
Industrial Local	44/64	<2,500	<5,000	<7,000	<8,500	<10,000

Source: LOS 2018, from Imperial County Department of Planning and Development Services *Circulation and Scenic Highways Element* January 29, 2008.

Notes: *Level of service is not applied to residential streets because the primary purpose of residential streets is to serve abutting lots, rather than carry through traffic. Level of service normally applies to roads carrying through traffic between major trip generators and attractors.

Freeway Segment LOS

The freeway segments, covering Interstate 8, were analyzed based on a multi-lane highway LOS criteria using a Volume to Capacity (V/C) ratio as outlined in the HCM. The V/C ratio is the ratio of traffic to the roadway capacity that provides a measure of how much roadway capacity is being used. The methodology accepted by Caltrans for the analysis of freeway sections is to use the most current edition of the HCM as noted on page 5 of the Caltrans Guide. **Table 4.3-4** summarizes the freeway LOS operations based on Caltrans’ *Guide for the Preparation of Traffic Impact Studies* V/C ratios. (Excerpts from Caltrans’ *Guide for the Preparation of Traffic Impact Studies* are included in Appendix D of the Draft Traffic Impact Analysis [**Appendix C** of this EIR].)

**TABLE 4.3-4
FREEWAY LEVEL OF SERVICE**

Measure of Effectiveness	LOS A	LOS B	LOS C	LOS D	LOS E
Max Volume/Capacity Ratio (V/C)	0.30	0.50	0.71	0.89	1.00

Source: LOS 2018 from Caltrans’ *Guide for the Preparation of Traffic Impact Studies*, December 2002.

4.3 TRANSPORTATION

B. EXISTING CONDITIONS

Existing AM, PM, and daily volumes are shown on **Figure 4.3-2**. Count data are included in Appendix H of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR. The intersection, segment, and freeway LOS are shown in **Tables 4.3-5, 4.3-6, and 4.3-7** respectively. Intersections LOS calculations are included in Appendix I of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

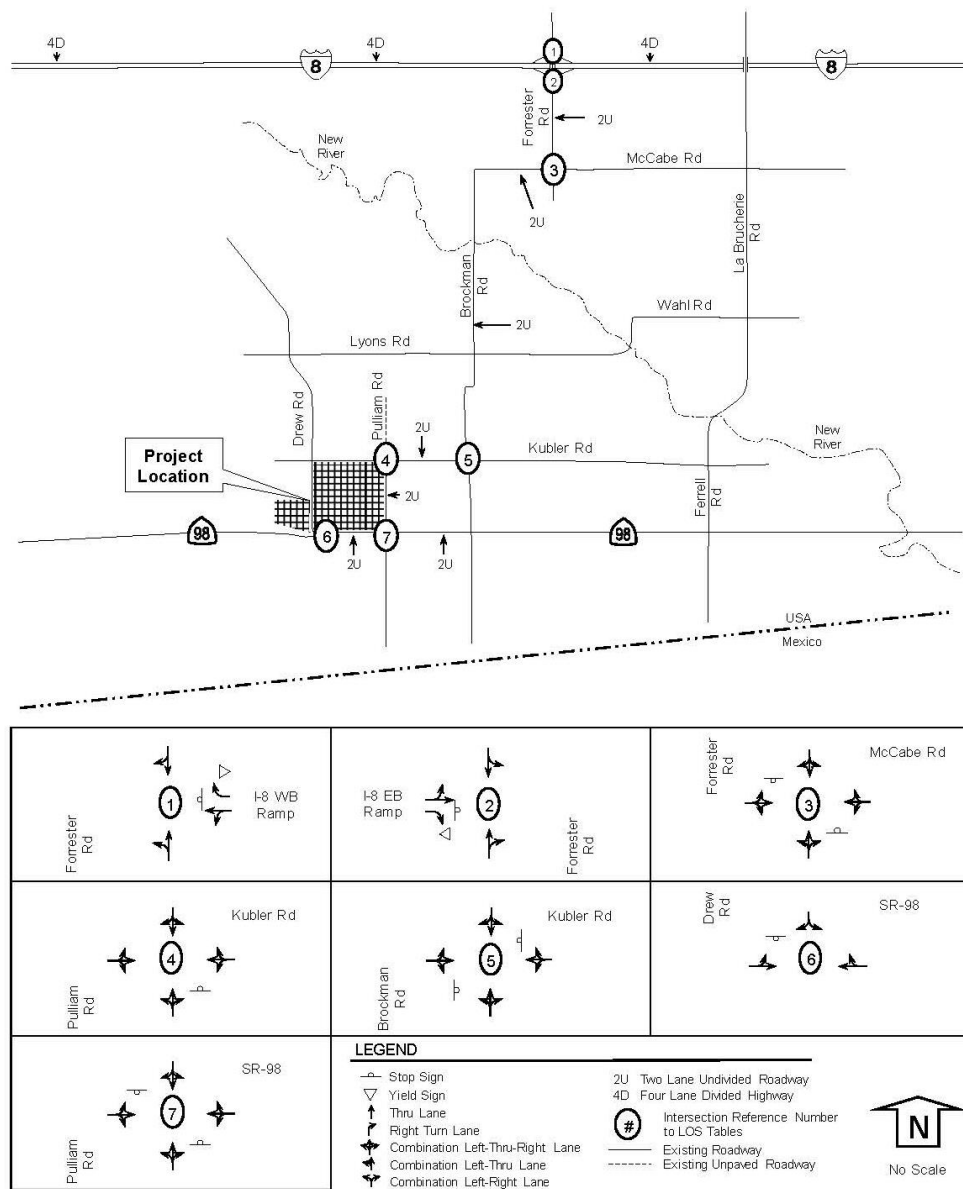


FIGURE 4.3-2
EXISTING TRAFFIC VOLUMES

Source: LOS 2018.

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TABLE 4.3-5
EXISTING INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	Year 2017	
			Delay ²	LOS ³
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM PM	9.7 9.6	A A
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM PM	11.1 13.6	B B
3) Forrester Road at McCabe Road (U)	Minor Leg	AM PM	9.5 9.5	A A
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM PM	8.6 8.6	A A
5) Brockman Road and Kubler Road (U)	Minor Leg	AM PM	8.9 9.0	A A
6) Drew Road at SR 98 (U)	Minor Leg	AM PM	8.7 8.9	A A
7) Pulliam Road at SR 98 (U)	Minor Leg	AM PM	9.0 8.6	A A

Source: LOS 2018.

¹ Intersection Control – (S) Signalized, (U) Unsignalized.

² Delay – HCM Average Control Delay in seconds.

³ LOS: Level of Service Minor Leg; approach LOS of minor/lessor roadway.

All: combined LOS for all approaches.

TABLE 4.3-6
EXISTING ROADWAY AND STATE ROUTE LOS

Intersection & (Control) ¹	Classification (as built)	Year 2017				
		Daily Volumes	# of Lanes	LOS C Capacity	V/C	LOS
Brockman Road McCabe Road to Kubler Road	Major (2U)	497	2	7,100	0.07	A
Forrester Road I-8 to McCabe Road	Prime (2U)	1,977	2	7,100	0.28	B
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	65	2	7,100	0.01	A
McCabe Road Brockman Road to Forrester Road	Major (2U)	738	2	7,100	0.10	A
Pulliam Road Kubler Road to SR 98	Minor (2U)	29	2	7,100	0.00	A
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,090	2	7,100	0.29	B
Pulliam Road to Brockman Road	State Highway (2U)	2,090	2	7,100	0.29	B

Source: LOS 2018. Classification based on January 29, 2018 Circulation and Scenic Highways Element.

2U = 2 lane undivided roadway.

Daily volume is a 24-hour volume. LOS: Level of Service.

LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

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**TABLE 4.3-7
EXISTING FREEWAY LOS**

Freeway Segment Forecasted	I-8 Dunaway Road to Drew Road				I-8 Forrester Road to Imperial Avenue			
Year 2017 ADT	14,000				17,200			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,032	1,131	1,299	1,321	1,318	1,446	1,661	1,689
Volume to Capacity	0.220	0.241	0.276	0.281	0.281	0.308	0.353	0.359
LOS	A	A	A	A	A	A	A	A

Source: LOS 2018.

Notes:

¹ Capacity of 2,350 pcphpl from Caltrans' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2015 report), which is the percentage of AADT in both directions.

³ Latest D factor from Caltrans (based on 2015 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2015 report).

Under existing conditions, the study intersections, roadways, State Route and freeway were calculated to operate at LOS B or better.

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C. STUDY AREA CRITERIA

The study area is determined based on the County of Imperial Department of Public Works *Traffic Study and Report Policy* dated March 12, 2007, revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007 (“Traffic Study and Report Policy”). “Any project that has the potential to degrade an existing road section, an existing signalized intersection, or an existing unsignalized intersection to below the existing level of service or to cause it to be lower than a level of service (LOS) “C” during any peak hour, using the HCM Methods of analysis on any individual, existing traffic movement” (Traffic Study and Report Policy, 4-5). The Project study area was determined based on similar solar projects in the same general area. Two configurations (Access Configuration #1 and Access Configuration #2) were analyzed based on different driveway access points to the Project site. Access Configuration #1 identifies access points from the east along Pulliam Road and the west along Drew Road with no access from Kubler Road on the north or SR 98 on the south. Access Configuration #1 identifies one access along SR 98 as well as four access points along Drew Road and two along Pulliam Road. The following intersections and Project driveway on SR 98 were analyzed as part of this study:

Access Configuration #1 (refer to Figure 4.3-11a)

- 1) Forrester Road/I-8 WB Ramp (un-signalized)
- 2) Forrester Road/I-8 EB Ramp (un-signalized)
- 3) Forrester Road/McCabe Road (un-signalized)
- 4) Kubler Road/Pulliam Road (un-signalized)
- 5) Kubler Road/Brockman Road (un-signalized)
- 6) SR 98/Drew Road (un-signalized)
- 7) SR 98/Pulliam Road (un-signalized)
- ~~8) SR 98/West Project Driveway (currently does not exist)~~

Access Configuration #2 (refer to Figure 4.3-11b)

- 1) Forrester Road/I-8 WB Ramp (un-signalized)
- 2) Forrester Road/I-8 EB Ramp (un-signalized)
- 3) Forrester Road/McCabe Road (un-signalized)
- 4) Kubler Road/Pulliam Road (un-signalized)
- 5) Kubler Road/Brockman Road (un-signalized)
- 6) SR 98/Drew Road (un-signalized)
- 7) SR 98/Pulliam Road (un-signalized)
- 8) SR 98/Proposed Project Driveway

Along with the following roadway and State Route segments:

- 1) Brockman Road from McCabe Road to Kubler Road
- 2) Forrester Road from I-8 to McCabe Road
- 3) Kubler Road from Pulliam Road to Brockman Road
- 4) McCabe Road from Brockman Road to Forrester Road
- 5) Pulliam Road from Kubler Road to SR 98
- 6) SR 98 between Drew Road and Pulliam Road
- 7) SR 98 between Pulliam Road and Brockman Road

And, the following Freeway (also referred to as Interstate) segments:

- 1) I-8 between Dunaway Road and Drew Road
- 2) I-8 between Forrester Road and Imperial Avenue

D. EXISTING (YEAR 2017) TRAFFIC VOLUMES AND LOS ANALYSIS

Intersection Volumes

Existing peak hour intersection volumes (with count dates) were collected from 6:00 AM to 8:00 AM and from 4:00 PM to 6:00 PM for Draft Traffic Analysis:

- 1) Forrester Road/I-8 WB Ramp (Tuesday 11/4/2017)
- 2) Forrester Road/I-8 EB Ramp (Tuesday 11/4/2017)
- 3) Forrester Road/McCabe Road (Tuesday 11/4/2017)

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- 4) Kubler Road/Pulliam Road (Tuesday 11/4/2017)
- 5) Kubler Road/Brockman Road (Tuesday 11/4/2017)
- 6) SR 98/Drew Road (Tuesday 11/4/2017)
- 7) SR 98/Pulliam Road (Tuesday 11/4/2017)
- 8) SR 98/West Project Driveway (currently does not exist)

Twenty-four hours of data were collected for the following roadway segments:

- 1) Brockman Road from McCabe Road to Kubler Road (Tuesday 11/4/2017)
- 2) Forrester Road from I-8 to McCabe Road (Tuesday 11/4/2017)
- 3) Kubler Road from Pulliam Road to Brockman Road (Tuesday 11/4/2017)
- 4) McCabe Road from Brockman Road to Forrester Road (Tuesday 11/4/2017)
- 5) Pulliam Road from Kubler Road to SR 98 (Tuesday 11/4/2017)

In addition, the data was obtained from Caltrans for the Freeway (Interstate) and State Route segments below. Please note that the latest available Caltrans data from 2016 was factored up to a year 2017 volume using a 1.8% annual growth factor (details provided under item "F. Methodology for Analysis", below).

- 1) I-8 between Dunaway Road and Drew Road
- 2) I-8 between Forrester Road and Imperial Avenue
- 3) SR 98 between Drew Road and Pulliam Road
- 4) SR 98 between Pulliam Road and Brockman Road

E. SCENARIOS

The number of scenarios to be analyzed is based on the methodology outlined in the County's Traffic Study and Report Policy. Excerpts from the Traffic Study and Report Policy showing the scenario criteria are included in Appendix A of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR. Based on the aforementioned methodology source and to account for the possibility that the project may be phased, the following scenarios were analyzed. The scenarios marked with an asterisk ("*") were analyzed for each of the two access configurations:

- 1) Existing 2017 Conditions
- 2) Existing 2017 + Project Conditions*
- 3) Existing 2017 + Project + Cumulative Conditions*
- 4) Near-Term Year 2019 Conditions
- 5) Near-Term Year 2019 + Project Conditions*
- 6) Near-Term Year 2019 + Project + Cumulative Conditions*
- 7) Long-Term Year 2027 Conditions
- 8) Long-Term Year 2027 + Project Conditions*
- 9) Long-Term Year 2027 + Project + Cumulative Conditions*
- 10) Horizon Year 2060 Conditions

Note that there is no separate analysis of phased construction of the Project because such phasing is captured within the bookend analysis provided by near- and long-term project forecasts.

Near-Term Year 2019 Conditions

This section documents Near-Term Year 2019 conditions when the project is anticipated to be at the peak of construction activities. The Year 2019 background volumes are based on increasing the existing Year 2017 volumes by an annual growth rate. The following documents and data were reviewed to determine a growth rate:

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- 1) The California Economic Forecast *California County-Level Economic Forecast 2015-2040*, dated September 2015 documents an average annual growth factor of 1.8 percent from 2015 to 2020 for Imperial County.
- 2) The U.S. Census Bureau population data from year 2010 to year 2016 for Imperial County was used to calculate an average growth factor of 0.6 percent.

For the purpose of the Draft Traffic Impact Analysis, the more conservative average growth rate of **1.8 percent** was selected for the annual population growth rate. Excerpts from the California Economic Forecast and Census data are included in Appendix O of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR. Year 2019 traffic data was factored up from existing data through the application of a 1.8% annual growth rate (3.6% total).

Long-Term Year 2027 Conditions

This section documents Long-Term Year 2027 conditions in case the entire Project (in 18 months) is constructed at the end of the period when construction must commence per the CUP. The Year 2027 background volumes are based on increasing the existing year 2017 volumes by an annual growth rate of 1.8% (19.5% total due to compounding growth) as described under the Near-Term Year 2019 Conditions.

F. METHODOLOGY FOR ANALYSIS

The following describes the methodology used for the various aspects of the traffic analysis. The Draft Traffic Impact Analysis included traffic generated for all components of the Project but does not differentiate traffic specifically associated with each component. The analysis below is therefore inclusive of the Solar Energy Generation Component, Energy Storage Component and Drew Switchyard and Gen-Tie Component.

Intersections

The HCM operations analysis using LOS evaluation criteria were employed in the Draft Traffic Impact Analysis. The operating conditions of the Project study area intersections were measured using the HCM LOS designations ranging from A through F. LOS A represents the best operating condition and LOS F denotes the worst operating condition. LOS worsens from A to F based on delay in seconds at the intersection (refer to **Table 4.3-2**, above).

Roadway and Segments

The roadway and State Route segments were analyzed based on the functional classification of the roadway using the Imperial County Standard Street Classification capacity lookup table (refer to Appendix C of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR). The capacity for State Route 98 in the project vicinity is based on a "Local Collector" as noted in the Imperial County Circulation and Scenic Highways Element dated January 29, 2008 ("Circulation Element"). The roadway segment capacity and LOS standards used to analyze roadway segments are summarized in **Table 4.3-3**, above.

Freeway Segments

The freeway segments, covering Interstate 8, were analyzed based on a multi-lane highway LOS criteria using a Volume to Capacity (V/C) ratio as outlined in the HCM. The V/C ratio is the ratio of traffic to the roadway capacity that provides a measure of how much roadway capacity is being used. The methodology accepted by Caltrans for the analysis of freeway sections is to use the most current edition of the HCM as noted on page 5 of the Caltrans Guide. The freeway LOS operations are based on the Caltrans Guide V/C ratios summarized below in **Table 4.3-4**. Relevant excerpts from the Caltrans Guide are included in Appendix D of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

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G. PROJECT TRIP GENERATION

The project trip generation consists of a construction phase, an operations phase and a decommissioning/reclamation phase. The construction phase will have the highest number of trips followed by an operations phase with significantly fewer trips. This section describes the construction and operations trip generation. Traffic details for the project are included in Appendix J of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

The Project may be constructed at one time taking approximately 18 months or it may be completed over a ten-year period. Under the development agreement, the Conditional Use Permit (CUP) will be valid for ~~40~~ 30 years with up to 10 years to commence construction. The Project could operate up to 40 years (30 years plus one 10-year extension to the CUP, if approved). If construction is to commence immediately after approvals, the Project could have the highest concentration of workers in Year 2019. If delayed due to market forces, the Project could have the highest concentration of construction workers in Year 2027. The project may also be phased (e.g., 20 MW constructed at a time or 1/5 of the overall Project) that would result in a lower concentration of construction workers and less trip generation. However, to be conservative, the entire Project (100 MW) was analyzed under Year 2019 and Year 2027 conditions assuming an 18-month construction period.

Construction Trip Generation

Construction of the Project includes site preparation, foundation construction, delivery of equipment and supplies, erection of major equipment and structures, installation of control systems, and start-up/testing. These construction activities are expected to require approximately 18 months.

According to the Applicant, the construction workforce may reach the highest concentration in late 2019 (for the near-term scenario) with an average of 250 workers per day (refer to Table 2.0-5 in Chapter 2.0, Project Description). Based on the Applicant's experience, about 75% of the workers follow a 4 day at 10 hours per day (4-10 shift) schedule, about 25% follow a 5 day at 8 hours per day (5-8 shift) schedule, and roughly 25% of the workers carpool. The workers also have different start and end times between the 4-10 and 5-8 shift schedules. The 4-10 shift workers typically arrive around 6:00 a.m. and depart around 5:00 p.m. while the 8-5 shift workers typically arrive around 7 a.m. and depart around 4:00 p.m.

Deliveries of equipment and supplies are anticipated to average about 10 daily truck trips per day. The HCM adjustment for heavy vehicles, such as trucks is through the application of a Passenger Car Equivalent (PCE) factor. Applying a PCE factor of 3 to the 10 daily truck trips, the PCE is 60 ADT with 6:00 a.m. peak hour trips (3 inbound and 3 outbound) and 6 p.m. peak hour trips (3 inbound and 3 outbound).

This analysis is based on the higher concentration (75%) of 4-10 shift workers that arrive between 6:00 a.m. and 7:00 a.m. and depart sometime between 5:00 p.m. and 6:00 p.m. **Table 4.3-8** summarizes the combined worker and construction truck traffic is calculated at 436 ADT with 147 a.m. peak hour trips (144 inbound and 3 outbound) and 147 p.m. peak hour trips (3 inbound and 144 outbound).

TABLE 4.3-8
PROJECT CONSTRUCTION TRIP GENERATION

Proposed Construction-Related Traffic	ADT	6:00 AM		7:00 AM		4:00 PM		5:00 PM	
		IN	OUT	IN	OUT	IN	OUT	IN	OUT
Construction Workers on 4 to 10 Shift (75% of 350) ¹	282	141	0	0	0	0	0	0	141
Construction Workers on 5 to 8 Shift (25% of 350) ²	94	0	0	47	0	0	47	0	0
Equipment and Construction Trucks (with PCE) ³	60	3	3	3	3	3	3	3	3
Total Traffic During Peak Construction Period	436	144	3	50	3	3	50	3	144
Daily and Higher Peak Hour Used for Analysis	436	144	3					3	144

4.0 ERRATA

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Source: LOS 2014.

Notes: ¹Applicant estimates the 4 days at 10 hrs/day (4-10s) shift to include about 188 workers (75% of the total 250 peak work force) with about 25% carpooling (47) and riding with the 75% (141), thus the inbound is 141 trips and the ADT is 282.

²Applicant estimates the 5 days at 8 hrs/day (5-8) shift to include about 62 workers (25% of the total 250 peak work force) with about 25% carpooling (15) and riding with the 75% (47), thus the inbound is 47 and the ADT is 94.

³Approx. 10 daily trucks with a Passenger Car Equivalent (PCE) factor of 3 applied to each truck equals 60 ADT (10 trucks x 2 x 3 PCE = 60 ADT) that are anticipated to have a frequency of about 1 in and 1 out per hour for a peak period volume of 6 (with PCE).

Construction Trip Distribution and Assignment

The Applicant estimates that approximately 80% of the labor pool for the construction workforce is anticipated to come from a combination of existing residents and workers that will temporarily reside within Imperial County ("Local Workforce"). The Local Workforce is anticipated to travel from Calipatria, Westmorland, Brawley, Imperial, El Centro, Holtville, and Calexico. The distribution of the construction workforce by cities/communities was based on the concentration of populations per the Census 2010 from the U.S. Census Bureau (U.S. Census Bureau 2010). **Table 4.3-9** shows the percentage of local construction workforce by city/community and county.

TABLE 4.3-9
CONSTRUCTION WORKFORCE SOURCES BASED ON CENSUS 2010 POPULATIONS (80 PERCENT LOCAL)

80 Percent Local Workforce	2010 Census Population	Percentage of Total	Percentage of Construction Employees (60% From Within Imperial County)
Calipatria	7,705	5%	4%
Westmorland	2,225	2%	1%
Brawley	24,953	18%	15%
Imperial	14,758	11%	9%
El Centro	42,598	31%	25%
Holtville	5,939	4%	3%
Calexico	38,572	28%	23%
Total	136,750	100%	80%

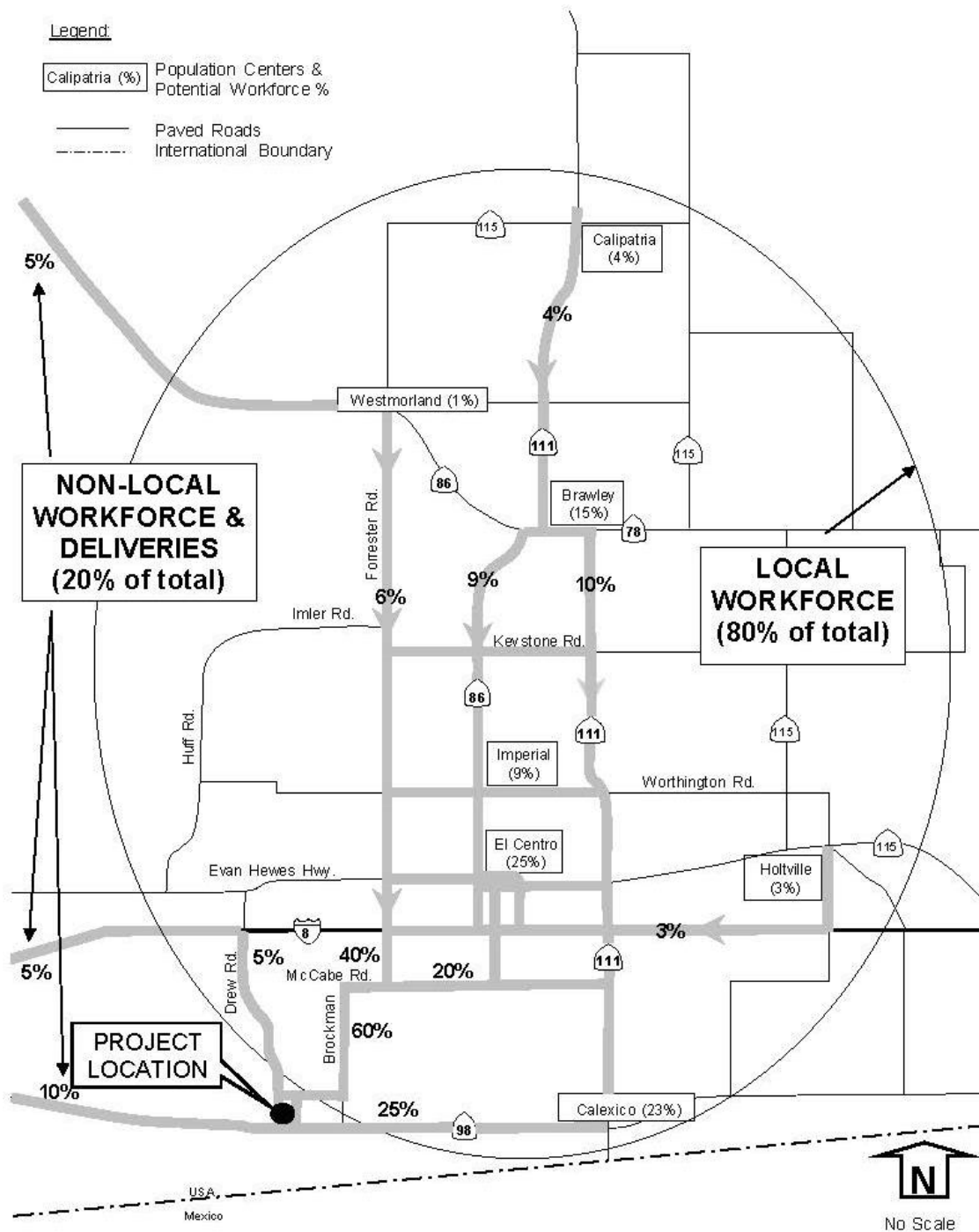
Source: LOS 2018. Population data from U.S. Census Bureau (<http://2010.census.gov/2010census>).

The remaining construction workforce and deliveries will come from outside Imperial County ("Non-Local Workforce") and is estimated to be from San Diego County (15%) and Riverside County (5%). **Figure 4.3-3** is based on the aforementioned Census information, the regional construction distribution. The local distribution accounted for the project driveway throughout the project site. **Figure 4.3-4a** and **Figure 4.3-4b** shows the local area distribution for Access Configuration #1 and Access Configuration #2, respectively. **Figure 4.3-5a** and **Figure 3.5b** shows the peak (Year 2019) construction trip assignment based on the aforementioned distribution for Access Configuration #1 and Access Configuration #2, respectively.

Project Operations and Maintenance Trip Generation

According to the Applicant, the operations phase is expected to generate approximately 4 to 10 trips per day from maintenance and security personnel. Based on this information, the operations and maintenance personnel are estimated to generate up to 20 ADT with approximately 2 AM and 2 PM peak hour trips. Therefore, the higher and more conservative construction trip generation is used to determine potential project impacts.

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Source: LOS 2018.

FIGURE 4.3-3
REGIONAL CONSTRUCTION DISTRIBUTION

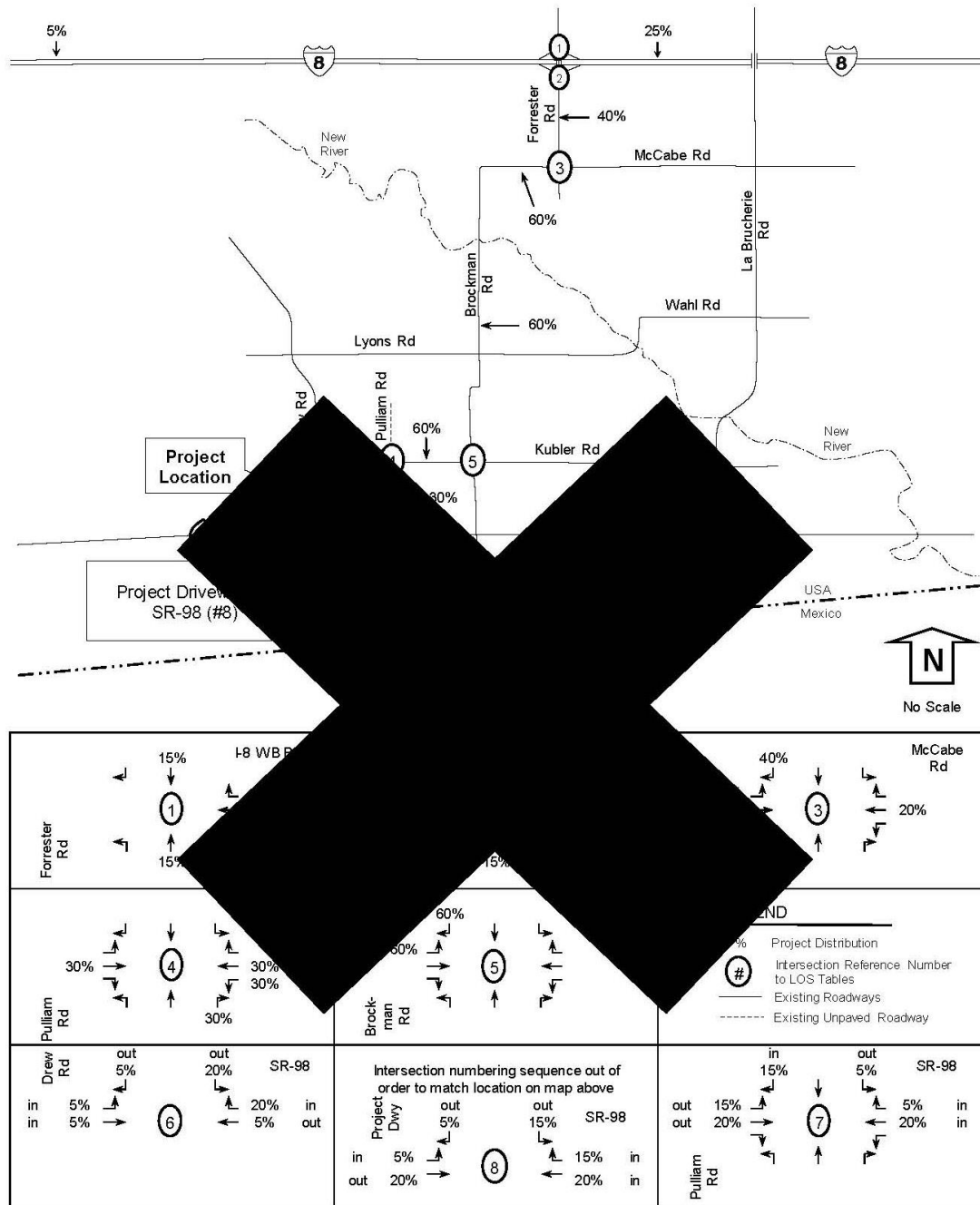
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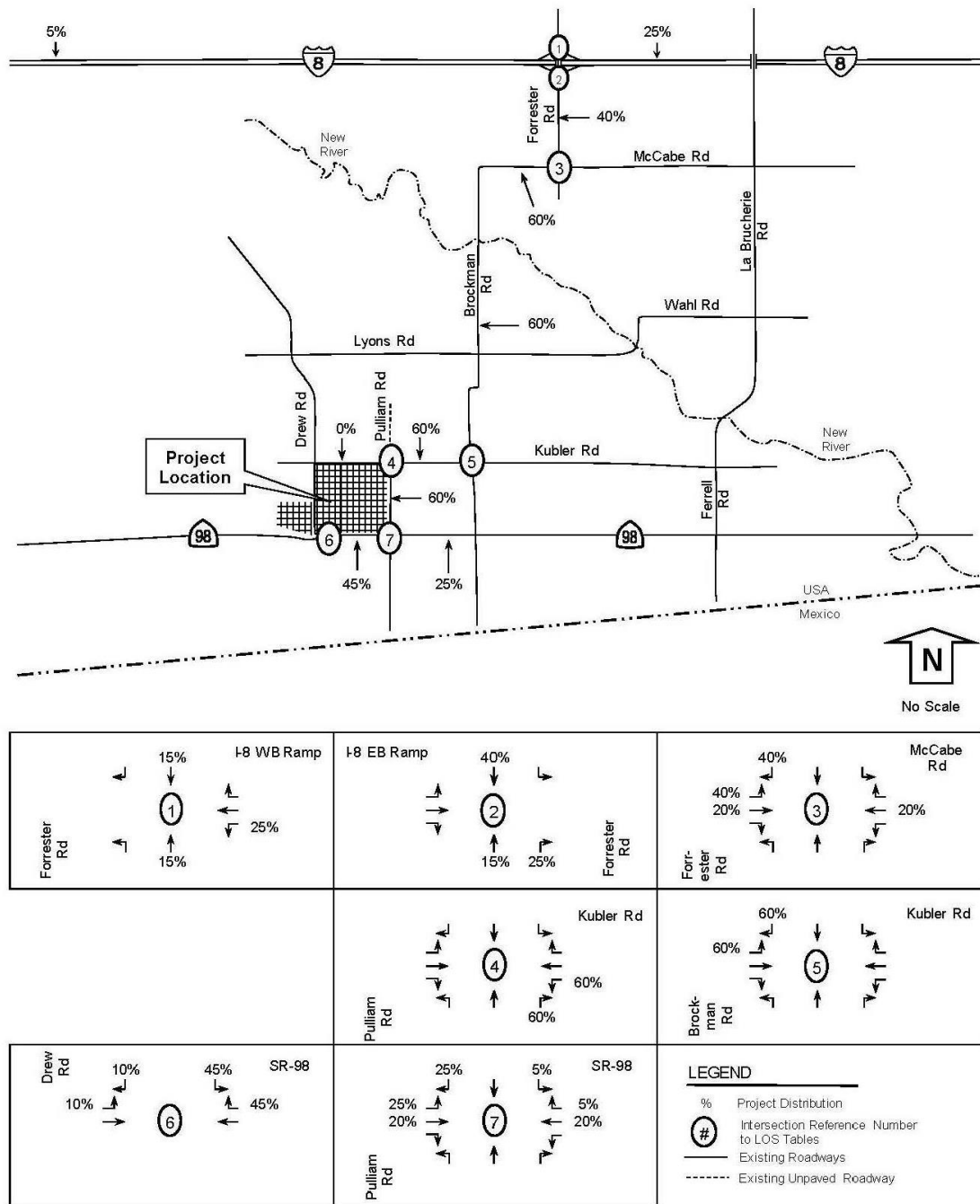
Source: LOS 2019.

FIGURE 4.3-4
LOCAL PROJECT CONSTRUCTION DISTRIBUTION

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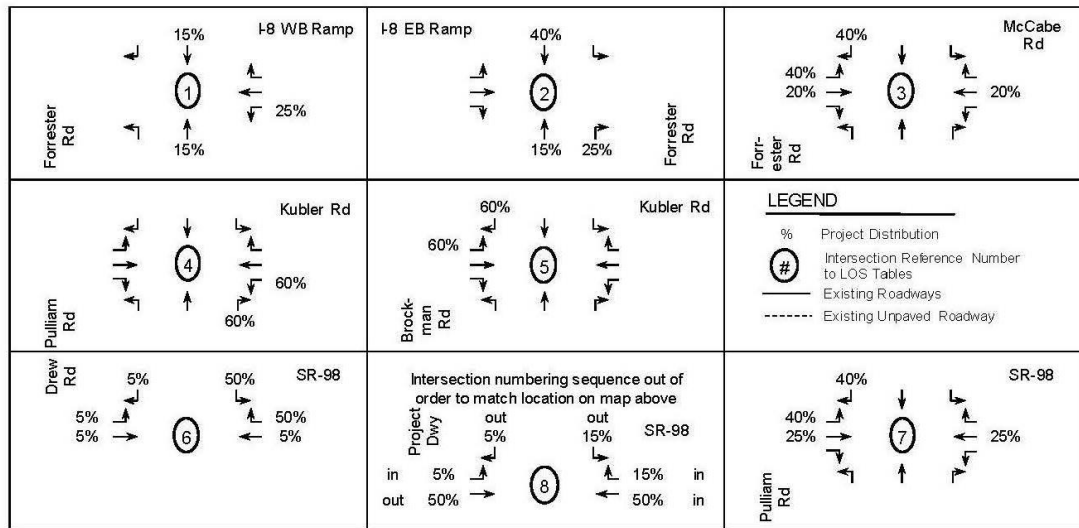
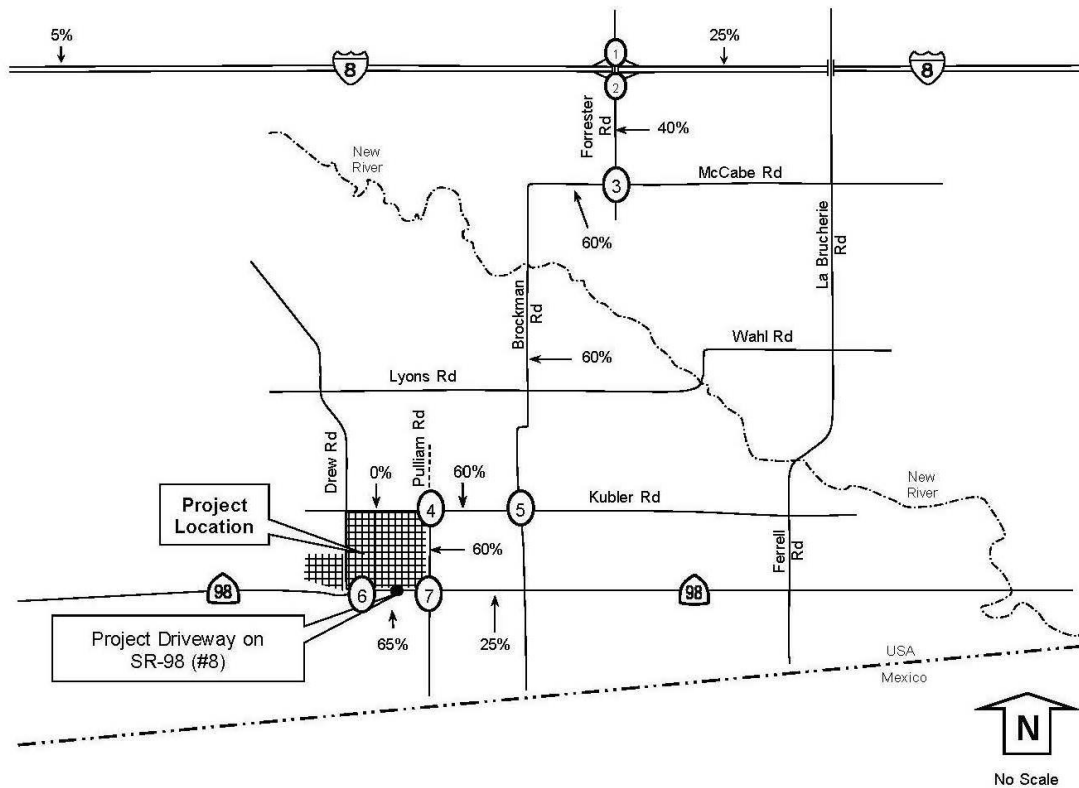


Source: LOS 2019a.

FIGURE 4.3-4A
ACCESS CONFIGURATION #1 - PROJECT DISTRIBUTION IMMEDIATELY AROUND PROJECT SITE

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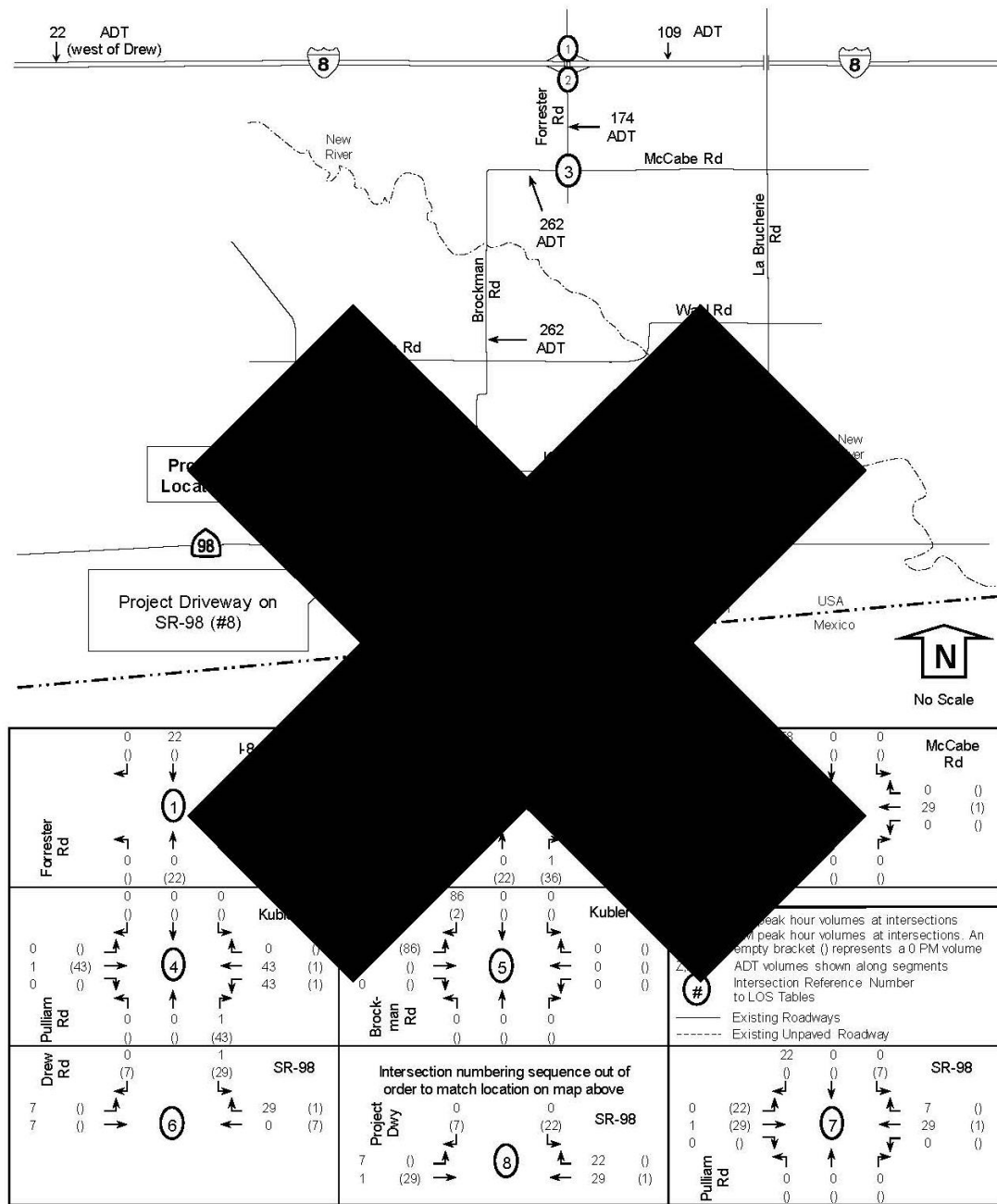
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Source: LOS 2019b.

FIGURE 4.3-4B
ACCESS CONFIGURATION #2 - PROJECT DISTRIBUTION IMMEDIATELY AROUND PROJECT SITE

4.3 TRANSPORTATION

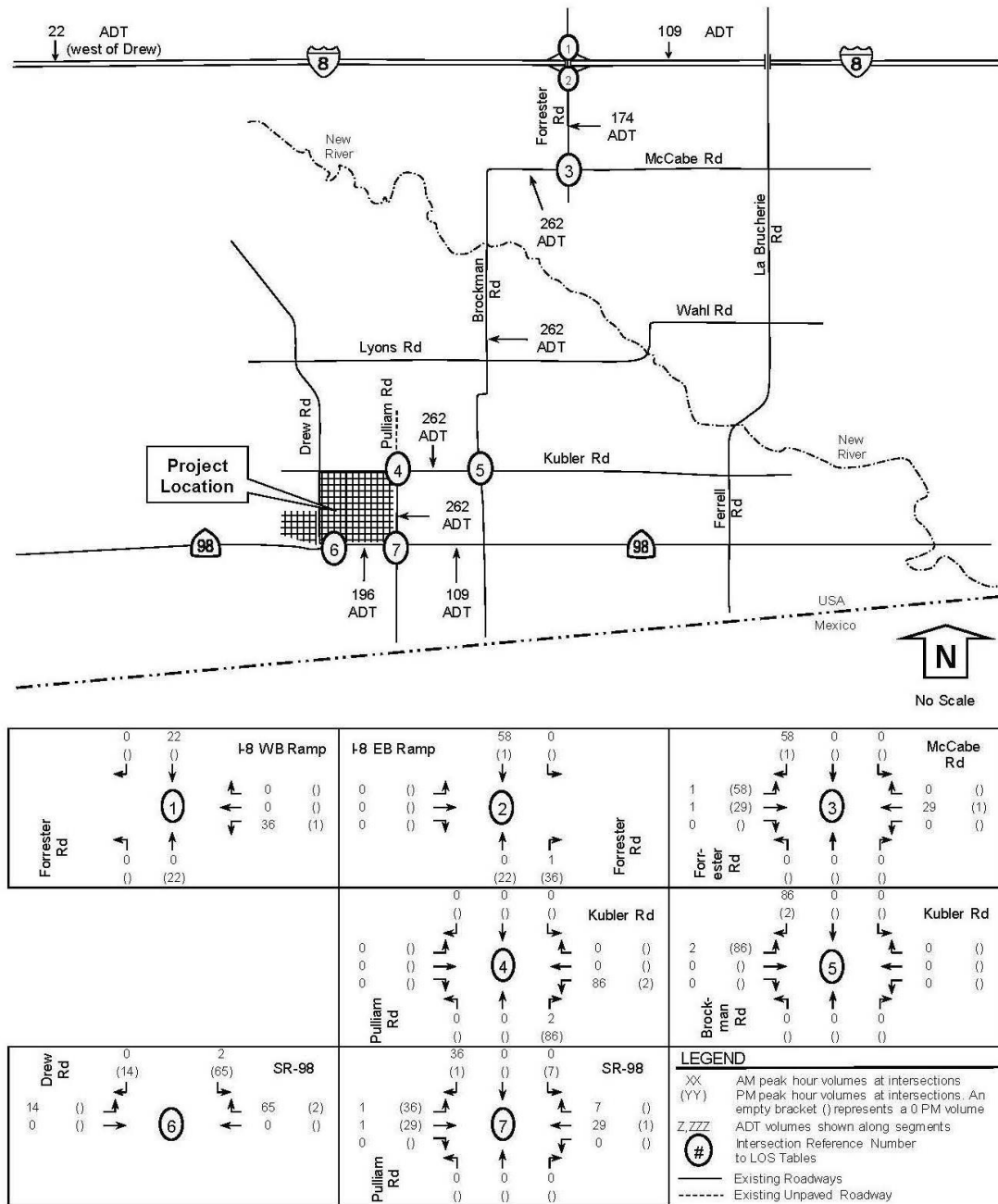


Source: LOS 2018.

FIGURE 4.3-5
PROJECT CONSTRUCTION TRAFFIC

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Source: LOS 2019a.

FIGURE 4.3-5A
ACCESS CONFIGURATION #1 - REVISED PROJECT ASSIGNMENT IMMEDIATELY AROUND PROJECT SITE

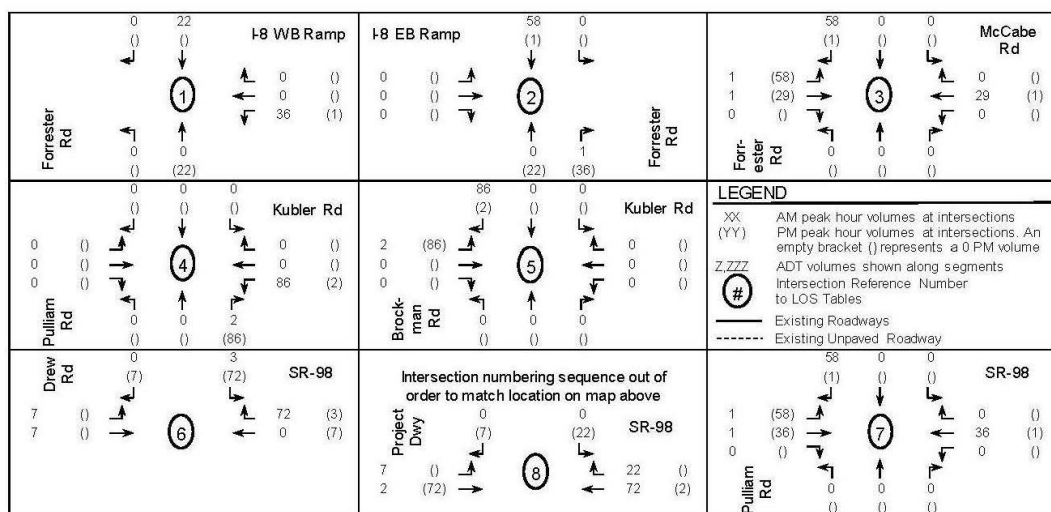


FIGURE 4.3-5B

ACCESS CONFIGURATION #2 - REVISED PROJECT ASSIGNMENT IMMEDIATELY AROUND PROJECT SITE

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4.3.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The CEQA significance criteria listed below were used to determine if the proposed Project would result in impacts to transportation and circulation. These criteria are the same as the significance criteria for Transportation/Traffic listed in the CEQA Environmental Checklist, Appendix G of the 2018 CEQA Guidelines. Under CEQA, the proposed Project would have a significant impact on transportation and circulation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines §15064.3 subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

The significance criteria for traffic impacts are based on the Imperial County Planning & Development Services Department LOS standard as outlined in the "Circulation Element". "The County's goal for an acceptable traffic service standard on an Average Daily Traffic (ADT) basis and during AM and PM peak periods for all County-Maintained Roads shall be LOS C for all street segment links and intersections." Circulation Element, 55. Excerpts from the *Circulation and Scenic Highways Element* are included in Appendix E of this EIR. The determination of direct or cumulative traffic impacts is defined by the significance criteria outlined in **Table 4.3-10**, which was obtained from several EIRs for projects located in Imperial County. Copies of traffic significance criteria from these project EIRs are included in Appendix F of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

**TABLE 4.3-10
SIGNIFICANCE CRITERIA**

Existing	Existing With Project	Existing With Project With Cumulative Projects	Impact Type
Intersections			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS D or worse	NA	Direct
LOS D	LOS D and adds 2.0 seconds or more of delay	LOS D or worse	Cumulative
LOS D	LOS E or F	NA	Direct
LOS E	LOS F	NA	Direct
LOS F	LOS F and delay increases by ≥ 10.0 seconds	LOS F	Direct
Any LOS	Project does not degrade LOS and adds < 2.0 seconds of delay	Any LOS	None
Any LOS	Project does not degrade LOS but adds 2.0 to 9.9 seconds of delay	LOS E or worse	Cumulative
Segments			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS C or better and V/C > 0.02	LOS D or worse	Cumulative
LOS C or better	LOS D or worse	NA	Direct ¹

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TABLE 4.3-10
SIGNIFICANCE CRITERIA

Existing	Existing With Project	Existing With Project With Cumulative Projects	Impact Type
LOS D	LOS D and V/C > 0.02	LOS D or worse	Cumulative
LOS D	LOS E or F	NA	Direct
LOS E	LOS F	NA	Direct
LOS F	LOS F and V/C increases by >0.09	LOS F	Direct
Any LOS	LOS E or worse & V/C 0.02 to 0.09	LOS E or worse	Cumulative
Any LOS	LOS E or worse & V/C < 0.02	Any LOS	None

Source: LOS 2018. LOS = Level of Service.

NA = Not Applicable.

Notes: ¹ Exception: post-project segment operation is LOS D and intersections along segment are LOS D or better resulting in no significant impact.

B. ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

None of the CEQA Appendix G significance criteria were scoped out as part of the Initial Study.

C. METHODOLOGY

The methodology for analysis has been previously described as it was also pertinent to the discussion of existing traffic conditions. Please refer to subsection 4.3.2 Environmental Setting, item E, "Methodology for Analysis." Horizon Year 2060 methodology associated with decommissioning is described below.

Horizon Year 60

The Year 2060 was selected as the Horizon Year because it is 40 years past the earliest estimate (Year 2019 construction peak with completion about a year later or 2020) of when the project may be constructed and decommissioned. Under the Development Agreement, the CUP will be valid for 40 30 years with up to 10 years to commence construction. The Project could operate up to 40 years (30 years plus one 10-year extension to the CUP, if approved). At the conclusion of the CUP term (estimated at Year 2059), the Project entitlements require the Applicant to decommission/reclaim the site and restore it to agricultural uses in accordance with a Reclamation Plan. The Reclamation Plan is anticipated to generate traffic on the roads in the vicinity of the Project from trucks removing solar panels and other infrastructure from the site after the 40 30-year CUP life. The CUP could operate up to 40 years if one 10-year extension to the CUP is approved. The traffic would also include the workers who travel to and from the Project site to perform the work.

After careful consideration of various methodologies for evaluating such traffic impacts, it is not possible to accurately forecast the traffic impacts for the following reasons:

- 1) There have been no solar projects decommissioned in Imperial County yet to provide a reference point for potential traffic impacts;
- 2) The near-term construction work force is based on the concentration of populations per the 2010 Census. The source and location of a Horizon Year 2060 construction work force cannot be estimated in the same manner; therefore, it would require speculation to determine where the construction work force would originate and the number of workers from the local area (i.e. Imperial Valley) vs. the regional area (i.e. Los Angeles, San Diego, or Arizona);
- 3) Other solar projects on the cumulative project list in the vicinity may or may not be undergoing decommissioning phase activities at the same time. Many of these other solar projects have a 10-year extension option and it is not possible to estimate how many would exercise the option.

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Accordingly, only a guess could be made as to when the other cumulative projects would initiate decommissioning and thus would add traffic to the horizon year background conditions;

- 4) The horizon year traffic model for Imperial County does not have horizon year volumes for the study area roadways around the Project site nor does the traffic model have data for decommissioning scenarios; and
- 5) The California Economic Forecast *California County-Level Economic Forecast 2015-2040*, dated September 2015 does not forecast beyond 2040.

Therefore, after a thorough investigation for reliable data having used best efforts to obtain and disclose all the information reasonably available regarding traffic in the decommissioning phase, the only conclusion that can be drawn decommissioning traffic is simply too speculative for evaluation.

D. PROJECT IMPACTS AND MITIGATION MEASURES

Conflict with Applicable Plan – Existing Year 2017 Plus Project Construction Conditions

Impact 4.3.1 Implementation of the proposed Project would add traffic to existing traffic volumes on Project study area intersections, roadway segments and freeway segments during (Year 2017) Project construction. The additional traffic would not result in an exceedance of LOS C. Therefore, conflicts with the Imperial County General Plan Circulation and Scenic Highways Element are considered **less than significant** for (Year 2017) with Project construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Existing (Year 2017) With Project Construction Conditions

This section documents the addition of construction traffic onto (Year 2017) conditions to analyze scenario if the Project was constructed immediately over 18 months. **Figure 4.3-6a** shows (Year 2017) With Project Construction traffic volumes for Access Configuration #1. **Figure 4.3-6b** shows (Year 2017) With Project Construction traffic volumes for Access Configuration #2. Intersection, segment, and freeway LOS are discussed below.

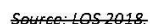
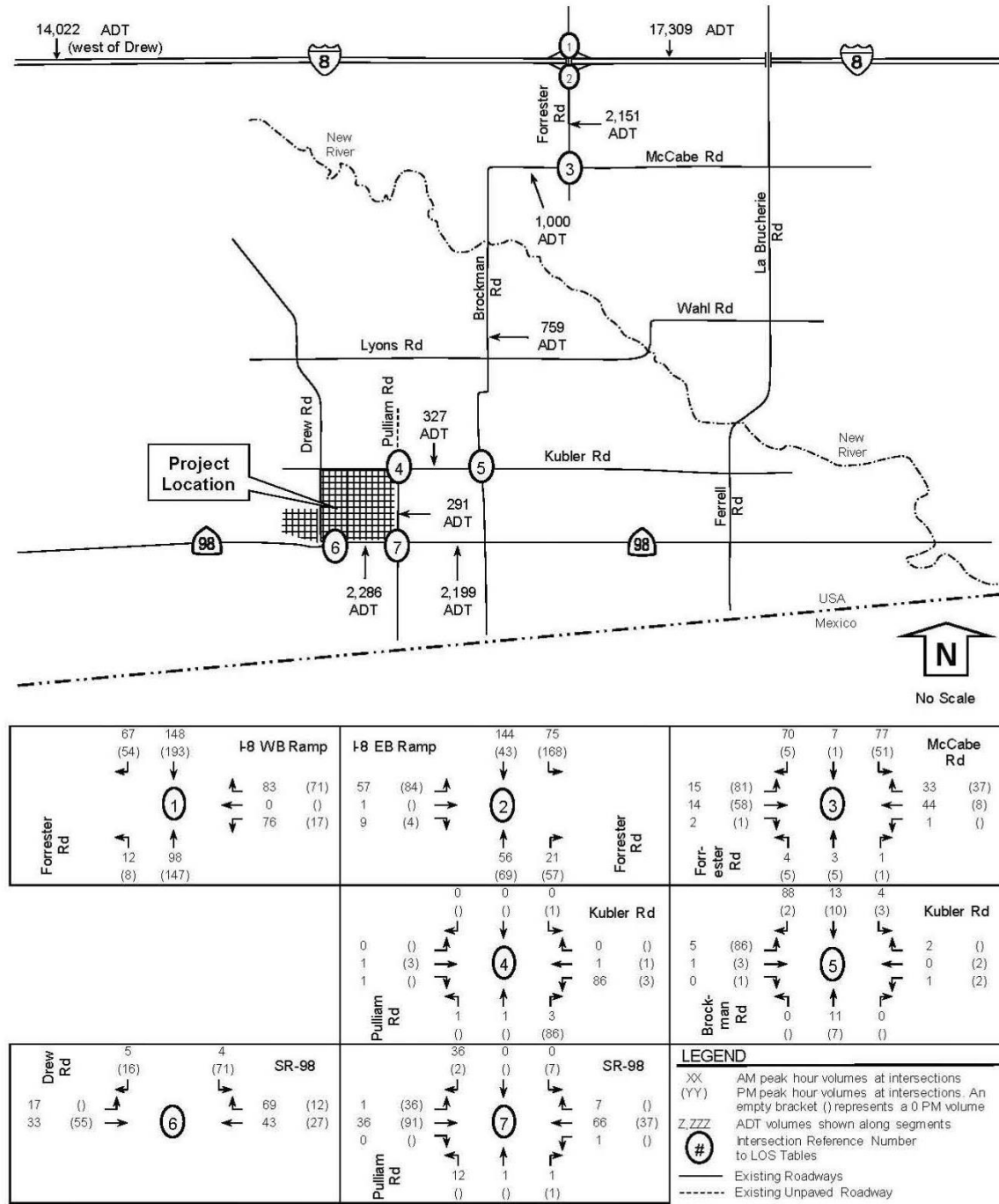


FIGURE 4.3-6
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION VOLUMES

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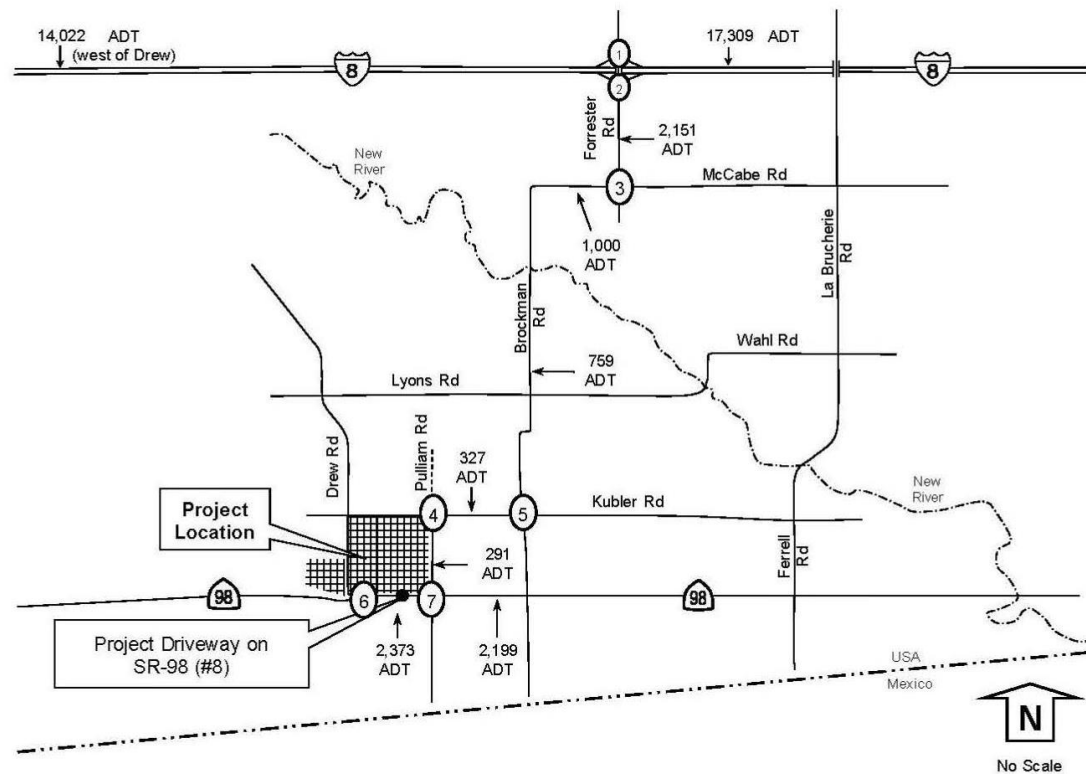
Source: LOS 2019.

FIGURE 4.3-6A
ACCESS CONFIGURATION #1 - EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION VOLUMES

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<p>Forrester Rd</p> <p>67 (54) 148 (193)</p> <p>12 (8) 98 (147)</p> <p>1</p> <p>83 (71) 0 (1) 76 (17)</p>	<p>I-8 WB Ramp</p> <p>57 (84) 144 (43) 75 (168)</p> <p>1 (1) 9 (4)</p> <p>2</p> <p>56 (69) 21 (57)</p> <p>Forrester Rd</p>	<p>McCabe Rd</p> <p>70 (5) 7 (1) 77 (51)</p> <p>15 (81) 14 (58) 2 (1)</p> <p>4 (5) 3 (5) 1 (1)</p> <p>33 (37) 44 (8) 1 (1)</p>
<p>Pulliam Rd</p> <p>0 (1) 1 (3) 1 (1)</p> <p>0 (1) 1 (1) 3 (86)</p> <p>4</p> <p>0 (1) 86 (3)</p>	<p>Kubler Rd</p> <p>88 (2) 13 (10) 4 (3)</p> <p>5 (86) 1 (3) 0 (1)</p> <p>0 (1) 0 (1) 11 (7)</p> <p>5</p> <p>0 (1) 0 (1) 0 (1)</p>	<p>LEGEND</p> <p>XX (YY) AM peak hour volumes at intersections PM peak hour volumes at intersections. An empty bracket () represents a 0 PM volume Z,ZZZ ADT volumes shown along segments # Intersection Reference Number to LOS Tables Existing Roadways Existing Unpaved Roadway</p>
<p>Drew Rd</p> <p>10 (55) 40 (55)</p> <p>5 (9) 5 (78)</p> <p>6</p> <p>76 (13) 43 (34)</p>	<p>SR-98</p> <p>Intersection numbering sequence out of order to match location on map above</p> <p>Project Dwy 0 (7) 0 (22) 22 (39)</p> <p>7 (134) 37 (134)</p> <p>8</p>	<p>SR-98</p> <p>58 (2) 0 (1) 0 (1)</p> <p>1 (58) 36 (98) 0 (1)</p> <p>12 (1) 1 (1) 1 (1)</p> <p>0 (1) 73 (37) 1 (1)</p>

Source: LOS 2019.

FIGURE 4.3-6B
ACCESS CONFIGURATION #2 - EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION VOLUMES

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Intersection LOS

Table 4.3-11a summarizes intersection LOS for Access Configuration #1. (Intersection LOS calculations are included in Appendix M of the Draft Traffic Impact Analysis [Appendix C of this EIR and Attachment A of the “Drew Solar Analysis Addressing Caltrans’ 7/1/19 No SR-98 Driveway Comment” Memo and Attachment 1 of the Final EIR]).

TABLE 4.3-11A
ACCESS CONFIGURATION #1
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	Existing (Year 2017)		Existing (Year 2017) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB (U)	Minor Leg	AM	9.7	A	10.2	B	0.5	None
		PM	9.6	A	9.8	A	0.2	None
2) Forrester Road at I-8 EB (U)	Minor Leg	AM	11.1	B	11.6	B	0.5	None
		PM	13.6	B	14.7	B	1.1	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	9.5	A	9.9	A	0.4	None
		PM	9.5	A	11.0	B	1.5	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.6	A	9.0-9.1	A	0.4-0.5	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	8.9	A	9.1	A	0.2	None
		PM	9.0	A	9.1	A	0.1	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A	8.9-9.0	A	0.2-0.3	None
		PM	8.9	A	9.1-9.3	A	0.2-0.4	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.0	A	9.4-9.5	A	0.4-0.5	None
		PM	8.6	A	8.8-9.7	A	0.2-1.1	None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM	DNE	A	1.2	A	NA	None
		PM	DNE	A	9.2	A	NA	None

Source: LOS 2018-2019a.

Notes:

¹ Intersection Control - (S) Signalized, (U) Unsignalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from project.

⁵ Type of impact: none, direct, or cumulative. DNE: Does not Exist. NA: Not Applicable.

Table 4.3-11b summarizes intersection LOS for Access Configuration #1. (Intersection LOS calculations are included in Appendix M of the Draft Traffic Impact Analysis [Appendix C of this EIR] and Attachment A of the “Drew Solar Alternative Access #2 with One SR-98 Access And No Access on Kubler” Memo and Attachment 2 of the Final EIR]).

TABLE 4.3-11B
ACCESS CONFIGURATION #2
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	Existing (Year 2017)		Existing (Year 2017) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB (U)	Minor Leg	AM	9.7	A	10.2	B	0.5	None
		PM	9.6	A	9.8	A	0.6	None
2) Forrester Road at I-8 EB (U)	Minor Leg	AM	11.1	B	11.6	B	0.5	None
		PM	13.6	B	14.7	B	1.1	None

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TABLE 4.3-11B
ACCESS CONFIGURATION #2
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	Existing (Year 2017)		Existing (Year 2017) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	9.5	A	9.9	A	0.4	None
		PM	9.5	A	11.0	B	1.5	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.6	A	9.1	A	0.5	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	8.9	A	9.1	A	0.2	None
		PM	9.0	A	9.1	A	0.1	None
6) Drew Rad at SR 98 (U)	Minor Leg	AM	8.7	A	9.1	A	0.4	None
		PM	8.9	A	9.4	A	0.5	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.0	A	9.7	A	0.7	None
		PM	8.6	A	8.8	A	0.2	None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM	DNE	N/A	1.2	A	NA	None
		PM	DNE	N/A	9.4	A	NA	None

Source: LOS 2018-2019a.

Notes: ¹ Intersection Control - (S) Signalized, (U) Unsignalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from project.

⁵ Type of impact: none, direct, or cumulative. DNE: Does not Exist. NA: Not Applicable.

Under existing (Year 2017) With Project Construction Conditions, all Project study area intersections were calculated to operate at LOS B or better above the County's LOS C threshold. As shown, only two intersections would experience a decline from LOS A to LOS B. This would occur for the intersection of Forrester Road and westbound I-8 during the AM Peak Hour and for the intersection of Forrester Road and McCabe Road in the PM Peak Hour. No significant impacts to Project study area intersections were calculated due to the addition of construction traffic to existing traffic. Moreover, the increases in traffic resulting from construction of the proposed Project would not exceed LOS standards. Therefore, **less than significant** impacts to Project study area intersections would result under Existing (Year 2017) With Project Construction Conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-12a summarizes roadway segment LOS for Existing (Year 2017) With Project conditions for Access Configuration #1. **Table 4.3-12b** summarizes roadway segment LOS for Existing (Year 2017) With Project conditions for Access Configuration #2. As shown, only one change in LOS would occur along the segment of Forrester Road which would decrease from LOS A to B. All other segments would all operate above LOS C (at LOS A or LOS B). Therefore, **less than significant** impacts to Project study area roadway and state route segments would result under Existing (Year 2017) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Freeway Segment LOS

Table 4.3-13 summarizes freeway segment LOS. Under existing (Year 2017) With Project Conditions, the freeway segments were calculated to operate above LOS C (at LOS A and LOS B). I-8 from Drew Road to Forrester Road would continue to operate at LOS A in the AM and PM peak hour in both directions (eastbound and westbound). I-8 from Forrester Road to Imperial Avenue would continue to operate at LOS A during the AM and PM peak hour

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in the eastbound direction and LOS B in the PM peak hour in the westbound direction and the PM peak hour eastbound direction. Moreover, the increases in traffic resulting from Project construction would not exceed V/C ratios or LOS standards. Therefore, **less than significant** impacts to Project study area freeway segments would occur under Existing (Year 2017) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Overall, under Existing (Year 2017) Plus Project Conditions, the Project study intersections, roadway, State Route and freeway segments were calculated to operate at LOS B or better for both Access Configuration #1 and Access Configuration #2. Thus, **less than significant** impacts were calculated with the addition of Project construction traffic to existing traffic volumes under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

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TABLE 4.3-12A
ACCESS CONFIGURATION #1
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2017) Without				Project Daily Volume	(Year 2017) With Project					
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Change in V/C	Significant Impact?
Brockman Road McCabe Road to Kubler Road	Major (2U)	497	7,100	0.07	A	262	759	7,100	0.11	A	0.04	None
Forrester Road I-8 to McCabe Road	Prime (2U)	1,977	7,100	0.28	B	174	2,151	7,100	0.30	B	0.02	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	65	7,100	0.01	A	262	327	7,100	0.05	A	0.04	None
McCabe Road Forrester Road to LaBrucherie Road	Major (2U)	738	7,100	0.10	A	262	1,000	7,100	0.14	A	0.04	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	29	7,100	0.00	A	131 262	160 291	7,100	0.02 0.04	A	0.02 0.04	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,090	7,100	0.29	B	153 196	2,243 2,286	7,100	0.31 0.32	B	0.02 0.03	None
Pulliam Road to Brockman Road	State Highway (2U)	2,090	7,100	0.29	B	109	2,199	7,100	0.32	B	0.02	None

Source: LOS ~~2018~~ 2019a.

Notes: Classification based on January 4 ~~29, 2018~~ 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-12B
ACCESS CONFIGURATION #s
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2017) Without				Project Daily Volume	(Year 2017) With Project					
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Change in V/C	Significant Impact?
Brockman Road McCabe Road to Kubler Road	Major (2U)	497	7,100	0.07	A	262	759	7,100	0.11	A	0.04	None
Forrester Road I-8 to McCabe Road	Prime (2U)	1,977	7,100	0.28	B	174	2,151	7,100	0.30	B	0.02	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	65	7,100	0.01	A	262	327	7,100	0.05	A	0.04	None
McCabe Road Forrester Road to LaBrucherie Road	Major (2U)	738	7,100	0.10	A	262	1,000	7,100	0.14	A	0.04	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	29	7,100	0.00	A	262	291	7,100	0.04	A	0.04	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,090	7,100	0.29	B	283	2,373	7,100	0.33	B	0.04	None
Pulliam Road to Brockman Road	State Highway (2U)	2,090	7,100	0.29	B	109	2,199	7,100	0.32	B	0.02	None

Source: LOS 2019b.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-13
EXISTING (YEAR 2017) WITHOUT AND WITH PROJECT CONSTRUCTION FREEWAY SEGMENT LOS

Freeway Segment	I-8 Drew Road to Forrester Road				I-8 Forrester Road to Imperial Avenue			
Forecasted (Year 2017) Without								
ADT	14,000				17,200			
Peak Hour	AM		PM		AM		PM	
Directions	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,032	1,131	1,299	1,321	1,318	1,446	1,666	1,689
V/C	0.220	0.241	0.276	0.218	0.281	0.308	0.353	0.359
LOS	A	A	A	A	A	B	B	B
Peak Project Hour Volume	7	0	0	7	01	36	36	1
Year2017 Plus Project								
Peak Hour Volume	1,039	1,131	1,299	1,328	1,319	1,482	1,697	1,690
V/C	0.221	0.241	0.276	0.283	0.281	0.315	0.361	0.360
LOS	A	A	A	A	A	B	B	B
Increase in V/C	0.001	0.000	0.000	0.001	0.000	0.008	0.008	0.000
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from Caltrans' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ Latest D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2015 report). Impact? = Direct, Cumulative, or None.

Conflict with Applicable Plan– Near-Term (Year 2019) With Project

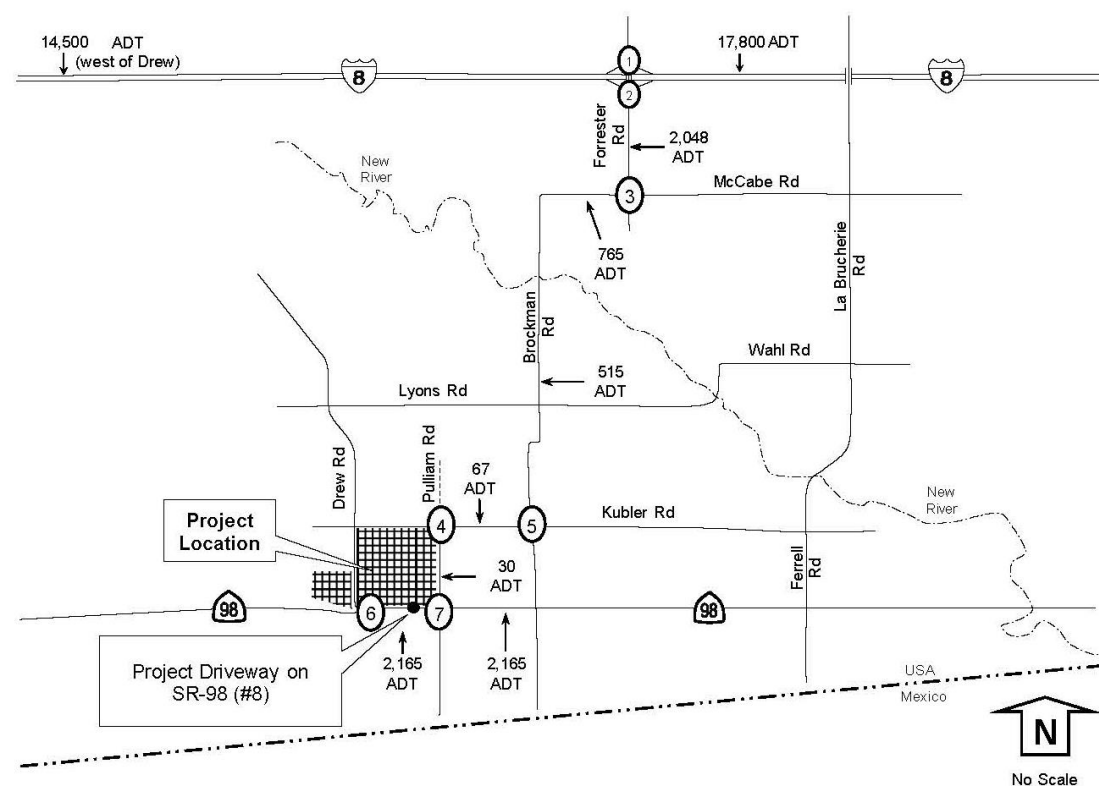
Impact 4.3.2 Implementation of the proposed Project would add traffic to existing traffic volumes on the Project study area intersections, roadway segments and freeway segments during Near-Term (Year 2019) Project construction. The additional traffic would not result in an exceedance of LOS C. Therefore, conflicts with the Imperial County General Plan Circulation and Scenic Highways Element are considered **less than significant** under Near-Term (Year 2019) with Project Conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Year volumes for the construction peak period were calculated by increasing existing volumes for year 2017 by 1.8% annually (3.6% total) as shown in **Figure 4.3-7**. Intersection, roadway, State Route and freeway segment LOS are shown in **Table 4.3-14**, **Table 4.3-15** and **Table 4.3-16**.

Intersection LOS

Table 4.3-14 summarizes intersection LOS. (Intersection LOS calculations are included in Appendix M of the Draft Traffic Impact Analysis [**Appendix C** of this EIR]).

4.3 TRANSPORTATION



<p>Forrester Rd</p> <p>I-8 WB Ramp</p> <p>1</p>	<p>Forrester Rd</p> <p>I-8 EB Ramp</p> <p>2</p>	<p>Forrester Rd</p> <p>McCabe Rd</p> <p>3</p>
<p>Pulliam Rd</p> <p>Kubler Rd</p> <p>4</p>	<p>Brockman Rd</p> <p>Kubler Rd</p> <p>5</p>	<p>LEGEND</p> <p>XX (YY) AM peak hour volumes at intersections PM peak hour volumes at intersections. An empty bracket () represents a 0 PM volume</p> <p>Z,ZZZ ADT volumes shown along segments</p> <p># Intersection Reference Number to LOS Tables</p> <p>Existing Roadways</p> <p>Existing Unpaved Roadway</p>
<p>Drew Rd</p> <p>SR-98</p> <p>6</p>	<p>Intersection numbering sequence out of order to match location on map above</p> <p>Project Dwy</p> <p>SR-98</p> <p>8</p>	<p>Pulliam Rd</p> <p>SR-98</p> <p>7</p>

Source: LOS 2018.

FIGURE 4.3-7
NEAR-TERM (YEAR 2019) TRAFFIC VOLUMES

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4.3 TRANSPORTATION

TABLE 4.3-14
NEAR-TERM (YEAR 2019) INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2019)	
			Delay ²	LOS ³
Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	9.7	A
		PM	9.7	A
Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	11.1	B
		PM	14.3	B
Forrester Road at McCabe Road (U)	Minor Leg	AM	9.6	A
		PM	9.6	A
Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.6	A
		PM	8.6	A
Brockman Road at Kubler Road (U)	Minor Leg	AM	8.9	A
		PM	8.9	A
Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A
		PM	8.9	A
Pulliam Road at SR 98 (U)	Minor Leg	AM	9.1	A
		PM	8.6	A

Source: LOS 2018.

Notes: ¹ Intersection Control - (S) Signalized, (U) Un-signalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway.

All: combined LOS for all approaches.

Under Near-Term (Year 2019) Conditions, the Project study area intersections were calculated to operate at LOS B or better. All intersections are operating below the LOS C standard with **less than significant impacts** under Near-Term (Year 2019) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

4.3 TRANSPORTATION

Roadway and State Route Segment LOS

Table 4.3-15 summarizes roadway segment LOS for Near-Term (Year 2019) conditions. As shown, all segments would operate above LOS C. Specifically, all segments would operate at LOS A with the exception of the segment of Forrester Road from I-8 to McCabe Road and both segments along SR 98 (Drew Road to Pulliam Road and Pulliam Road to Brockman Road) which would all operate at LOS B. Because, all roadway segments would operate above the LOS C standard, **less than significant impacts** would occur under Near-Term (Year 2019) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

TABLE 4.3-15
NEAR-TERM (YEAR 2019) ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	Year 2019				
		Daily Volume	# of Lanes	LOS C Capacity	V/C	LOS
Brockman Road McCabe Road to Kubler Road	Major (2U)	515	2	7,100	0.07	A
Forrester Road I-8 to McCabe Road	Prime (2U)	2,048	2	7,100	0.29	B
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	67	2	7,100	0.01	A
McCabe Road Forrester Road to LaBrucherie Road	Major (2U)	765	2	7,100	0.11	A
Pulliam Road Kubler Road to SR 98	Minor (2U)	30	2	7,100	0.00	A
SR 98 Drew Road to Pulliam Road Pulliam Road to Brockman Road	State Highway (2U)	2,165	2	7,100	0.30	B
	State Highway (2U)	2,165	2	7,100	0.30	B

Source: LOS 2018.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

4.0 ERRATA

4.3 TRANSPORTATION

Freeway Segment LOS

Table 4.3-16 summarizes Near-Term (Year 2019) freeway segment LOS. As shown, the freeway segments were calculated to operate above LOS C. I-8 from Drew Road to Forrester Road would operate at LOS B in the PM peak hour in the westbound direction. Likewise, the segment of I-8 from Forrester Road to Imperial Avenue would operate at LOS B in both the AM and PM peak hour in the westbound direction. All other freeway segments would operate at LOS A during both the AM and PM peak Hours in both the eastbound and westbound directions. Because, all freeway segments would operate above the LOS C standard, **less than significant impacts** would occur under Near-Term (Year 2019) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

TABLE 4.3-16
NEAR-TERM (YEAR 2019) FREEWAY SEGMENT LOS

Freeway Segment	I-8 Drew Road to Forrester Road				I-8 Forrester Road to Imperial Avenue			
Forecasted (Year 2019)								
ADT	14,500				17,800			
Peak Hour	AM		PM		AM		PM	
Directions	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,069	1,172	1,346	1,369	1,364	1,496	1,718	1,748
V/C	0.227	0.249	0.286	0.291	0.290	0.318	0.366	0.372
LOS	A	A	A	A	A	B	B	B

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2015 report), which is the percentage of Annual Average Day Traffic (AADT) in both directions.

³ Latest D factor from Caltrans (based on 2015 report), which when multiplied by K and ADT will provide peak hour volume.

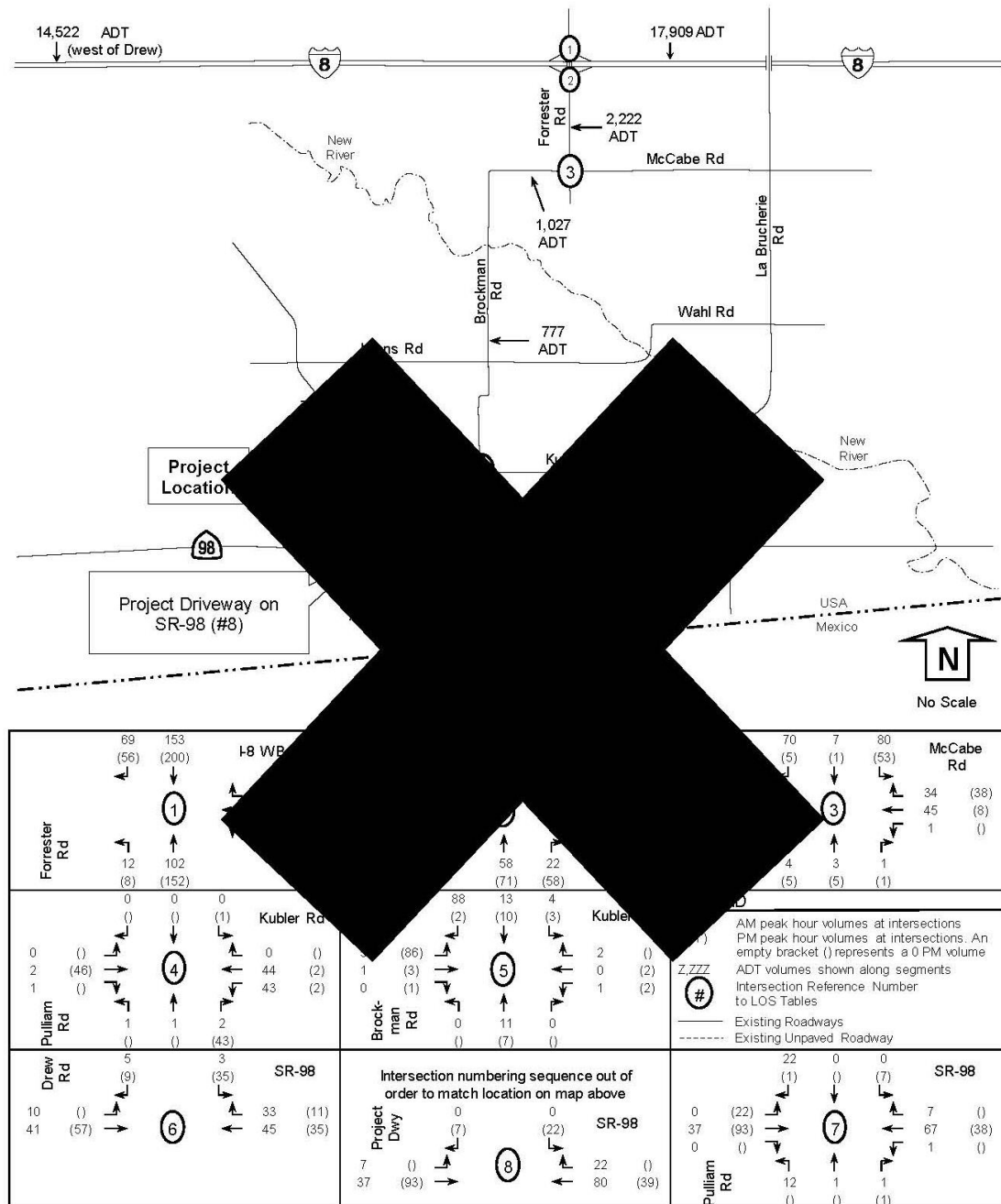
⁴ Latest truck factor from Caltrans (based on 2015 report).

Under Near-Term (Year 2019) conditions, the Project study area intersections, roadways, State Route and freeway segments were calculated to operate at LOS B or better.

Near-Term (Year 2019) With Project Construction Conditions

This section discusses the addition of Project construction traffic in combination with Near-Term (Year 2019) conditions for the anticipated construction peak. **Figure 4.3-8a** depicts Near-Term (Year 2019) With Project Construction traffic volumes for Access Configuration #1. **Figure 4.3-8b** depicts Near-Term (Year 2019) With Project Construction traffic volumes for Access Configuration #2. Intersection, roadway, State Route and freeway segment LOS for Access Configuration #1 are shown in **Table 4.3-17a**, and **Table 4.3-18a**. Intersection, roadway, State Route and freeway segment LOS for Access Configuration #2 are shown in **Table 4.3-17b** and **Table 4.3-18b**, and **Table 4.3-19** summarizes Near-Term (Year 2019) Without and with Project Construction Freeway Segment LOS. (Intersection LOS calculations are included in Appendix Q of the Draft Traffic Impact Analysis [Appendix C of this EIR]).

4.3 TRANSPORTATION



Source: LOS 2018.

FIGURE 4.3-8
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION VOLUMES

County of Imperial
May 2019

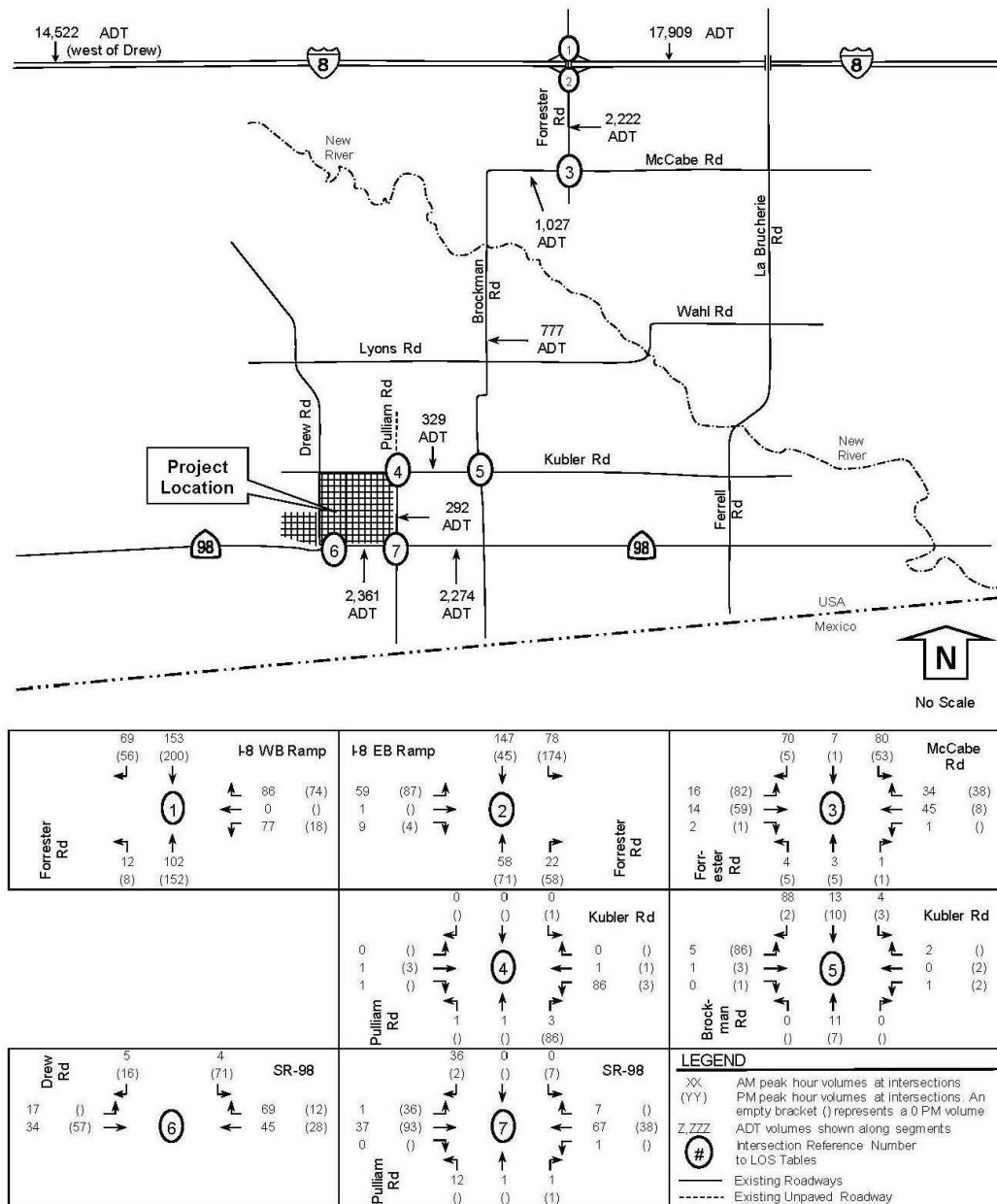
Drew Solar Project
Draft EIR

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4.3 TRANSPORTATION

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4.3 TRANSPORTATION



Source: LOS 2019a.

FIGURE 4.3-8A

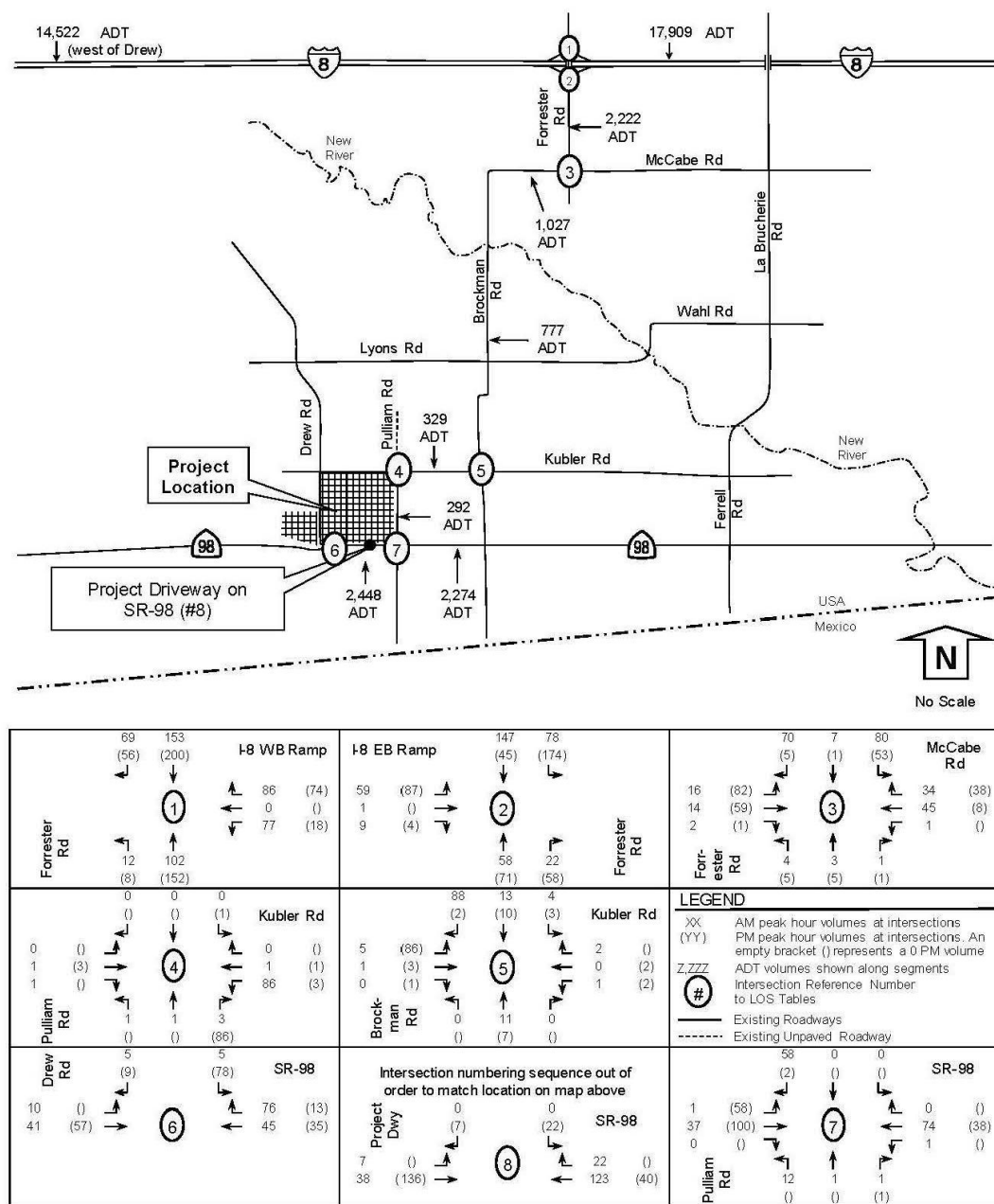
ACCESS CONFIGURATION #1 - NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION VOLUMES

County of Imperial
May 2019Drew Solar Project
Draft EIR

4.3-45

4.0 ERRATA

4.3 TRANSPORTATION



Source: LOS 2019b.

FIGURE 4.3-8B

ACCESS CONFIGURATION #2 - NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION VOLUMES

4.3 TRANSPORTATION

Intersection LOS

Table 4.3-17a summarizes Near-Term (Year 2016) intersection LOS compared to Near-Term (Year 2019) With Project construction traffic for Access Configuration #1. (Intersection LOS calculations are included in Appendix M of the Draft Traffic Impact Analysis [Appendix C of this EIR]).

TABLE 4.3-17A
ACCESS CONFIGURATION #1
NEAR-TERM (YEAR 2019) WITHOUT AND WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2019)		(Year 2019) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM PM	9.7 9.7	A A	10.2 9.9	B A	0.5 0.2	None None
2) Forrester Road at I-8 EB Ramp(U)	Minor Leg	AM PM	11.1 14.3	B B	11.8 15.2	B C	0.7 0.9	None None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM PM	8.6 8.6	A A	9.9 11.0	A B	0.3 1.4	None None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM PM	8.9 8.6 8.9 8.6	A A	9.0 9.1 9.2	A A	0.4 0.5 0.6	None None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM PM	8.7 8.9	A A	9.1 9.1	A A	0.2 0.2	None None
6) Drew Road at SR 98 (U)	Minor Leg	AM PM	9.1 8.7 8.6 8.9	A A	8.9 9.1 9.1 9.4	A A	0.2 0.4 0.2 0.5	None None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM PM	DNE 9.1 DNE 8.6	A A	9.4 9.6 8.8 9.7	A A	0.3 0.5 0.2 1.1	None None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM PM	DNE DNE	NA NA	1.2 9.2	A A	NA NA	None None

Source: LOS 2018 2019a. DNE: Does Not Exist NA: Not Applicable.

Notes: ¹ Intersection Control - (S) Signalized, (U) Un-signalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from Project.

⁵ Type of impact: none, direct, or cumulative.

Table 4.3-17b summarizes Near-Term (Year 2016) intersection LOS compared to Near-Term (Year 2019) With Project construction traffic for Access Configuration #2.

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4.3 TRANSPORTATION

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4.3 TRANSPORTATION

TABLE 4.3-17B
ACCESS CONFIGURATION #2
NEAR-TERM (YEAR 2019) WITHOUT AND WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2019)		(Year 2019) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	9.7	A	10.2	B	0.5	None
		PM	9.7	A	9.9	A	0.2	None
2) Forrester Road at I-8 EB Ramp(U)	Minor Leg	AM	11.1	B	11.8	B	0.7	None
		PM	14.3	B	15.2	C	0.9	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	8.6	A	9.9	A	0.3	None
		PM	8.6	A	11.0	B	1.4	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.6	A	9.1	A	0.5	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	8.7	A	9.1	A	0.2	None
		PM	8.9	A	9.1	A	0.2	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A	9.1	A	0.4	None
		PM	8.9	A	9.5	A	0.6	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.1	A	9.8	A	0.7	None
		PM	8.6	A	8.8	A	0.2	None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM	DNE	NA	1.2	A	NA	None
		PM	DNE	NA	9.4	A	NA	None

Source: LOS 2019a. DNE: Does Not Exist NA: Not Applicable.

Notes: ¹ Intersection Control - (S) Signalized, (U) Un-signalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from Project.

⁵ Type of impact: none, direct, or cumulative.

As shown, under Near-Term (Year 2019) With Project Conditions, all Project study area intersections are calculated to operate at LOS B or better with one exception. The intersection of Forrester Road at the I-8 eastbound ramp would operate at LOS C in the PM peak hour with project traffic would decline from LOS A to LOS B: Forrester Road at I-8 westbound in the AM Peak Hour and Forrester Road at McCabe Road in the PM Peak hour. No significant impacts to Project study area intersections were calculated due to the addition of Project construction traffic to existing traffic under Near-Term (Year 2019) conditions. Moreover, the increases in traffic resulting from construction of the proposed Project would not exceed LOS standards. Therefore, **less than significant** impacts to Project study area intersections would result under Near-Term (Year 2019) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-18a summarizes roadway and State Route segment LOS for Near-Term (Year 2019) With and Without Project Construction for Access Configuration #1. **Table 4.3-18b** summarizes roadway and State Route segment LOS for Near-Term (Year 2019) With and Without Project Construction for Access Configuration #2. As shown, all segments would continue to operate above LOS C (at LOS A or LOS B). No change in LOS would occur for any segment with the addition of Near-Term (Year 2019) Project construction traffic. Therefore, **less than significant** impacts to Project study area roadway segments would result under Near-Term (Year 2019) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

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4.3 TRANSPORTATION

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4.3 TRANSPORTATION

TABLE 4.3-18A
ACCESS CONFIGURATION #1
NEAR-TERM (YEAR 2019) WITHOUT AND WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

Segment	Classification (as built)	Daily Volume	LOS C Capacity	V/C	LOS	Project Daily Volume	Daily Volume	LOS C Capacity	V/C	LOS	Change in V/C	Impact?
Brockman Road McCabe Road to Kubler Road	Major (2U)	515	7,100	0.07	A	262	777	7,100	0.11	A	0.04	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,048	7,100	0.29	B	174	2,222	7,100	0.31	B	0.02	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	67	7,100	0.01	A	262	329	7,100	0.05	A	0.04	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	765	7,100	0.11	A	262	1,027	7,100	0.14	A	0.04	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	30	7,100	0.00	A	131 262	161 292	7,100	0.02 0.04	A	0.02 0.04	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,165	7,100	0.30	B	153 196	2,318 2,361	7,100	0.33	B	0.02 0.03	None
Pulliam Road to Brockman Road	State Highway (2U)	2,165	7,100	0.30	B	109	2,274	7,100	0.32	B	0.02	None

Source: LOS ~~2018~~ 2019a.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

4.0 ERRATA

4.3 TRANSPORTATION

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4.3 TRANSPORTATION

TABLE 4.3-18B
ACCESS CONFIGURATION #2
NEAR-TERM (YEAR 2019) WITHOUT AND WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

<u>Segment</u>	<u>Classification (as built)</u>	<u>Daily Volume</u>	<u>LOS C Capacity</u>	<u>V/C</u>	<u>LOS</u>	<u>Project Daily Volume</u>	<u>Daily Volume</u>	<u>LOS C Capacity</u>	<u>V/C</u>	<u>LOS</u>	<u>Change in V/C</u>	<u>Impact?</u>
Brockman Road McCabe Road to Kubler Road	Major (2U)	515	7,100	0.07	A	262	777	7,100	0.11	A	0.04	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,048	7,100	0.29	B	174	2,222	7,100	0.31	B	0.02	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	67	7,100	0.01	A	262	329	7,100	0.05	A	0.04	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	765	7,100	0.11	A	262	1,027	7,100	0.14	A	0.04	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	30	7,100	0.00	A	262	292	7,100	0.04	A	0.04	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,165	7,100	0.30	B	283	2,448	7,100	0.34	B	0.04	None
SR 98 Pulliam Road to Brockman Road	State Highway (2U)	2,165	7,100	0.30	B	109	2,274	7,100	0.32	B	0.02	None

Source: LOS 2019b.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

4.0 ERRATA

4.3 TRANSPORTATION

Freeway Segment LOS

Table 4.3-19 summarizes freeway segment LOS under Near-Term (Year 2019) With and Without Project Construction. As shown, both freeway segments were calculated to operate above LOS C (at LOS A and LOS B). I-8 from Dunaway Road to Drew Road would continue to operate at LOS A in the AM and PM Peak Hour in both directions (eastbound and westbound); I-8 from Forrester Road to Imperial Avenue would continue to operate at LOS A during the AM and PM peak hour in the eastbound direction and LOS B in the AM and PM peak hour in the westbound direction and the AM Peak Hour in the westbound direction. None of the increases in traffic resulting from Project construction would exceed V/C ratios or LOS standards. Therefore, **less than significant** impacts to Project study area freeway segments would occur under Near-Term (Year 2019) With Project Construction under both the Full Build-Out Scenario and Phased CUP Scenario.

**TABLE 4.3-19
NEAR-TERM (YEAR 2019) WITHOUT AND WITH PROJECT CONSTRUCTION FREEWAY SEGMENT LOS**

Freeway Segment	I-8 Dunaway Road to Drew Road				I-8 Forrester Road to Imperial Avenue			
Forecasted Near-Term (Year 2019) Without Project								
ADT	14,500				17,800			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,069	1,172	1,346	1,369	1,364	1,496	1,718	1,748
V/C	0.227	0.249	0.286	0.291	0.290	0.318	0.366	0.372
LOS	A	A	A	A	A	B	B	B
Project Peak Hour Volume	7	0	0	7	1	36	36	1
Near-Term (Year 2019) With Project								
Peak Hour Volume	1,076	1,172	1,346	1,376	1,365	1,532	1,754	1,749
V/C	0.229	0.249	0.286	0.293	0.291	0.326	0.373	0.372
LOS	A	A	A	A	A	B	B	B
Increase in V/C	0.001	0.000	0.000	0.001	0.000	.0008	0.008	0.000
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from Caltrans' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ Latest D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2017 report).

Impact? = Direct, Cumulative, or None.

Overall, under Near-Term (Year 2019) With and Without Project, the Project study area intersections, roadway, State Route and freeway segments were calculated to operate at LOS C or better for both Access Configuration #1 and Access Configuration #2. Thus, **less than significant** impacts were calculated with the addition of Project construction traffic to existing traffic volumes under Near-Term (Year 2019) With Project construction under both the Full Build-Out Scenario and Phased CUP Scenario.

4.3 TRANSPORTATION

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Conflict with Applicable Plan – Long-Term (Year 2027) Conditions

Impact 4.3.3 Implementation of the proposed Project would add traffic to existing traffic volumes on Project study area intersections, roadway segments and freeway segments during Long-Term (Year 2019) Project construction. The additional traffic would not result in an exceedance of LOS C. Therefore, conflicts with the Imperial County General Plan Circulation and Scenic Highways Element are considered **less than significant** under Mid-Term (Year 2027) With Project conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Long-Term (Year 2027)

This discussion addresses Long-Term Year 2027 conditions if the entire Project (in 18 months) is constructed at the end of the period when construction must commence per the CUP. The Year 2027 background volumes are based on increasing the existing year 2017 volumes by an annual growth rate of 1.8% (19.5% total due to compounding growth) as described in the Near-Term Year 2019 Conditions' Section. Year 2027 traffic volumes are shown in **Figure 4.3-9**. Intersection, roadway, State Route and freeway segment LOS are shown in **Tables 4.3-20, Table 4.3-21 and Table 4.3-22**. Intersection LOS calculations are included in Appendix S of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR.

Intersection LOS

Table 4.3-20 summarizes Long-Term (Year 2027) intersection LOS. (Intersection LOS calculations are included in Appendix S of the Draft Traffic Impact Analysis [**Appendix C** of this EIR]).

**TABLE 4.3-20
LONG-TERM (YEAR 2027) INTERSECTION LOS**

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2027)	
			Delay ²	LOS ³
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM PM	10.0 10.0	B B
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM PM	11.8 16.4	B C
3) Forrester Road at McCabe Road (U)	Minor Leg	AM PM	9.8 9.7	A A
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM PM	8.6 8.6	A A
5) Brockman Road at Kubler Road (U)	Minor Leg	AM PM	8.9 9.0	A A
6) Drew Road at SR 98 (U)	Minor Leg	AM PM	8.7 9.0	A A
7) Pulliam Road at SR 98 (U)	Minor Leg	AM PM	9.1 8.7	A A

Source: LOS 2018. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

Notes: ¹ Intersection Control – (S) Signalized, (U) Un-signalized. ² Delay – HCM Average Control Delay in seconds. ³ LOS: Level of Service.

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Under Long-Term (Year 2027) Conditions, the Project study area intersections were calculated to operate at LOS C or better. One intersection (Forrester Road at I-8, eastbound ramp) would operate at LOS C in the PM peak hour. This same intersection operates at LOS B in the AM Peak hour. One intersection (Forrester Road at I-8, westbound ramp) operates at LOS B in both the AM and PM peak hours while all others will operate at LOS A. All of the intersections will operate with **less than significant impacts** to LOS under Long-Term (Year 2019) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-21 summarizes roadway segment LOS for Long-Term (Year 2027) conditions. As shown, all segments would operate above LOS C (at LOS A or LOS B). Specifically, all segments would operate at LOS A with the exception of the segment along Forrester Road from I-8 to McCabe Road and both segments of SR 98 which would all operate at LOS B. Because, all roadway and State Route segments would operate above the LOS C standard, **less than significant impacts** would occur under Long-Term (Year 2027) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

**TABLE 4.3-21
LONG-TERM (YEAR 2027) ROADWAY AND STATE ROUTE SEGMENT LOS**

Segment	Classification (as built)	Daily Volume	# of Lanes	LOS C Capacity	V/C	LOS
Brockman Road McCabe Road to Kubler Road	Major (2U)	594	2	7,100	0.08	A
Forrester Road I-8 to McCabe Road	Prime (2U)	2,363	2	7,100	0.33	B
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	78	2	7,100	0.01	A
McCabe Road Brockman Road to Forrester Road	Major (2U)	882	2	7,100	0.12	A
Pulliam Road Kubler Road to SR 98	Minor (2U)	35	2	7,100	0.00	A
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,498	2	7,100	0.35	B
Pulliam Road to Brockman Road	State Highway (2U)	2,498	2	7,100	0.35	B

Source: LOS 2018.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

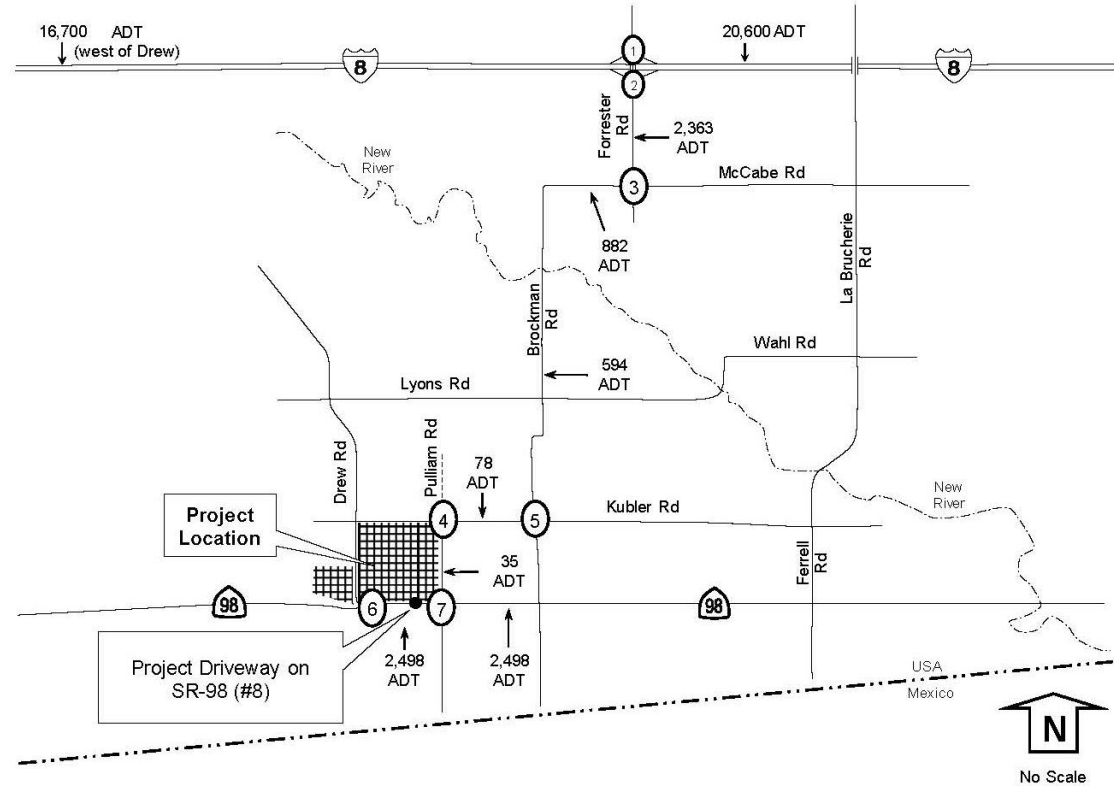
2U = 2-lane undivided roadway.

Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

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<p>Forrester Rd</p> <p>80 (65) →</p> <p>151 (231) ↓</p> <p>117 (149) ↑</p> <p>14 (10) ←</p> <p>0 (0) →</p> <p>1 (4) ↓</p> <p>1 (1) ↑</p> <p>0 (0) ←</p> <p>0 (0) →</p> <p>42 (74) ↓</p> <p>0 (0) ↑</p>	<p>I-8 WB Ramp</p> <p>99 (85) →</p> <p>0 (0) ↓</p> <p>48 (19) ↑</p>	<p>I-8 EB Ramp</p> <p>68 (100) →</p> <p>1 (0) ↓</p> <p>11 (5) ↑</p>	<p>103 (50) →</p> <p>90 (201) ↓</p> <p>67 (56) ↑</p> <p>24 (25) ↓</p>	<p>Forrester Rd</p> <p>17 (27) →</p> <p>16 (35) ↓</p> <p>2 (1) ↑</p> <p>5 (6) →</p> <p>4 (6) ↓</p> <p>1 (1) ↑</p>	<p>McCabe Rd</p> <p>39 (44) →</p> <p>18 (8) ↓</p> <p>1 (0) ↑</p>	<p>Drew Rd</p> <p>4 (0) →</p> <p>39 (66) ↓</p>	<p>SR-98</p> <p>0 (0) →</p> <p>44 (43) ↓</p> <p>1 (1) ↑</p>	<p>Project Dwy</p> <p>0 (0) →</p> <p>42 (74) ↓</p>	<p>SR-98</p> <p>0 (0) →</p> <p>59 (44) ↓</p>	<p>LEGEND</p> <p>XX (YY) AM peak hour volumes at intersections. PM peak hour volumes at intersections. An empty bracket () represents a 0 PM volume.</p> <p>Z,ZZZ ADT volumes shown along segments.</p> <p># Intersection Reference Number to LOS Tables.</p> <p>Existing Roadways</p> <p>Existing Unpaved Roadway</p>
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Source: LOS 2018.

FIGURE 4.3-9
LONG-TERM (YEAR 2027) TRAFFIC VOLUMES

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Freeway Segment LOS

Table 4.3-22 summarizes Long-Term (Year 2027) freeway segment LOS. As shown, the freeway segments were calculated to operate above LOS C (LOS A or LOS B). I-8 from Drew Road to Forrester Road would operate at LOS B in the PM peak hour in both the eastbound and westbound direction. Likewise, I-8 from Forrester Road to Imperial Avenue would operation at LOS B in both the AM and PM peak hour in both the eastbound and the westbound direction. The segment of I-8 from Dunaway Road to Drew Road would operate at LOS A. Because, all freeway segments would operate above the LOS C standard, **less than significant impacts** would occur under Long-Term (Year 2027) conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

**TABLE 4.3-22
LONG-TERM (YEAR 2027) FREEWAY SEGMENT LOS**

Freeway Segment	I-8 Dunaway Road to Drew Road				I-8 Forrester Road to Imperial Avenue			
	Forecasted (Year 2027)							
ADT	16,700				20,600			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,231	1,349	1,550	1,1576	1,579	1,731	1,989	2,022
V/C	0.262	0.287	0.330	0.335	0.336	0.368	0.412	0.430
LOS	A	A	B	B	B	B	B	B

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

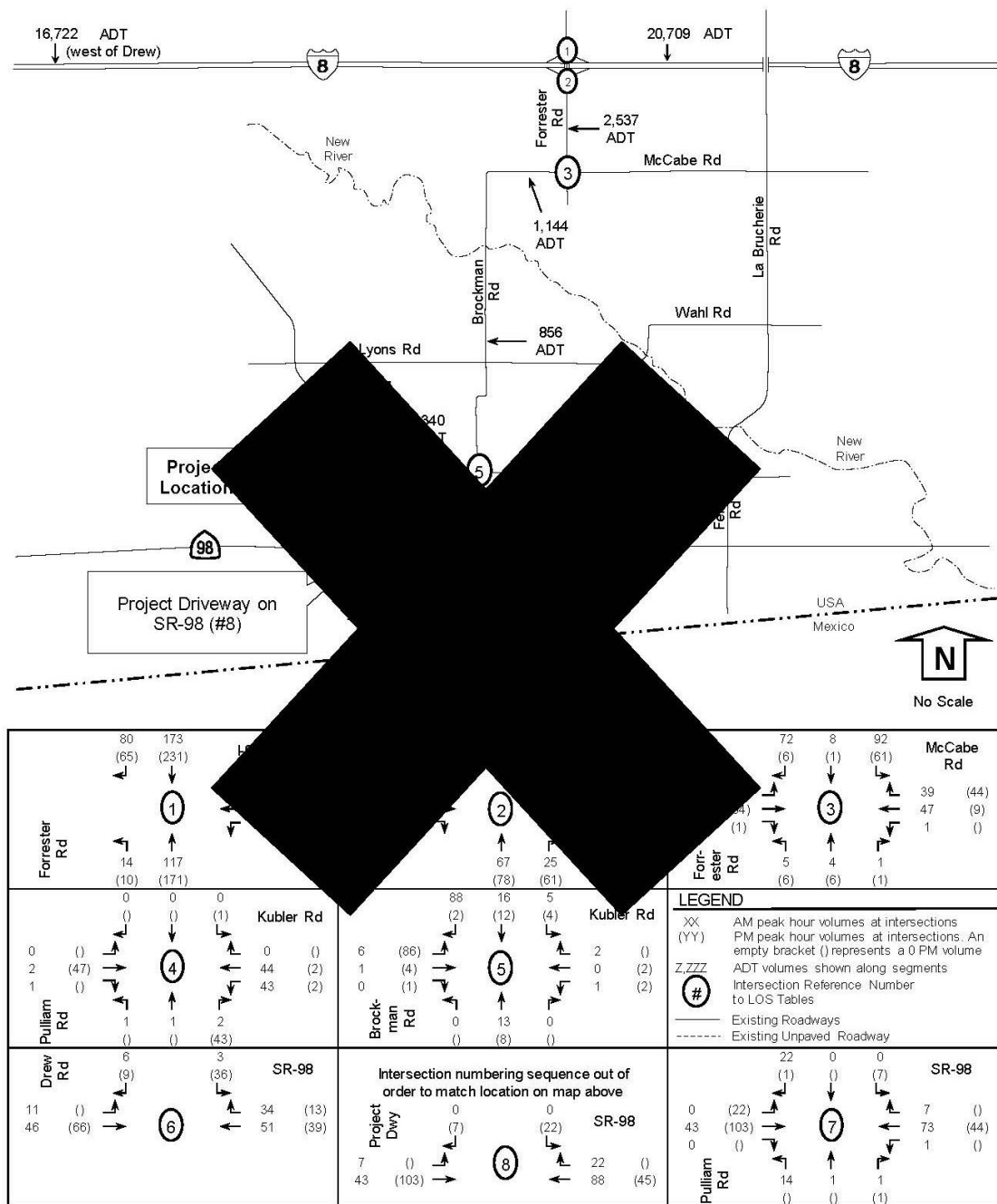
⁴ Truck factor from Caltrans (based on 2015 report).

Impact? = Direct, Cumulative, or None.

Long-Term (Year 2027) With Project Construction Conditions

This section documents the addition of Project construction traffic onto Long-Term (Year 2027) conditions. **Figure 4.3-10a** depicts Long-Term (Year 2027) With Project Construction traffic volumes for Access Configuration #1. **Figure 4.3-10b** depicts Long-Term (Year 2027) With Project Construction traffic volumes for Access Configuration #2. Intersection, segment, and freeway LOS are shown in **Table 4.3-23a** and **Table 4.3-23b** (Access Configuration #1), **Table 4.3-24a** and **Table 4.3-24b** (Access Configuration #2) and **Table 4.3-25**.

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Source: LOS 2018.

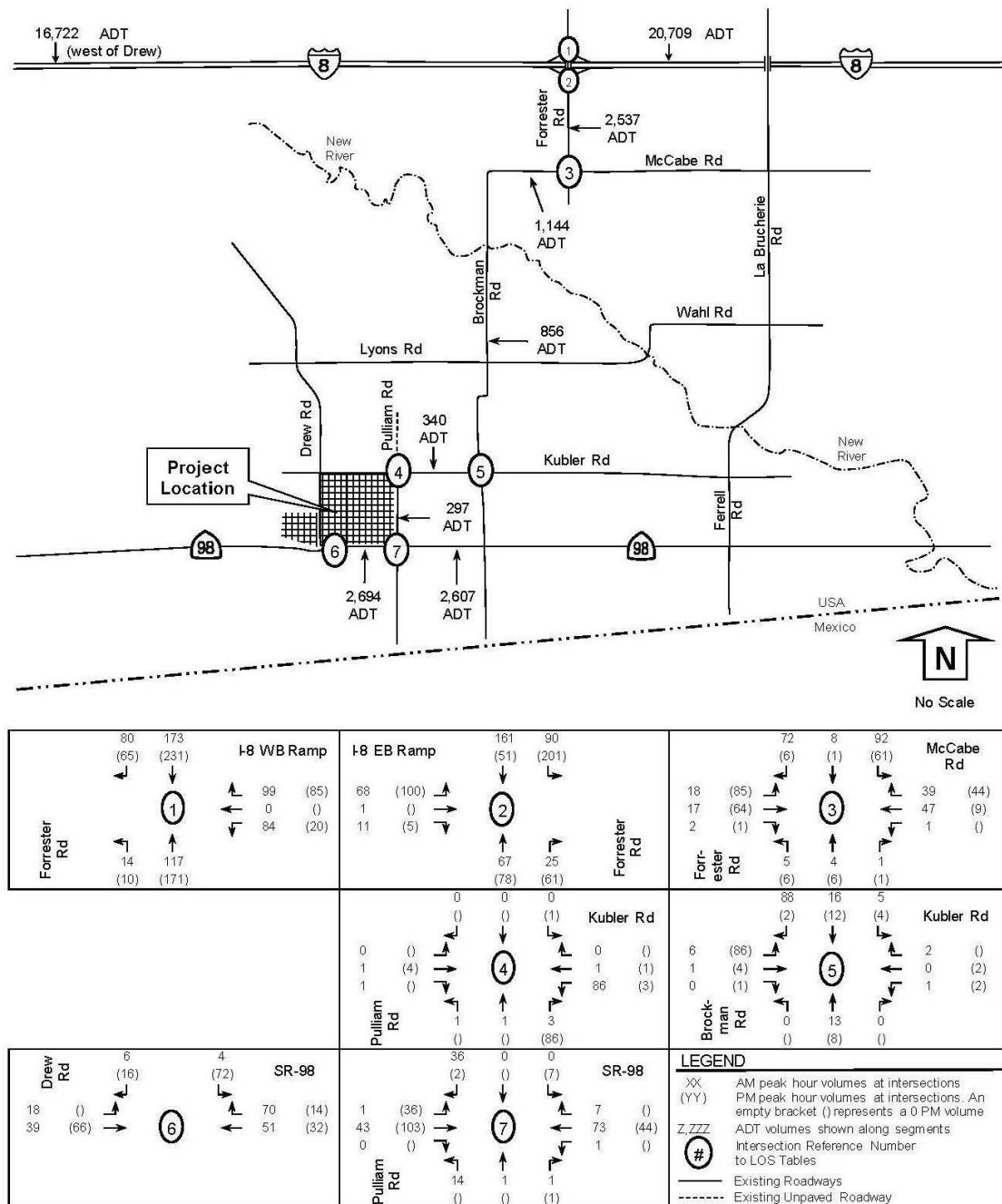
FIGURE 4.3-10
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION VOLUMES

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Source: LOS 2019.

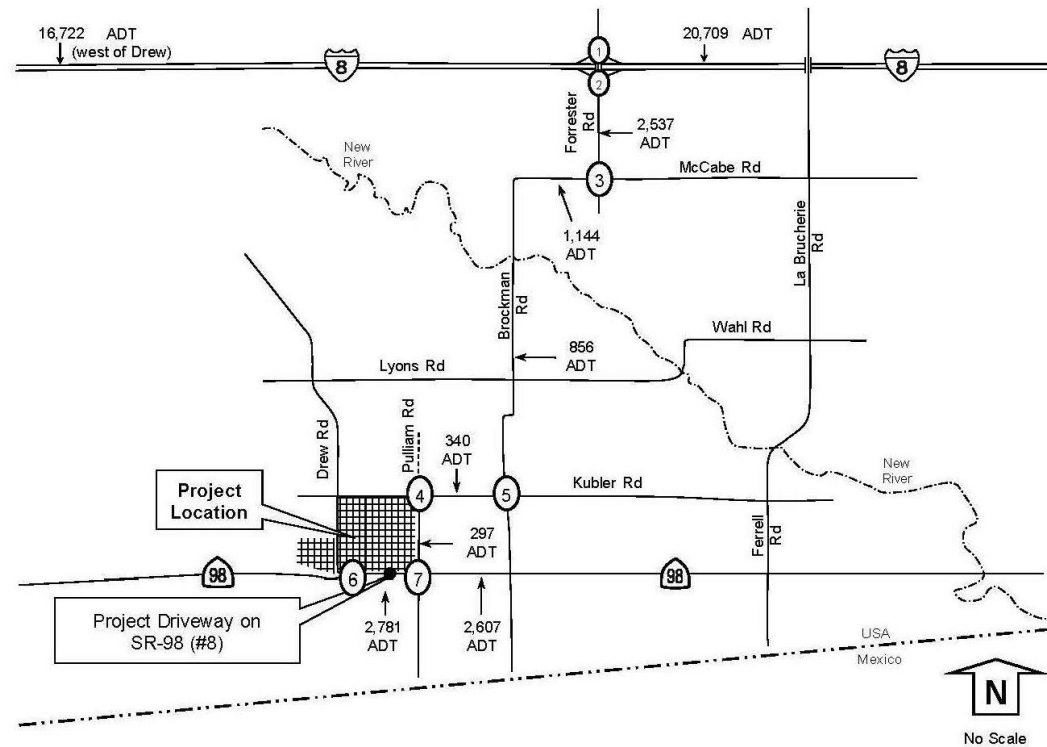
FIGURE 4.3-10A
ACCESS CONFIGURATION #1 - LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION VOLUMES

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<p>Forrester Rd</p> <p>80 (65) 173 (231)</p> <p>1</p> <p>99 (85) 0 (0) 84 (20)</p> <p>14 (10) 117 (171)</p>	<p>I-8 WB Ramp</p> <p>68 (100) 161 (51) 90 (201)</p> <p>2</p> <p>67 (78) 25 (61)</p> <p>Forrester Rd</p>	<p>McCabe Rd</p> <p>72 (6) 8 (1) 92 (61)</p> <p>3</p> <p>18 (85) 17 (64) 2 (1)</p> <p>39 (44) 47 (9) 1 (0)</p>
<p>Pulliam Rd</p> <p>0 (0) 1 (4) 1 (0)</p> <p>4</p> <p>1 (0) 1 (0) 3 (86)</p>	<p>Kubler Rd</p> <p>88 (2) 16 (12) 5 (4)</p> <p>5</p> <p>6 (86) 1 (4) 0 (1)</p> <p>0 (1) 13 (8) 0 (0)</p> <p>Brockman Rd</p>	<p>Kubler Rd</p> <p>2 (0) 0 (2) 1 (2)</p>
<p>Drew Rd</p> <p>11 (0) 46 (66)</p> <p>6</p> <p>5 (79) 77 (15) 51 (39)</p> <p>6</p>	<p>SR-98</p> <p>Intersection numbering sequence out of order to match location on map above</p> <p>Project Dwy</p> <p>7 (0) 44 (146)</p> <p>8</p> <p>0 (22) 22 (0) 131 (46)</p>	<p>SR-98</p> <p>58 (2) 0 (0) 0 (0)</p> <p>7</p> <p>1 (58) 43 (110) 0 (0)</p> <p>14 (0) 1 (0) 1 (1)</p> <p>Pulliam Rd</p>

Source: LOS 2019.

FIGURE 4.3-10b
ACCESS CONFIGURATION #2 - LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION VOLUMES

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TABLE 4.3-23A
ACCESS CONFIGURATION #1
LONG-TERM YEAR 2027 WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2027)		(Year 2027) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB (U)	Minor Leg	AM	10.0	B	10.6	B	0.6	None
		PM	10.0	B	10.2	B	0.2	None
2) Forrester Road at I-8 EB (U)	Minor Leg	AM	11.8	B	12.6	B	0.8	None
		PM	16.4	C	17.5	C	1.1	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	9.8	A	10.2	B	0.4	None
		PM	9.7	A	11.3	B	1.6	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.6	A	9.0 9.1	A	0.4 0.5	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Rd at Kubler Rd (U)	Minor Leg	AM	8.9	A	9.1	A	0.2	None
		PM	9.0	A	9.1	A	0.1	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A	8.9 9.1	A	0.2 0.4	None
		PM	9.0	A	9.2 9.5	A	0.2 0.5	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.1	A	9.5 9.7	A	0.4 0.6	None
		PM	8.7	A	8.8 9.9	A	0.1 1.2	None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM	DNE	NA	1.0	A	NA	None
		PM	DNE	NA	9.3	A	NA	None

Source: LOS 2018 2019a. DNE: Does Not Exist; NA: Not Applicable

Notes: ¹ Intersection Control – (S) Signalized, (U) Un-signalized.

² Delay – HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from project.

⁵ Type of impact: none, direct, or cumulative.

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TABLE 4.3-23B
ACCESS CONFIGURATION #2
LONG-TERM YEAR 2027 WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2027)		(Year 2027) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB (U)	Minor Leg	AM PM	10.0 10.0	B B	10.6 10.2	B B	0.6 0.2	None None
2) Forrester Road at I-8 EB (U)	Minor Leg	AM PM	11.8 16.4	B C	12.6 17.5	B C	0.8 1.1	None None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM PM	9.8 9.7	A A	10.2 11.3	B B	0.4 1.6	None None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM PM	8.6 8.6	A A	9.1 9.2	A A	0.5 0.6	None None
5) Brockman Rd at Kubler Rd (U)	Minor Leg	AM PM	8.9 9.0	A A	9.1 9.1	A A	0.2 0.1	None None
6) Drew Road at SR 98 (U)	Minor Leg	AM PM	8.7 9.0	A A	9.1 9.6	A A	0.4 0.6	None None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM PM	9.1 8.7	A A	9.9 8.9	A A	0.8 0.2	None None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM PM	DNE DNE	NA NA	1.0 9.5	A A	NA NA	None None

Source: LOS 2019b. DNE: Does Not Exist; NA: Not Applicable

Notes: ¹ Intersection Control – (S) Signalized, (U) Un-signalized.

² Delay – HCM Average Control Delay in seconds.

³ LOS: Level of Service. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

⁴ Delta is the increase in delay from project.

⁵ Type of impact: none, direct, or cumulative.

As shown, under Long-Term (Year 2027) With Project Construction, all but one Project study area intersection is calculated to operate at LOS C or better. The intersection of Ferrell Road at I-8 eastbound would continue to operate at LOS C during the PM peak hour with Project traffic. The intersection of Forrester Road at McCabe Road would decline from LOS A to LOS B in both the AM and PM Peak Hour. No significant impacts to Project study area intersections were calculated due to the addition of construction traffic to existing traffic under Long-Term (Year 2027) conditions. Moreover, the increases in traffic resulting from construction of the proposed Project would not exceed LOS standards. Therefore, **less than significant impacts** to Project study area intersections would result under Long-Term (Year 2027) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-24a 4.3-27 summarizes roadway and State Route segment LOS for Long-Term (Year 2027) With and Without Project Construction for Access Configuration #1. **Table 4.3-24b** summarizes roadway and State Route segment LOS for Long-Term (Year 2027) With and Without Project Construction for Access Configuration #2. As shown, all segments would continue to operate above LOS C (at LOS A or LOS B). No change in LOS would occur for any segment with the addition of Long-Term (Year 2027) Project construction traffic. Therefore, **less than significant impacts** to Project study area roadway segments would occur under Long-Term (Year 2027) With Project Construction conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

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TABLE 4.3-24A
ACCESS CONFIGURATION #1
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

Segment	Classification (as built)	(Year 2027)				Project Daily Volume	(Year 2027) With Project					
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Change in V/C	Impact?
Brockman Road McCabe Road to Kubler Road	Major (2U)	594	7,100	0.08	A	262	856	7,100	0.12	A	0.04	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,363	7,100	0.33	B	174	2,537	7,100	0.36	B	0.02	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	78	7,100	0.01	A	262	340	7,100	0.05	A	0.04	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	882	7,100	.012	A	262	1,144	7,100	0.16	A	0.04	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	35	7,100	0.00	A	131 262	166 297	7,100	0.02 0.04	A	0.02 0.04	None
SR 98 Drew Road to Pulliam Road	State Highway (SU)	2,498	7,100	0.35	B	153 196	2,651 2,694	7,100	0.37 0.38	B	0.02 0.03	None
Pulliam Road to Brockman Road	State Highway (SU)	2,498	7,100	0.35	B	109	2,607	7,100	0.37	B	0.02	None

Source: LOS 2019 2019a.

Notes: Classification based on the Imperial County General Plan, Circulation and Scenic Highways Element, January 29, 2008.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-24b
ACCESS CONFIGURATION #2
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION ROADWAY AND STATE ROUTE SEGMENT LOS

Segment	Classification (as built)	(Year 2027)				Project Daily Volume	(Year 2027) With Project					Impact?
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Change in V/C	
Brockman Road												
McCabe Road to Kubler Road	Major (2U)	594	7,100	0.08	A	262	856	7,100	0.12	A	0.04	None
Forrester Road												
I-8 to McCabe Road	Prime (2U)	2,363	7,100	0.33	B	174	2,537	7,100	0.36	B	0.02	None
Kubler Road												
Brockman Road to Ferrell Road	Minor (2U)	78	7,100	0.01	A	262	340	7,100	0.05	A	0.04	None
McCabe Road												
Brockman Road to Forrester Road	Major (2U)	882	7,100	0.12	A	262	1,144	7,100	0.16	A	0.04	None
Pulliam Road												
Kubler Road to SR 98	Minor (2U)	35	7,100	0.00	A	262	297	7,100	0.04	A	0.04	None
SR 98												
Drew Road to Pulliam Road	State Highway (SU)	2,498	7,100	0.35	B	283	2,781	7,100	0.39	B	0.04	None
Pulliam Road to Brockman Road	State Highway (SU)	2,498	7,100	0.35	B	109	2,607	7,100	0.37	B	0.02	None

Source: LOS 2019a.

Notes: Classification based on the Imperial County General Plan, Circulation and Scenic Highways Element, January 29, 2008.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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Freeway Segment LOS

Table 4.3-25 summarizes freeway segment LOS under Long-Term (Year 2027) With and Without Project Construction. As shown, both freeway segments were calculated to operate above LOS C (at LOS A and LOS B). In fact, no change in LOS would occur with the addition of Project construction traffic. Moreover, the increases in traffic resulting from Project construction would not exceed V/C ratios or LOS standards. Therefore, **less than significant impacts** to Project study area freeway segments would occur under Long-Term (Year 2027) With Project construction under both the Full Build-Out Scenario and Phased CUP Scenario.

TABLE 4.3-25
LONG-TERM (YEAR 2027) WITHOUT AND WITH PROJECT CONSTRUCTION FREEWAY SEGMENT LOS

Freeway Segment	I-8 Drew Road to Forrester Road				I-8 Forrester Road to Imperial Avenue			
Forecasted (Year 2019) Without Project								
ADT	16,700				20,600			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,231	1,349	1,550	1,583	1,580	1,767	2,025	2,023
V/C	0.262	0.287	0.330	0.335	0.336	0.368	0.423	0.430
LOS	A	A	B	B	B	B	B	B
Project Peak Hour Volume								
2019 With Project								
Peak Hour Volume	1,238	1,349	1,550	1,583	1,580	1,767	2,025	2,023
V/C	0.263	0.287	0.330	0.337	0.336	0.376	0.431	0.431
LOS	A	A	B	B	B	B	B	B
Increase in V/C	0.001	0.000	0.000	0.001	0.000	0.008	0.008	0.000
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Truck factor from Caltrans (based on 2017 report).

Impact? = Direct, Cumulative, or None.

Overall, under Long-Term (Year 2027) With and Without Project construction, the Project study area intersections, roadway, State Route and freeway segments were calculated to operate at LOS C or better for both Access Configuration #1 and Access Configuration #2. Thus, **less than significant impacts** were calculated with the addition of Project construction traffic to existing traffic volumes under Long-Term (Year 2027) With Project construction under both the Full Build-Out Scenario and Phased CUP Scenario.

4.3 TRANSPORTATION

Increase Hazards Due to a Geometric Design Feature – Driveways and Travel Speeds

Impact 4.3.4 Implementation of the proposed Project would not require provision of left-turn lanes at Project driveways to allow access to any of the CUPs. No geometric design features are proposed that would result in hazards. Likewise, area roadways are currently traveled by farm equipment similar in size and speed to construction equipment necessary for the proposed Project. Therefore, impacts resulting from an increase in hazards due to a geometric design feature or an incompatible use are considered **less than significant** under both the Full Build-Out Scenario and Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction

Multiple County maintained roads provide access throughout the Project Area. These roads are currently traveled by farm equipment used to maintain and harvest crops currently grown on the solar field site parcels and surrounding agricultural lands. Farm equipment and construction equipment are of similar size and travel at similar speeds. Thus, the introduction of construction equipment onto area roadways would not pose a hazard or be incompatible with existing uses. The Project does not propose to use unpaved County roads for access. No left turn lanes are warranted during Project construction and none of the access points present a hazard to traffic along adjacent roadways. Therefore, **less than significant impacts** are identified with regard to hazards due to a geometric design feature or incompatible use during construction of both the Full Build-Out Scenario and Phased CUP Scenario.

Operation

During Project operation, access to each CUP will be controlled and gates will be installed at the access roads. The parking lot(s) will meet the requirements of the Imperial County Land Use Ordinance Division 3 Chapter 1 90302.02 Development of Standard I. All driveways leading to the O&M building(s) will be surfaced with a minimum of three (3) inches of asphaltic concrete paving or similar material.

Incorporation of these access points and paving features would not present a hazard. Therefore, less than significant impacts are identified with regard to hazards due to a geometric design feature during operation of both the Full Build-Out Scenario and Phased CUP Scenario.

Decommissioning

Access points to each CUP used during decommissioning are anticipated to be the same as those used during construction. Similar equipment would be involved during decommissioning as was used during construction. However, traffic volumes will likely be less and not as intensive as occurred during construction. Therefore, **less than significant impacts** are identified with regard to hazards due to a geometric design feature during decommissioning of both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.3 TRANSPORTATION

Increase Hazards Due to a Geometric Design Feature – Damage to County-Maintained Roadways During Project Construction

Impact 4.3.5 Construction of the proposed Project will require movement of heavy equipment and large vehicles on County roadways not designed to accommodate high volumes of overweight trucks and loads. The condition of the roadways may deteriorate rapidly based on the volume and weight of construction traffic. Therefore, impacts to County-maintained roadways are considered **potentially significant** under both the Full Build-Out Scenario and Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction, Operation and Decommissioning/Reclamation

Damage to County-maintained roadways would occur during construction, require repair prior to operation and be re-assessed following decommissioning. Once the project is reclaimed, no damage beyond what is currently occurring in association with existing farming operations is anticipated.

County roadways within the Project Area should be designed in accordance with the specifications outlined under item “II H. STREET STRUCTURAL SECTION” of the *Engineering Design Guidelines Manual for the Preparation and Checking of Street Improvement Drainage and Grading Plans Within Imperial County* (Imperial County 2008d). As such, the roadways may not currently be designed to accommodate high volumes of construction traffic involving heavy equipment and trucks.

According to the Applicant, the construction workforce is expected to start in 2017 and reach the highest concentration in spring of 2019 (for the near-term scenario) with an average of 250 workers. Construction activities are expected to require approximately 18 months.

The worker and construction truck traffic is calculated at 436 ADT with 144 AM peak hour trips (141 inbound and 6 outbound) and 141 PM peak hour trips (3 inbound and 144 outbound). These trips would be generated along designated Project haul routes during Project construction and would avoid unpaved County roads.

As construction of the Project includes site preparation, foundation construction, delivery of equipment and supplies, erection of major equipment and structures, installation of control systems, and start-up/testing, many of the 436 ADT would involve movement of heavy equipment and supplies including large trucks carrying oversized loads. Trucks loaded with equipment and supplies are extremely heavy. The weight of these vehicles combined with elevated volumes of trips generated during construction would accelerate the deterioration of County-maintained roadway surfaces along designated Project haul routes. The amount of degradation associated with construction traffic is contingent upon both the design of the pavement (type and thickness) as well as the existing condition of the roadway surface. Existing County-maintained roadways in the Project vicinity are not designed with a pavement thickness sufficient to withstand a high volume of heavy-duty trucks and equipment trips. Cracks, ruts and pot-holes will develop as a result of high volumes of heavy vehicles. This damage represents a potential hazard to motorists as well as an economic burden to the County associated with roadway repairs. However, this analysis conservatively concludes that the Project’s impacts to the safety of county roads is a **potentially significant impact** under both the Full Build-out Scenario and the Phased CUP Scenario.

4.3 TRANSPORTATION

Mitigation Measures**MM 4.3.5a All CUPs (CUP#17-0031 thru CUP#17-0035 and CUP#18-0001)**

~~The Project contractor shall utilize SR 98 for all equipment deliveries.~~ Employee and vendor routes to each CUP shall be limited to ~~SR 98, Drew Road, and Pulliam Road and Kubler Road,~~ unless improvements are made to other county roads leading to individual CUP sites in advance of development of each CUP.

Timing/Implementation: Prior to the issuance of grading permit/Project contractor.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department.

MM 4.3.5b All CUPs (CUP#17-0031 thru CUP#17-0035 and CUP#18-0001)

The CUP owner(s) shall limit the Project's construction traffic to paved County roadways. In the event the Applicant's construction traffic requires the use of unpaved County roadways, the Applicant shall mitigate those County unpaved roadways in accordance with ICAPCD Rule 805.

In addition to complying with Rule 805, if 50 vehicle trips per day (VPD) (cumulative from public and project use) are triggered by the project on any single County unpaved roadway, the Applicant shall provide for the future maintenance cost of the affected roadway for the full term of the CUP which triggered the increase beyond the 50 VPD threshold.

Timing/Implementation: Prior to the issuance of grading permit/CUP owner(s).

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department.

MM 4.3.5c All CUPs (CUP#17-0031 thru CUP#17-0035 and CUP#18-0001)

As each CUP may be constructed individually and independently, the CUP owner(s) shall improve the roads per the approved haul route study. If the CUP owner(s) has already improved the roads that will be utilized by the next CUP to start construction, then no new road improvements are required.

Timing/Implementation: Prior to the issuance of grading permit/CUP owner(s).

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department.

MM 4.3.5d All CUPs (CUP#17-0031 thru CUP#17-0035 and CUP#18-0001)

~~Construction traffic shall prioritize ingress and egress from SR 98.~~ Project construction traffic will utilize County roads, therefore a fair share shall be paid per the approved haul route study, and the Developer will be required to repair any damages caused to County roads by construction traffic during construction and maintain them in safe conditions. The Imperial County Public Works Department/Road Commissioner shall have final authority as to the fair share percentage and the final payment amounts based on the final and approved access points in the project's grading and improvement plans. Fair share shall be paid in full prior to issuance of grading, building and encroachment permits.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

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MM 4.3.5e CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035 and CUP#18-0001

Fair share payments shall be paid per the approved haul route study, as approved by Imperial County Public Works Department prior to issuance of grading, building and encroachment permits.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5f CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035 and CUP#18-0001

Prior to issuance of final Certificate of Occupancy, CUP owner shall be responsible for repairing any damage caused to County roads and bridges it utilizes via improvements as determined by the County Road Commissioner based on the final and approved access points in the Project's grading and improvement plans.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5g CUP#17-0031

Fair share payments shall be paid for future road maintenance of at least one-half mile of road improvements (calculated to include 100% of shoulder work, grinding 1-inch of asphalt and final 2-inches of overlays) along Drew Road from SR 98 to the Mount Signal Drain No. 1 or as approved by ICDPW prior to issuance of the first grading permit based on the final and approved access points in the Project's grading and improvement plans. Final distance of road improvements and unit costs for the fair share shall be determined by the Road Commissioner.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5h CUP#17-0032

Fair share payments shall be paid for future road maintenance of at least one-half mile of road improvements (calculated to include 100% of shoulder work, grinding 1-inch of asphalt and final 2-inches of overlays) along Pulliam Road from SR 98 to the Carr Drain or as approved by ICDPW prior to issuance of the first grading permit based on the final and approved access points in the Project's grading and improvement plans. Final distance of road improvements and unit costs for the fair share shall be determined by the Road Commissioner.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

4.3 TRANSPORTATION

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5i 4.3.5g CUP#17-0033

Fair share payments shall be paid for future road maintenance of 2,800 feet of at least one-half mile of road improvements (calculated to include 100% of shoulder work, grinding 1-inch of asphalt and final 2-inches of overlays) asphalt paving required on along Pulliam Road from Carr Drain to Kubler Road, Pulliam Road north of SR 98 or as approved by ICDPW prior to issuance of the first grading permit Final Certificate of Occupancy based on the final and approved access points in the Project's grading and improvement plans. Final distance of road improvements and unit costs for the fair share shall be determined by the Road Commissioner.

~~Fair share payments shall be paid for 1,600 feet of asphalt patching required on Kubler Road west of Pulliam Road relating to construction haul route, or as approved by Imperial County Public Works Department prior to issuance of Final Certificate of Occupancy.~~

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5j 4.3.5h CUP#17-0034

Fair share payments shall be paid for future road maintenance of install up to 2,400 feet at least one-half mile of road improvements (calculated to include 100% of shoulder work, grinding 1-inch of asphalt and final 2-inches of overlays) asphalt paving required on Kubler Road west of Pulliam Road relating to the construction haul route and 2,400 feet of Drew Road along Drew Road from Mount Signal Drain No. 1 to Kubler Road, or as approved by Imperial County Public Works Department prior to issuance of Final Certificate of Occupancy the first grading permit based on the final and approved access points in the Project's grading and improvement plans, unless already the condition has already been satisfied as part of CUP#17-0033. Final distance of road improvements and unit costs for the fair share shall be determined by the Road Commissioner.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Public Works Department/Road Commissioner.

MM 4.3.5k 4.3.5i CUP#17-0035 and CUP#18-0001

Fair share payments shall be paid for future road maintenance of install up to 2,400 feet of at least one mile of road improvements (calculated to include 100% of shoulder work, grinding 1-inch of asphalt and final 2-inches of overlays) asphalt paving on along Drew Road from SR 98 up to Kubler Road unless this condition has already been satisfied as part of CUP 17-0031 or CUP 17-0035 required on Drew Road relating to construction haul route, or as approved by Imperial County Public Works Department prior to issuance of Final Certificate of Occupancy the first grading permit based on the final and approved access points in the

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Project's grading and improvement plans. Final distance of road improvements and unit costs for the fair share shall be determined by the Road Commissioner.

Timing/Implementation: Prior to the issuance of grading, building and encroachment permits.

Enforcement/Monitoring: Imperial County Public Works Department.

Significance After Mitigation

Implementation of mitigation measure MM 4.3.5a would limit equipment deliveries, employee and vendor traffic to specific routes unless improvements are made to other County Roads prior to development of each CUP. Mitigation measure MM 4.3.5b requires that the Project's construction traffic use paved roads and avoid unpaved County roadways. If public unpaved roads are used for construction, then MM 4.3.5b will stipulate the mitigation utilizing acceptable best management practices in accordance with ICAPCD Rule 805. Furthermore, if the Proponent's VPD increase beyond a cumulative total of 50 trips per day, the Proponent will be responsible for the cost of future maintenance of impacted public unpaved roadways. Mitigation measure 4.3.5c requires the Applicant to improve roads to each CUP. Mitigation measure MM 4.3.5d applies to all CUPs (CUP#17-0031 thru CUP#17-0035 and CUP#18-0001) and requires fair share payments for County roads used during construction as determined by the Imperial County Public Works Department/ Road Commissioner. Mitigation measure MM 4.3.5e requires fair share payment ~~for 1,300 feet of asphalt paving required on Drew Road immediately north of SR 98 specific to CUP#17-0031 based on the approved haul route study.~~ Mitigation measure MM 4.3.5f requires the owners of CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035 and CUP#18-0001 to repair any damaged caused to County roads and bridges. Mitigation measure MM 4.3.5g requires the owner of CUP #17- 0031 to pay fair share payments for future road maintenance of at least one-half mile of road improvements along Drew Road from SR 98 to the Mount Signal Drain No. 1. Mitigation measure MM 4.3.5h requires the owner of CUP #17- 0032 to pay fair share payments for at least one-half mile of road improvements along Pulliam Road from SR 98 to the Carr Drain. Mitigation measure MM 4.3.5i requires the owner of CUP #17-0033 to pay fair share payments for future road maintenance of at least one-half mile of road improvements ~~for 2,800 feet of asphalt paving on Pulliam Road north of SR 98 and 1,600 feet of asphalt patching on Kubler Road west of Pulliam Road along Pulliam Road from Carr Drain to Kubler Road.~~ Mitigation measure MM 4.3.5j requires the owner of CUP #17-0034 to pay fair share payments for future road maintenance of at least one-half mile of road improvements along Drew Road from Mount Signal Drain No. 1 to Kubler Road ~~install up to 2,400 feet of asphalt paving required on Kubler Road west of Pulliam Road relating to the construction haul route and 2,400 feet of Drew Road.~~ Lastly, mitigation measure MM 4.3.5k requires the owner of CUP#17-0035 and CUP#18-001 to pay fair share payments for at least one mile of road improvements along Drew Road from SR 98 up to Kubler Road unless condition has already been satisfied as part of CUP 17-0031 or CUP 17-0035 ~~installation up to 2,400 feet of asphalt paving on Drew Road relating to the construction route.~~ Following implementation of these measures, impacts associated with damage to County-maintained roadways resulting from Project construction would be reduced to **less than significant** under both the Full Build-Out Scenario and Phased CUP Scenario.

Emergency Access

Impact 4.3.6 The proposed Project includes emergency access points off of Kubler Road, Drew Road, Pulliam Road. Access of SR 98 is to a frontage road which connects with an emergency access. Final design will be review by the Imperial County Fire Department and Imperial County Sheriff's Office prior to approval. Therefore, impacts associated with adequate emergency access are **less than significant** under both the Full Build-Out Scenario and Phased CUP Scenario.

4.3 TRANSPORTATION

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO***Construction, Operation and Decommissioning***

Project access would be installed during construction, maintained during operation and abandoned as part of decommissioning/reclamation.

Table 4.3-26 summarizes the proposed access points for each CUP and **Figure 4.3-11** depicts the location of the proposed access/driveways. As shown, driveways are accessed directly off of County roads with the exception of one driveway off of SR 98 along the southern boundary of the site. This driveway would provide access to a frontage road paralleling SR 98. This frontage road would connect to the one primary access and 1 emergency gate along the southern boundary of both CUP 17-0031 and CUP 17-0032.

TABLE 4.3-26
PROJECT ACCESS POINTS/DRIVEWAYS

CUP	Road	Number of Driveways
17-0031	SR 98	1 Driveway to frontage road to 1 primary and 1 emergency gate
17-0032	SR 98	1 Driveway to frontage road to 1 primary and 1 emergency gate
17-0033	Kubler Road on the north Pulliam Road on the East	1 Primary Access 1 Emergency Access/1 Primary Access
17-0034	Kubler Road on the north	1 Emergency Access
17-0035	Drew Road on the east	1 Primary Access/1 Emergency Access
18-0001	Drew Road on the east	

Source: See Figure 4.11-3

The Project does not propose to use unpaved County roads to access the solar field site parcels/CUP Areas. Access to components of the solar field site parcels will be controlled through security gates at access driveways for Access Configuration #1 as shown in **Figure 4.3-11a** or through access driveways for Access Configuration #2 shown in **Figure 4.3.11b**. Primary access driveways would be paved. Emergency (secondary) access driveways would be Class II base. For all CUPs (CUP#17-0031 thru CUP17#0035 and CUP#18-0001), the Applicant will provide on-site compacted dirt roads, and Class II base emergency access driveways with a 10-foot paved section adjacent to County's edge of pavement. If the emergency access point connects to a private frontage a 10-foot paved section will not be required. Both the Imperial County Fire Department and Imperial County Sheriff's Office would review the plans for adequate emergency access prior to issuance of building permits. The Imperial County Public Works Department will also review plans to ensure they are designed consistent with County design requirements. Therefore, impacts associated with a hazard due to a geometric design feature or incompatible use during construction of either the Full Build-Out Scenario or the Phased CUP Scenario are considered **less than significant** under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

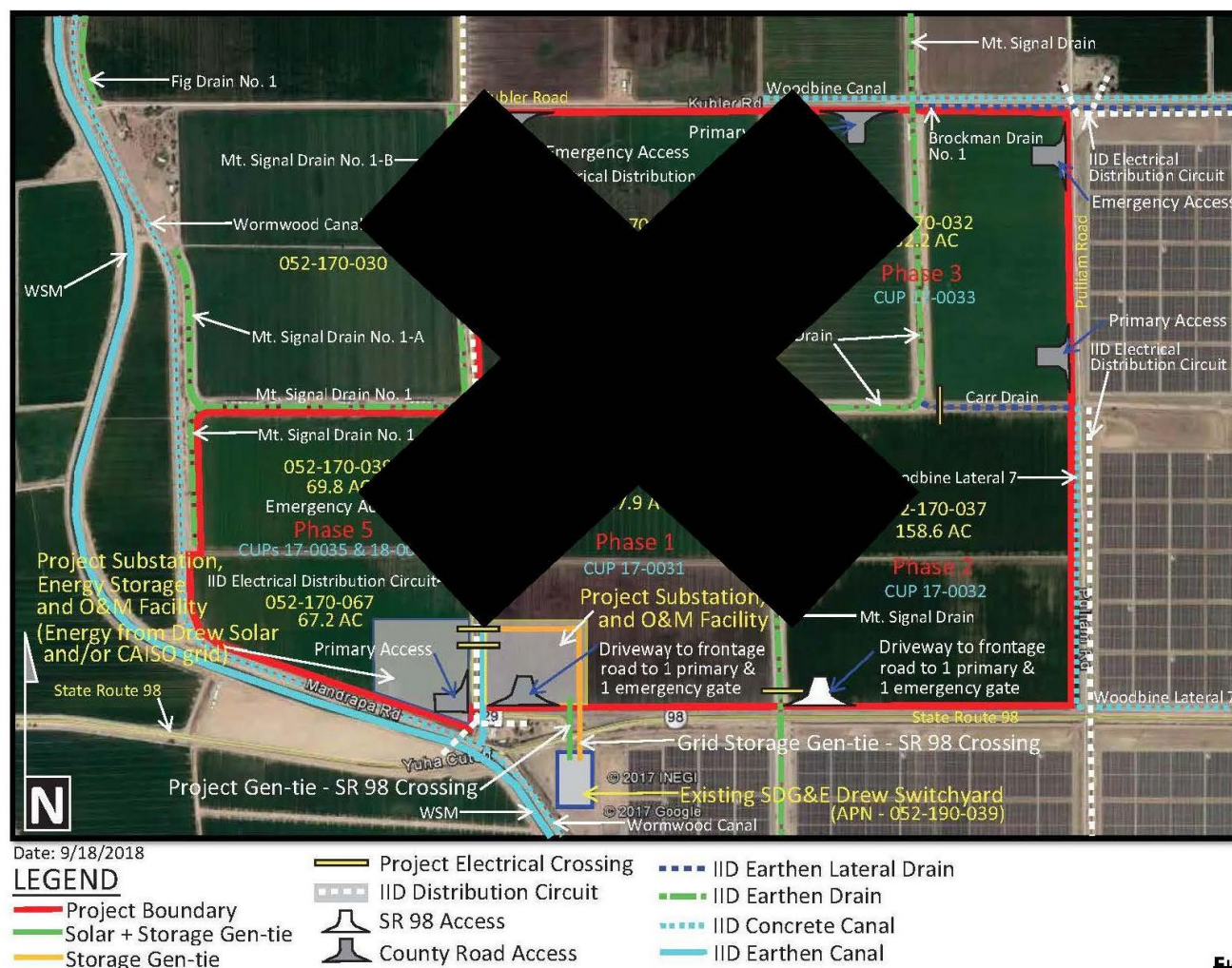
Not Applicable.

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4.3 TRANSPORTATION



Source: Drew Solar 2019.

FIGURE 4.3-11
PROJECT ACCESS POINTS/DRIVEWAYS

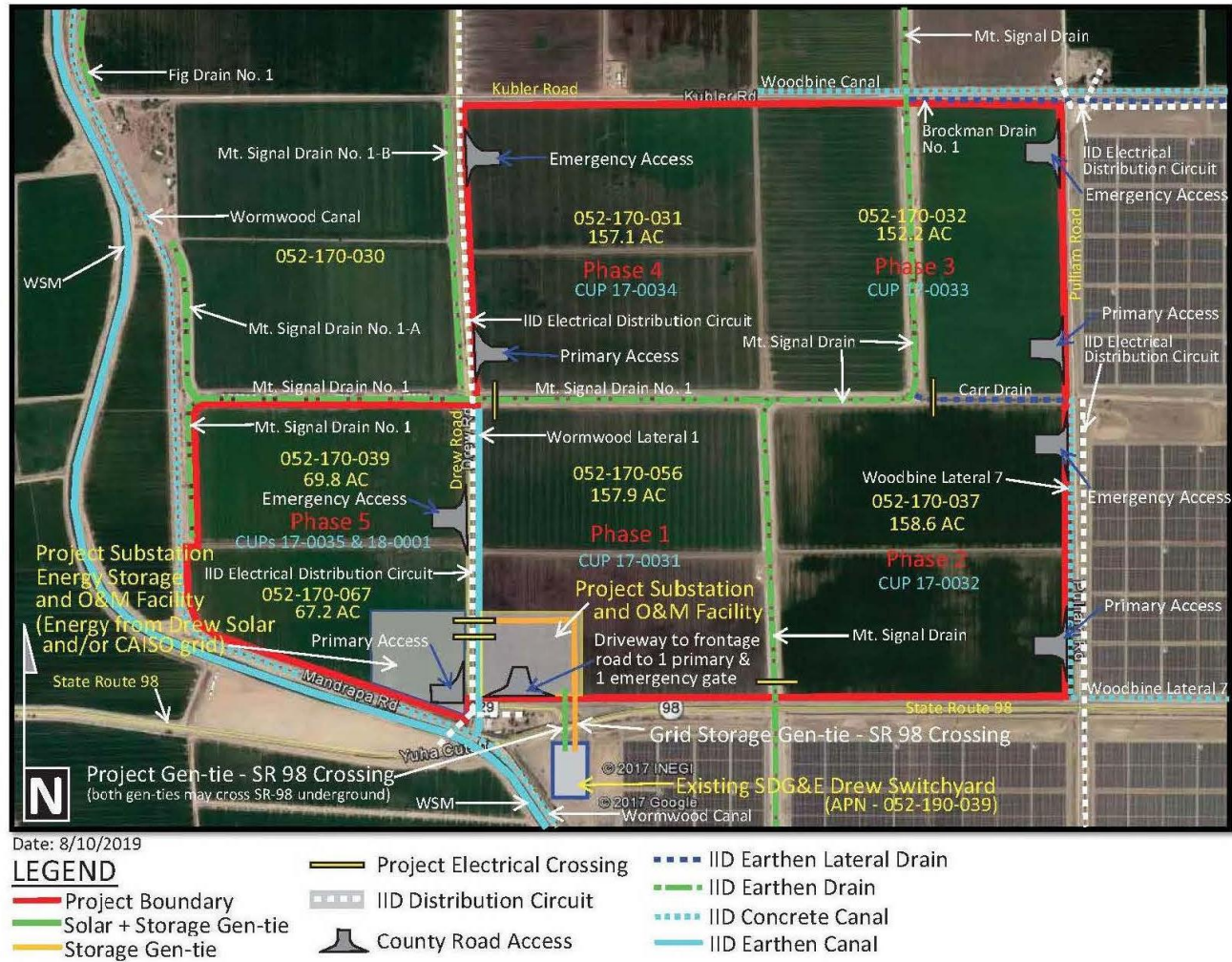
County of Imperial
 May 2019

Drew Solar Project
 Draft EIR

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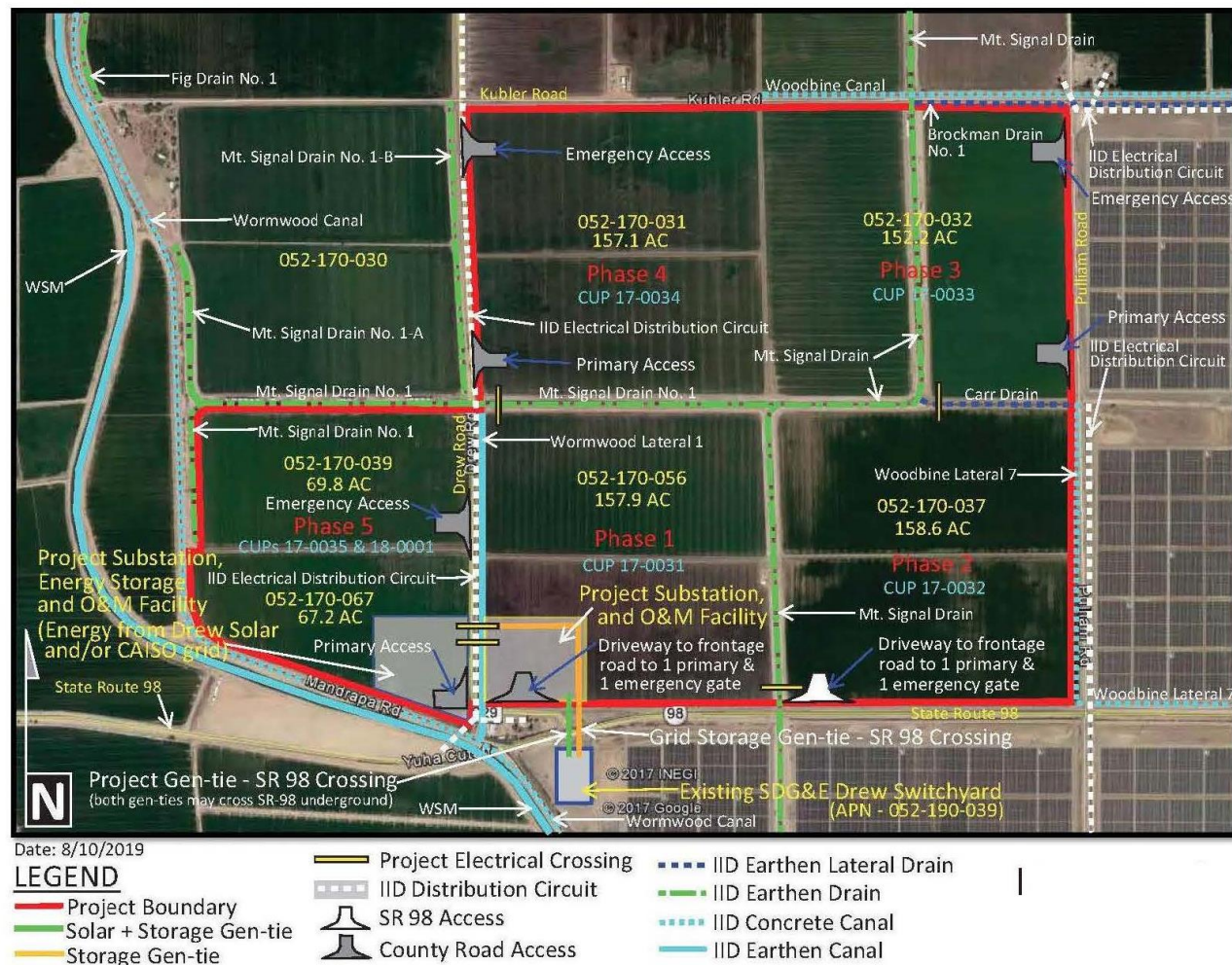
4.3 TRANSPORTATION



Source: Drew Solar 2019.

FIGURE 4.3-11A
ACCESS CONFIGURATION #1 - PROJECT ACCESS POINTS/ DRIVEWAYS

4.3 TRANSPORTATION



Source: Drew Solar 2019.

FIGURE 4.3-11B
ACCESS CONFIGURATION #2 - PROJECT ACCESS POINTS/ DRIVEWAYS

County of Imperial
 May 2019

Drew Solar Project
 Draft EIR

4.3-77

County of Imperial
 November 2019

Drew Solar Project
 Final EIR

4.0-91

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4.3 TRANSPORTATION

4.3.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope for the cumulative setting for transportation and circulation is based on the roadways in the vicinity of the Project study area that may be affected by traffic generated by the Project and cumulative projects. Information on cumulative projects was obtained from, and confirmed by, the County of Imperial to be current as of November 2017 (refer to Figure 3.0-1 in Chapter 3.0 for a graphical presentation of these projects). A County of Imperial map showing planned solar farm projects is included in Appendix K of the Draft Traffic Impact Analysis included as Appendix C of this EIR. Please note that the the Le Conte Battery Energy Storage Facility has submitted a CUP Application in July 2018 and is anticipated to go before the Board of Supervisors in the Spring of 2019.

The cumulative list below describes the cumulative projects in the immediate area around the Project site (i.e. projects that are generally located south of I-8 and west of Clark Road). Some of the cumulative projects have completed technical studies including traffic generation information; however, several have not. For the projects that do not have detailed traffic generation information, an estimate was calculated based on traffic generation information for similar projects and are noted below with an asterisk "*". Traffic generation calculations and copies of the cumulative project descriptions, locations, traffic generation, and assignments are also included in Appendix L of the Draft Traffic Impact Analysis included as Appendix C of this EIR. Information for each cumulative project is included below:

Table 4.3-27 summarizes information for each cumulative project including its construction status.

TABLE 4.3-27
TRAFFIC GENERATED BY CUMULATIVE PROJECTS

#	Project Name	Description	Traffic Generation
1	Big Rock Solar and Laurel Solar	Solar Facility	A PV solar facility capable of producing approximately 345 MWs of electricity generally located west of Drew Road and south of I-8.
2	Calexico 1-A	Solar Facility	A PV solar facility capable of producing approximately 100 MWs of electricity generally located 6 miles west of the City of Calexico.
3	Calexico 1-B	Solar Facility	A PV solar facility capable of producing approximately 100 MWs of electricity generally located 6 miles west of the City of Calexico.
4	Calexico II-A	Solar Facility	A PV solar facility capable of producing approximately 100 MWs of electricity generally located 6 miles west of the City of Calexico.
5	Campo Verde Battery Energy Storage System	Battery Storage	A 100 MW battery storage system for the Campo Verde Solar facility generally located west of Drew Road and south of I-8.

4.3 TRANSPORTATION

TABLE 4.3-27
TRAFFIC GENERATED BY CUMULATIVE PROJECTS

#	Project Name	Description	Traffic Generation
6	Centinela Solar Phase 2	Photovoltaic Solar Facility	A PV solar facility capable of producing approximately 100 MWs of electricity generally located east of Drew Road and south of I-8.
7	Coyne Ranch Specific Plan	Specific Plan	A residential project with up to 546 residential units located at 1642 Ross Road.
8	County Center II Expansion	Mixed-Use	A mixed-use project of a commercial center, expansion of the Imperial County Office of Education, a Joint-Use Teacher Training and Conference Center, Judicial Center, County Park, Jail expansion, County Administrative Complex, Public Works Administration, and a County Administrative Complex located on the southwest corner of McCabe Road and Clark Road.
9	IV Substation and SDG&E Ocotillo Solar	Transmission Line	A project connecting the Imperial Irrigation District's "S" line from the Imperial Irrigation District substation to the Imperial Valley substation and a PV solar facility capable of producing approximately 14 MWs of electricity generally located adjacent to the SDG&E Imperial Valley Substation.
10	IRIS Solar Farm Cluster (Ferrell, Rockwood, Iris, and Lyons)	Photovoltaic Solar Facility	PV solar facilities capable of producing approximately 360 MWs of electricity generally located north of SR-98 between Brockman Road and Weed Road.
11	Wistaria Ranch Solar Energy Center	Photovoltaic Solar Facility	A PV solar facility capable of producing approximately 250 MWs of electricity generally located 8 miles west of the city of Calexico.
12	Vega Solar	Photovoltaic Solar Facility	A PV solar facility capable of producing approximately 100 MWs of electricity generally located west of Drew Road and south of I-8.
13	Le Conte Battery Storage System	Battery Storage	Battery storage system proposed on 2.0 acres within the Centinela Solar Facility capable of strong 125 MWs.

Source: LOS 2018 based on Table 3.0-1 of Chapter 3.0.

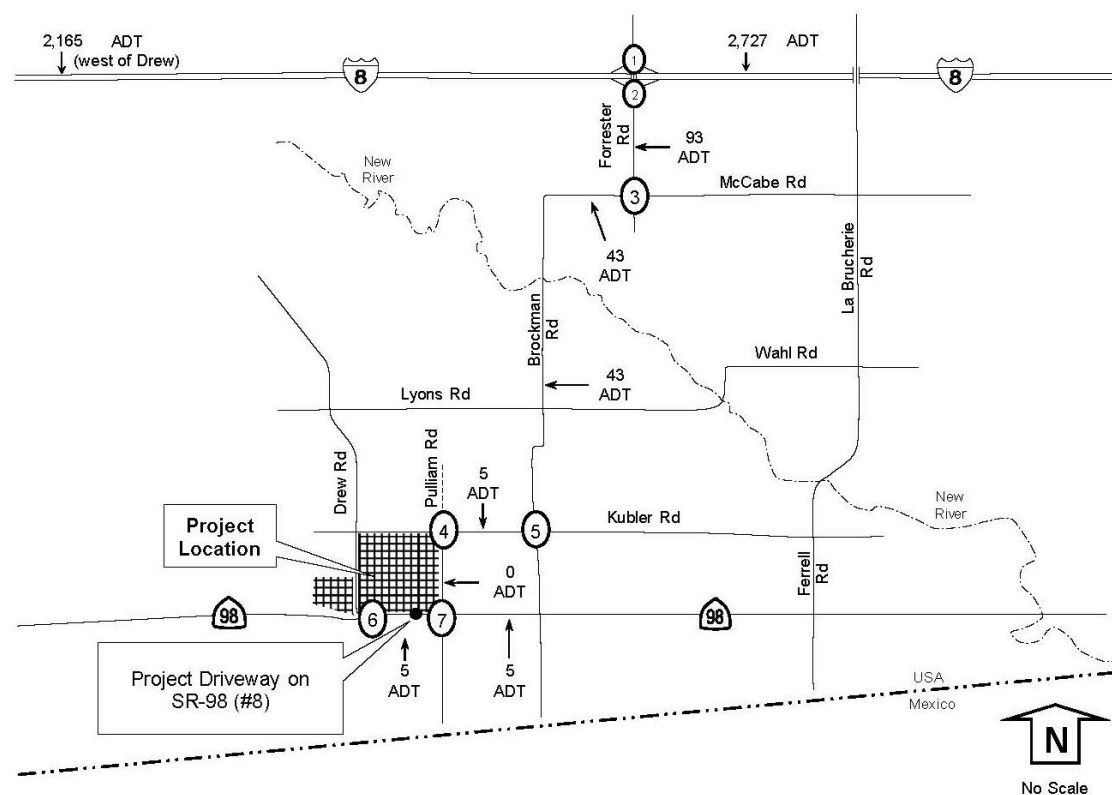
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4.3 TRANSPORTATION

B. METHODOLOGY

It was assumed that the cumulative projects listed in **Table 4.3-27** above will be generating construction traffic during the construction phase of the Drew Solar project. Presently, however, some of the cumulative projects are still in the environmental review process and, thus, may add construction traffic after the completion of the Drew Solar Project. Alternatively, some of the cumulative projects may add traffic before the construction of the proposed Project. Furthermore, most if not all of the cumulative solar projects will have a peak construction period that may or may not coincide with the Drew Solar Project peak construction period. Finally, there is a chance that some of the cumulative projects will not proceed. However, the Draft Impact Analysis is made with the conservative assumption that all of the peak cumulative construction volumes were used in the cumulative analysis. Realistically, however, there is high likelihood that all construction peaks will not coincide. The cumulative project (new development) volumes are shown in **Figure 4.3-12**.

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<p>Forrester Rd</p> <p>I-8 WB Ramp</p> <p>1</p>	<p>I-8 EB Ramp</p> <p>Forrester Rd</p> <p>2</p>	<p>Forrester Rd</p> <p>McCabe Rd</p> <p>3</p>
<p>Pulliam Rd</p> <p>Kubler Rd</p> <p>4</p>	<p>Brockman Rd</p> <p>Kubler Rd</p> <p>5</p>	<p>LEGEND</p> <p>XX AM peak hour volumes at intersections (YY) PM peak hour volumes at intersections. An empty bracket () represents a 0 PM volume</p> <p>Z,ZZZ ADT volumes shown along segments</p> <p># Intersection Reference Number to LOS Tables</p> <p>— Existing Roadways - - - Existing Unpaved Roadway</p>
<p>Drew Rd</p> <p>SR-98</p> <p>6</p>	<p>Intersection numbering sequence out of order to match location on map above</p> <p>Project Dwy</p> <p>SR-98</p> <p>8</p>	<p>Pulliam Rd</p> <p>SR-98</p> <p>7</p>

Source: LOS 2018.

FIGURE 4.3-12
LONG-TERM CUMULATIVE PROJECT (NEW DEVELOPMENT) VOLUMES

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4.3 TRANSPORTATION

C. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS – Existing (Year 2017) With Project Construction With Cumulative Conditions

Impact 4.3.7 Implementation of the proposed Project would contribute construction traffic to Project study area intersections, roadway, State Route and freeway segments under (Year 2017) With Project Construction With Cumulative Conditions. However, none of the intersections or segments would exceed LOS C or V/C ratios under this scenario. Therefore, cumulative impacts to study area intersections, roadway, State Route and freeway segments under (Year 2017) With Project Construction With Cumulative Conditions are considered **less than cumulatively considerable** under both the Full Build-Out Scenario and Phased CUP Scenario under both the Full Build-Out Scenario and Phased CUP Scenario.

Existing (Year 2017) With Project Construction With Cumulative Conditions

This analysis documents the addition of Project construction traffic onto (Year 2017) with cumulative conditions. **Figure 4.3-13a** depicts (Year 2017) With Project Construction With Cumulative traffic volumes for Access Configuration #1. **Figure 4.3-13b** depicts (Year 2017) With Project Construction With Cumulative traffic volumes for Access Configuration #2. Intersection and roadway segment Statement and freeway segment LOS for Access Configuration #1 and Access Configuration #2 are shown in **Table 4.3-28a**, **Table 4.3-28b**, **Table 4.3-29a** and **Table 4.3-29b** and Freeway segment LOS is shown in **Table 4.3-30**. Intersection LOS calculations are included in Appendix N of the Draft Traffic Impact Analysis included as **Appendix C** of this EIR and as Attachments A, B and C of **Attachment 1** and **Attachment 2** of the Final EIR.

Intersection LOS

Table 4.3-28a summarizes intersection LOS under (Year 2017) With Project Construction With Cumulative conditions for Access Configuration #1. (Intersection LOS calculations are included in Appendix N of the Draft Traffic Impact Analysis [**Appendix C** of this EIR and Attachment A of the “Drew Solar Analysis Addressing Caltrans’ 7/1/19 No SR-98 Driveway Comment” Memo and **Attachment 1** of the Final EIR]).

TABLE 4.3-28A
ACCESS CONFIGURATION #1
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2017) With Cumulative		(Year 2017) With Cumulative With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM PM	12.8 10.8	B B	14.2 11.1	B B	1.4 0.3	None None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM PM	12.9 21.1	B C	13.7 22.9	B C	0.8 1.8	None None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM PM	12.1 14.9	B B	13.7 18.9	B C	1.6 4.0	None None
4) Pulliam Road and Kubler Road (U)	Minor Leg	AM PM	9.0 9.1	A A	9.4 9.8 9.9	A A	0.4 0.7 0.8	None None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	10.5	B	10.9	B	0.4	None

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TABLE 4.3-28A
ACCESS CONFIGURATION #1
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2017) With Cumulative		(Year 2017) With Cumulative With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
		PM	9.1	A	9.8	A	0.7	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.9	A	<u>9.1</u> <u>9.3</u>	A	<u>0.2</u> <u>0.4</u>	None
		PM	9.3	A	<u>9.5</u> <u>9.7</u>	A	<u>0.2</u> <u>0.4</u>	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.4	A	<u>9.8</u> <u>10.0</u>	A	<u>0.4</u> <u>0.6</u>	None
		PM	8.8	A	<u>10.0</u> <u>10.1</u>	B	<u>1.2</u> <u>1.3</u>	None
8) SR 98 at Project West Driveway(U)	Minor Leg	AM	0.0	A	0.8	A	0.8	None
		PM	0.0	A	9.5	A	9.5	None

Source: LOS 2018 2019a-

Notes: ¹ Intersection Control – (S) Signalized, (U) Un-signalized;

² Delay – HCM Average Control Delay in seconds;

³ LOS: Level of Service

⁴ Delta is the increase in delay from project;

⁵ Type of impact: none, direct or cumulative.

Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

Table 4.3-28b summarizes intersection LOS under (Year 2017) With Project Construction With Cumulative conditions for Access Configuration #2.

TABLE 4.3-28B
ACCESS CONFIGURATION #2
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2017) With Cumulative		(Year 2017) With Cumulative With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	12.8	B	14.2	B	1.4	None
		PM	10.8	B	11.1	B	0.3	None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	12.9	B	13.7	B	0.8	None
		PM	21.1	C	22.9	C	1.8	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	12.1	B	13.7	B	1.6	None
		PM	14.9	B	18.9	C	4.0	None
4) Pulliam Road and Kubler Road (U)	Minor Leg	AM	9.0	A	9.4	A	0.4	None
		PM	9.1	A	9.9	A	0.8	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	10.5	B	10.9	B	0.4	None
		PM	9.1	A	9.8	A	0.7	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.9	A	9.3	A	0.4	None
		PM	9.3	A	9.8	A	0.5	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.4	A	10.2	B	0.8	None
		PM	8.8	A	9.0	A	0.2	None
8) SR 98 at Project West Driveway (U)	Minor Leg	AM	0.0	A	0.8	A	0.8	None
		PM	0.0	A	9.7	A	9.7	None

Source: LOS 2018 2019b-

Notes: ¹ Intersection Control – (S) Signalized, (U) Un-signalized; ² Delay – HCM Average Control Delay in seconds;

³ LOS: Level of Service ⁴ Delta is the increase in delay from project; ⁵ Type of impact: none, direct or cumulative.

Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

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As shown, under Existing (Year 2017) With Project Construction with Cumulative Conditions, all Project study area intersections are calculated to operate at LOS C or better. One intersection (Forrester Road at McCabe Road) would experience a decline in LOS from LOS B to LOS C during the PM peak hour. Pulliam Road at SR 98 would decrease from Los A to LOS B during the PM peak hour. No other changes in LOS would occur with the addition of cumulative traffic. Moreover, the increases in traffic resulting from cumulative conditions would not exceed LOS standards. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative intersection traffic. Likewise, cumulative impacts to cumulative intersection LOS would be **less than cumulatively considerable** under Existing (Year 2017) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-29 summarizes roadway and State Route segment LOS for Existing (Year 2017) With Project Construction With Cumulative conditions. As shown, all segments would continue to operate above LOS C (LOS A or LOS B). No change in LOS would occur for any segment with the addition of Year 2017 cumulative traffic conditions. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative roadway and State Route segment traffic. Likewise, cumulative impacts to cumulative roadway and State Route segment LOS would be **less than cumulatively considerable** under Existing (Year 2017) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Freeway Segment LOS

Table 4.3-30 summarizes freeway segment LOS under Existing (Year 2017) With Project Construction With Cumulative conditions. As shown, both freeway segments were calculated to operate at or above LOS. However, the segment of I-8 from Dunaway Road to Drew Road would experience a decline in LOS from LOS A to LOS B during the AM peak hour in the westbound direction and in the PM Peak Hour in both the eastbound and westbound direction with the addition of cumulative traffic. The segment of I-8 from Forrester Road to Imperial Avenue would experience a decline from LOS A to LOS B in the AM Peak Hour in the eastbound direction and from LOS B to LOS C in the PM Peak Hour in the east bound direction. In no instance would the increases in traffic resulting from Project construction exceed V/C ratios or LOS standards. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative freeway segment traffic. Likewise, cumulative impacts to cumulative freeway segment LOS would be **less than cumulatively considerable** under Existing (Year 2017) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

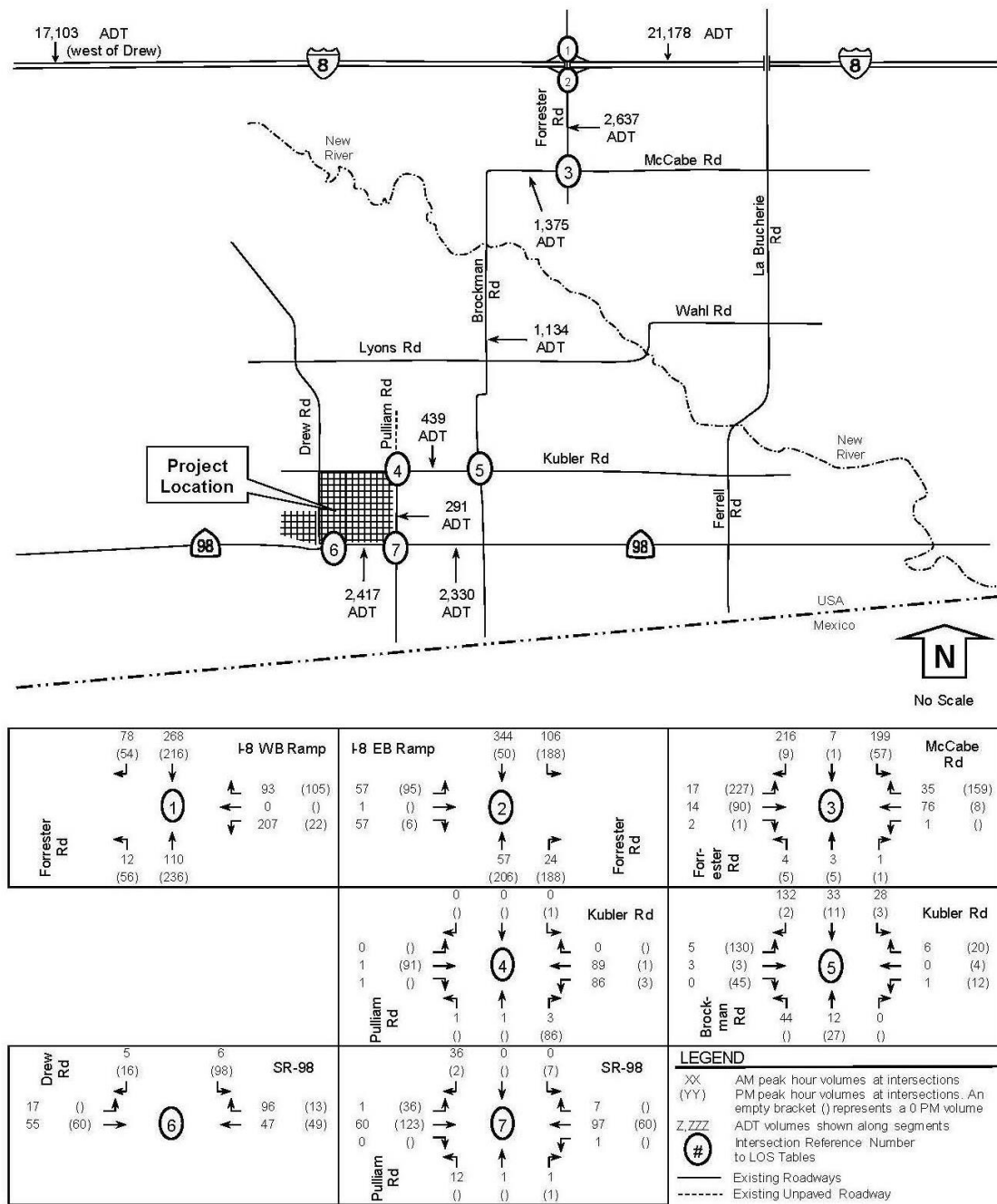


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Source: LOS 2019a.

FIGURE 4.3-13A
ACCESS CONFIGURATION #1 –
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

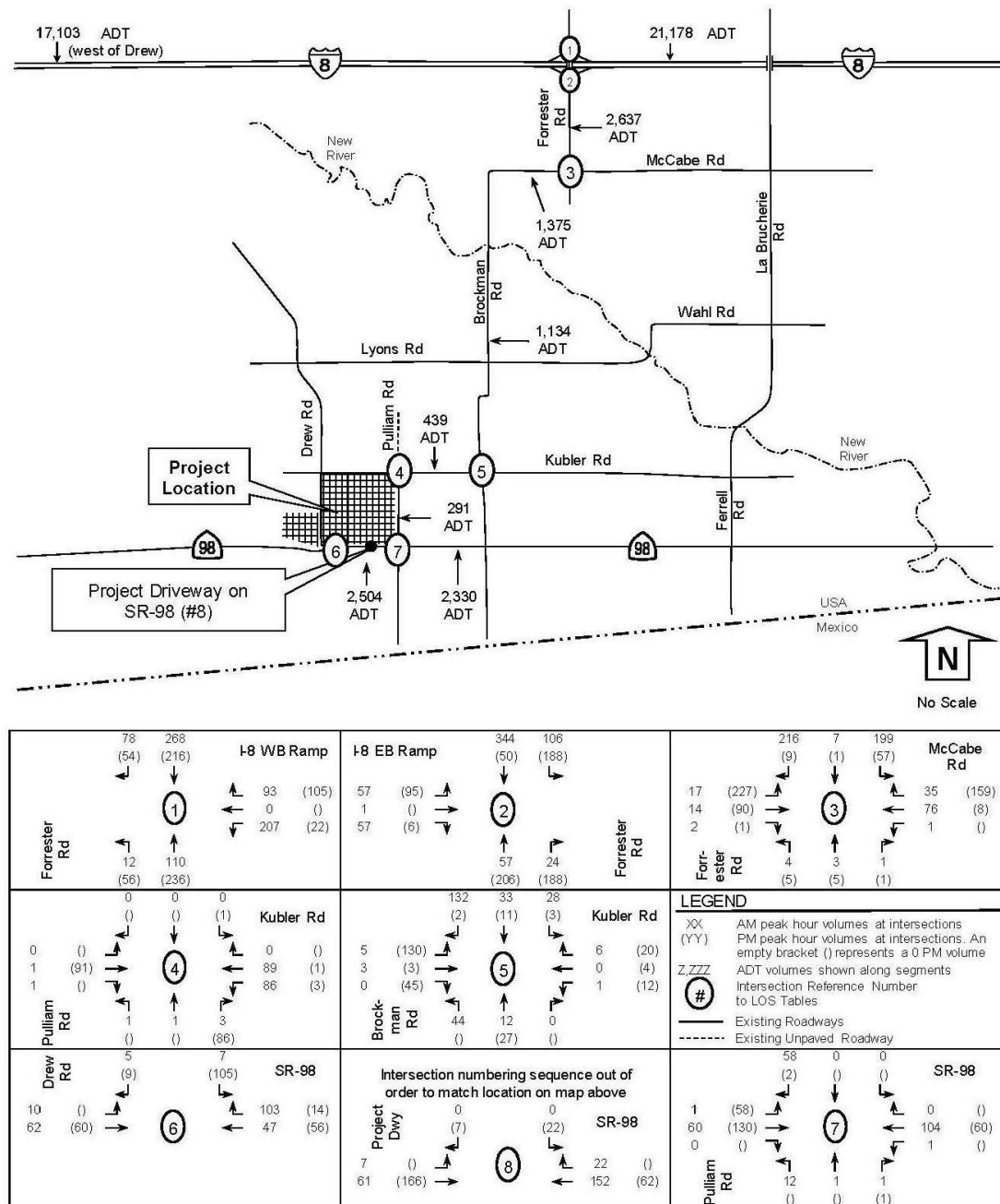
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May 2019Drew Solar Project
Draft EIR

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Source: LOS 2019b.

FIGURE 4.3-13B
ACCESS CONFIGURATION #2 –
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

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TABLE 4.3-29A
ACCESS CONFIGURATION #1
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2017) With Cumulative				Project Daily Volume	(Year 2017) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact?
Brockman Road McCabe Road to Kubler Road	Major (2U)	872	7,100	0.12	A	262	1,134	7,100	0.16	A	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,463	7,100	0.35	B	174	2,637	7,100	0.37	B	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	177	7,100	0.02	A	262	439	7,100	0.06	A	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	1,375	7,100	0.19	A	1,113	1,375	7,100	0.19	A	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	29	7,100	0.00	A	131 262	260 291	7,100	0.02 0.04	A	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,211	7,100	0.31	B	153 196	2,374 2,417	7,100	0.33 0.34	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,211	7,100	0.31	B	109	2,330	7,100	0.33	B	None

Source: LOS 2018 2019a.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-29B
ACCESS CONFIGURATION #2
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2017) With Cumulative				Project Daily Volume	(Year 2017) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact?
Brockman Road											
McCabe Road to Kubler Road	Major (2U)	872	7,100	0.12	A	262	1,134	7,100	0.16	A	None
Forrester Road											
I-8 to McCabe Road	Prime (2U)	2,463	7,100	0.35	B	174	2,637	7,100	0.37	B	None
Kubler Road											
Brockman Road to Ferrell Road	Minor (2U)	177	7,100	0.02	A	262	439	7,100	0.06	A	None
McCabe Road											
Brockman Road to Forrester Road	Major (2U)	1,375	7,100	0.19	A	1,113	1,375	7,100	0.19	A	None
Pulliam Road											
Kubler Road to SR 98	Minor (2U)	29	7,100	0.00	A	262	291	7,100	0.04	A	None
SR 98											
Drew Road to Pulliam Road	State Highway (2U)	2,211	7,100	0.31	B	283	2,504	7,100	0.35	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,211	7,100	0.31	B	109	2,330	7,100	0.33	B	None

Source: LOS 2018 2019b.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway. Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-30
EXISTING (YEAR 2017) WITH PROJECT CONSTRUCTION WITH CUMULATIVE FREEWAY SEGMENT LOS

Freeway Segment	I-8 Dunaway Road to Drew Road				I-8 Forrester Road to Imperial Avenue			
Existing (Year 2017)								
ADT	14,400				17,200			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,032	1,131	1,299	1,321	1,318	1,446	1,661	1,689
V/C	0.220	0.241	0.276	0.281	0.281	0.380	0.353	0.359
LOS	A	A	A	A	A	B	B	B
Cumulative With Project	248	385	435	282	237	582	643	280
Existing (Year 2017) With Cumulative With Project								
Peak Hour Volume	4,280	1,516	1,734	1,603	1,555	2,028	2,304	1,969
V/C	0.272	0.323	0.369	0.341	0.331	0.431	0.490	0.419
LOS	A	B	B	B	B	B	C	B
Increase in V/C	0.053	0.082	0.093	0.060	0.050	0.124	0.137	0.060
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2015 report).

Impact? = Direct, Cumulative, or None.

Overall, under Existing (Year 2017) With Project Construction With Cumulative conditions, the Project study area intersections, roadway, State Route and freeway segments were calculated to operate at LOS C or better for both Access Configuration #1 and Access Configuration #2 with **no cumulatively considerable impacts** under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS Near-Term (Year 2019) With Project Construction With Cumulative Conditions)

Impact 4.3.8 Implementation of the proposed Project would contribute construction traffic to Project study area intersections, roadway, State Route and freeway segments under Near-Term (Year 2019) With Project Construction With Cumulative Conditions. However, none of the intersections or segments would exceed LOS C or V/C ratios under this scenario. Therefore, cumulative impacts to Project study area intersections, roadway, State Route and freeway segments under Near-Term (Year 2019) With Project

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Construction With Cumulative Conditions are considered **less than cumulatively considerable** under both the Full Build-Out Scenario and Phased CUP Scenario.

Near-Term (Year 2019) With Project Construction With Cumulative Conditions

This analysis documents the addition of construction traffic onto Near-Term (Year 2019) with Cumulative conditions. Near-Term (Year 2019) With Project Construction With Cumulative traffic volumes are shown in **Figure 4.3-14a** (Access Configuration #1) and **Figure 4.3-14b** (Access Configuration #2). Intersection, segment, and freeway LOS are shown in **Tables 4.3-31a** (Access Configuration #1), **Table 4.3-31b** (Access Configuration #2), **Table 4.3-32a** (Access Configuration #1), **Table 4.3-32b** (Access Configuration #2) and **Table 4.3-33**.

Intersection LOS

Table 4.3-31a summarizes intersection LOS under Near-Term (Year 2019) with Project Construction With Cumulative conditions for **Access Configuration #1**. (Intersection LOS calculations are included in Appendix N of the Draft Traffic Impact Analysis [Appendix C of this EIR and Attachment B of the “Drew Solar Analysis Addressing Caltrans’ 7/1/19 No SR-98 Driveway Comment” Memo and Attachment 1 of the Final EIR]).

TABLE 4.3-31A
ACCESS CONFIGURATION #1
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2019) With Cumulative		(Year 2019) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	13.0	B	14.4	B	1.4	None
		PM	10.9	B	11.2	B	0.3	None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	13.1	B	13.9	B	0.8	None
		PM	22.2	C	24.3	C	2.1	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	12.2	B	13.9	B	1.7	None
		PM	15.1	C	19.1	C	4.0	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	9.0	A	9.4	A	0.4	None
		PM	9.1	A	9.8 9.9	A	0.7 0.8	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	10.5	B	10.9	B	0.4	None
		PM	9.1	A	9.8	A	0.7	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.9	A	9.6 9.3	A	0.2 0.4	None
		PM	9.3	A	9.4 9.7	A	0.2 0.4	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.4	A	9.8 10.0	A	0.4 0.6	None
		PM	8.8	A	10.1	B	1.3	None
8) SR 98 at Project West Driveway(U)	Minor Leg	AM	0.0	A	0.8	A	0.8	None
		PM	0.0	A	9.5	A	9.5	None

Source: LOS ~~2018~~ 2019a. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

Notes: ¹Control - (S) Signalized, (U) Un-signalized.

² Delay - HCM Average Control Delay in seconds.

³ LOS: Level of Service.

⁴ Delta is the increase in delay from project.

⁵ Type of impact: none, direct, or cumulative.

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Table 4.3-31b summarizes intersection LOS under Near-Term (Year 2019) with Project Construction With Cumulative conditions for Access Configuration #2. (Intersection LOS calculations are included in Appendix N of the Draft Traffic Impact Analysis [Appendix C of this EIR and Attachment B of the “Drew Solar Alternative Access #2 with One SR-98 Access and No Access on Kubler” Memo and Attachment 1 of the Final EIR]).

TABLE 4.3-31B
ACCESS CONFIGURATION #2
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2019) With Cumulative		(Year 2019) With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴	Impact ⁵
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	13.0	B	14.4	B	1.4	None
		PM	10.9	B	11.2	B	0.3	None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	13.1	B	13.9	B	0.8	None
		PM	22.2	C	24.3	C	2.1	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	12.2	B	13.9	B	1.7	None
		PM	15.1	C	19.1	C	4.0	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	9.0	A	9.4	A	0.4	None
		PM	9.1	A	9.9	A	0.8	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	10.5	B	10.9	B	0.4	None
		PM	9.1	A	9.8	A	0.7	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.9	A	9.3	A	0.4	None
		PM	9.3	A	9.9	A	0.4	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.4	A	10.2	B	0.8	None
		PM	8.8	A	9.0	A	0.2	None
8) SR 98 at Project West Driveway(U)	Minor Leg	AM	0.0	A	0.8	A	0.8	None
		PM	0.0	A	9.8	A	9.8	None

Source: LOS 2019b. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

Notes: ¹Control - (S) Signalized, (U) Un-signalized.

²Delay - HCM Average Control Delay in seconds.

³LOS: Level of Service.

⁴Delta is the increase in delay from project.

⁵Type of impact: none, direct, or cumulative.

As shown, under Near-Term (Year 2019) With Project Construction with Cumulative Conditions, all Project study area intersections are calculated to operate at LOS C or better. Only one intersection (Pulliam Road at SR 98) would experience a decline in LOS from LOS A to LOS B during the PM Peak hour. LOS of all other segments would remain unchanged under Project construction with cumulative conditions. Moreover, the increases in traffic resulting from Project construction with cumulative conditions would not exceed the LOS standards as Forrester Road at the eastbound ramp and Forrester Road at McCabe would continue to operate at LOS C in the PM Peak Hour with Project traffic. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative intersection traffic. Likewise, cumulative impacts to cumulative intersection LOS would be **less than cumulatively considerable** under Near-Term (Year 2019) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Roadway and State Route Segment LOS

Table 4.3-32a summarizes roadway segment LOS for Near-Term (Year 2019) With Project Construction With Cumulative conditions for Access Configuration #1. **Table 4.3-32b** summarizes roadway segment LOS for Near-Term (Year 2019) With Project Construction With Cumulative conditions for Access

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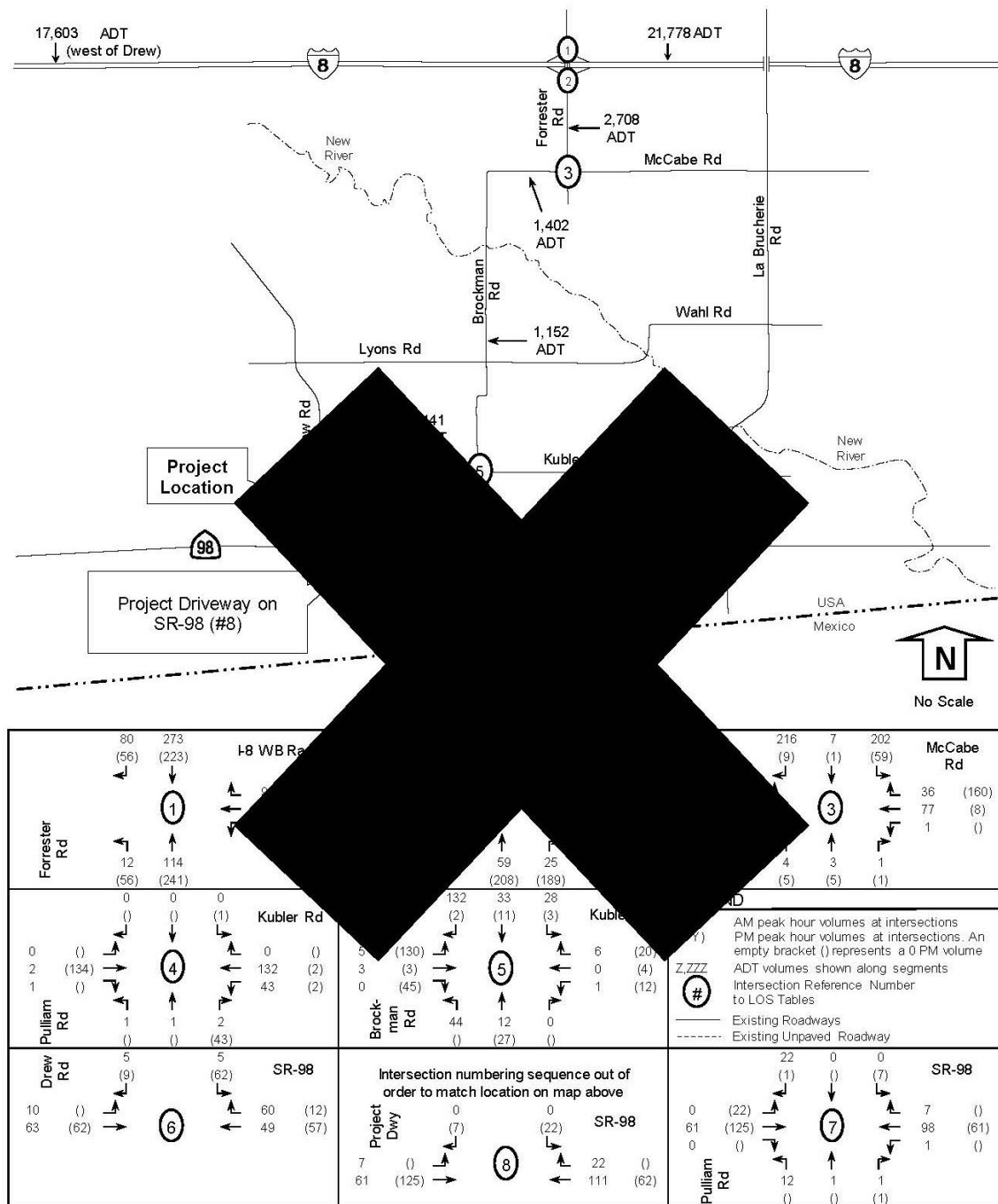
Configuration #2. As shown, all segments would continue to operate above LOS C (at LOS A or LOS B). No change in LOS would occur for any segment with the addition of Near-Term (Year 2019) cumulative traffic conditions. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative roadway segment traffic. Likewise, cumulative impacts to cumulative roadway segment LOS would be **less than cumulatively considerable** under Near-Term (Year 2019) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Freeway Segment LOS

Table 4.3-33 summarizes freeway segment LOS under Near-Term (Year 2019) With Project Construction With Cumulative conditions. As shown, both freeway segments were calculated to operate at or above LOS C. The segment of I-8 from Drew Road to Dunaway Road would experience a decline in LOS from LOS A to LOS B during the AM peak hour in the westbound direction and in the PM Peak Hour in both the eastbound and westbound directions with the addition of cumulative traffic. The segment of I-8 from Forrester Road to Imperial Avenue would decline from LOS A to LOS B in the AM Peak Hour eastbound direction and from LOS B to LOS C in the PM Peak Hour eastbound direction. LOS of all other segments would be unchanged with the addition of cumulative traffic. Moreover, the increases in traffic resulting from Project construction would not exceed V/C ratios or LOS standards. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative freeway segment traffic. Likewise, cumulative impacts to cumulative freeway segment LOS would be **less than cumulatively considerable** under Near-Term (Year 2019) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

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Source: LOS 2018.

FIGURE 4.3-14
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

4.3 TRANSPORTATION

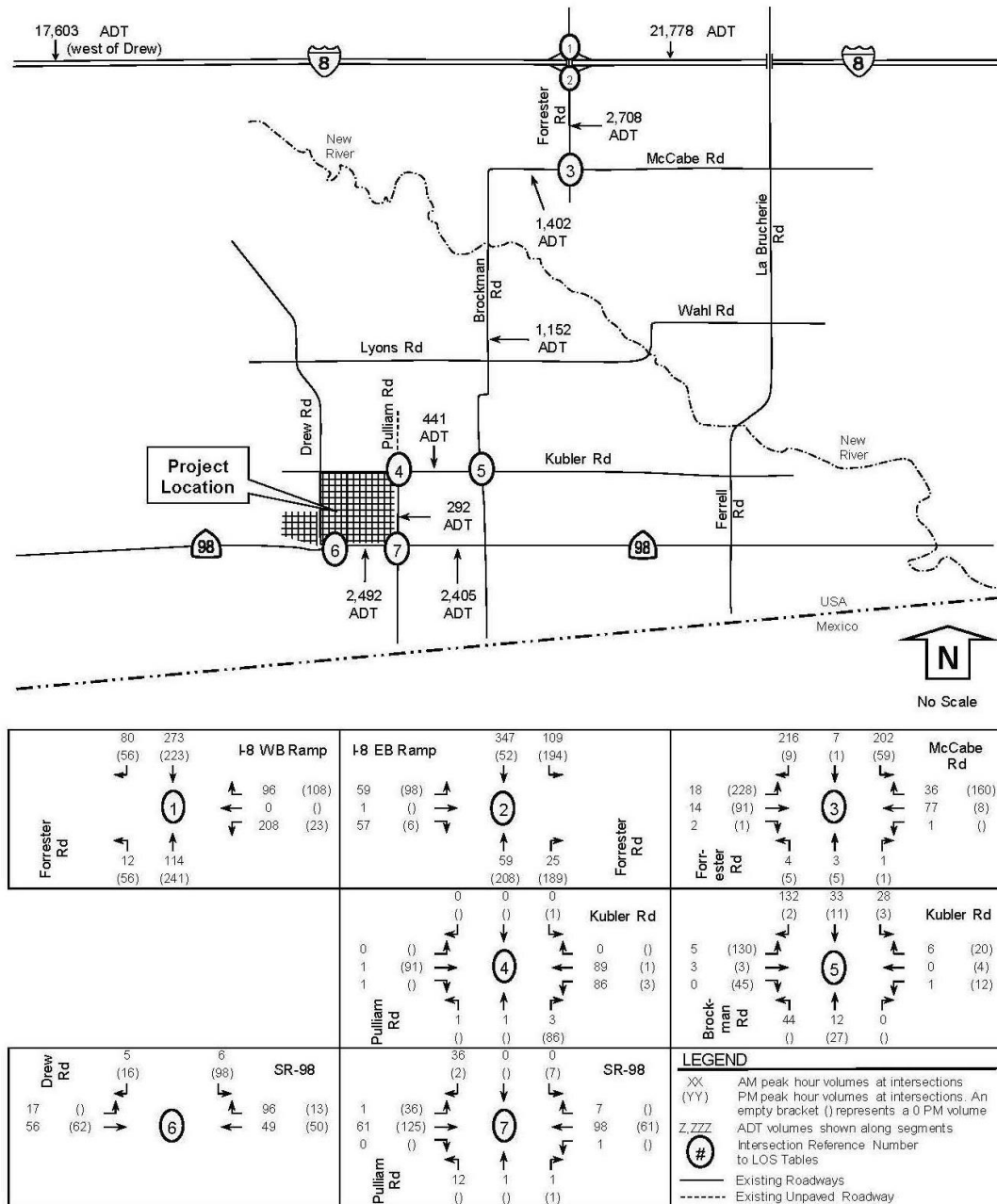
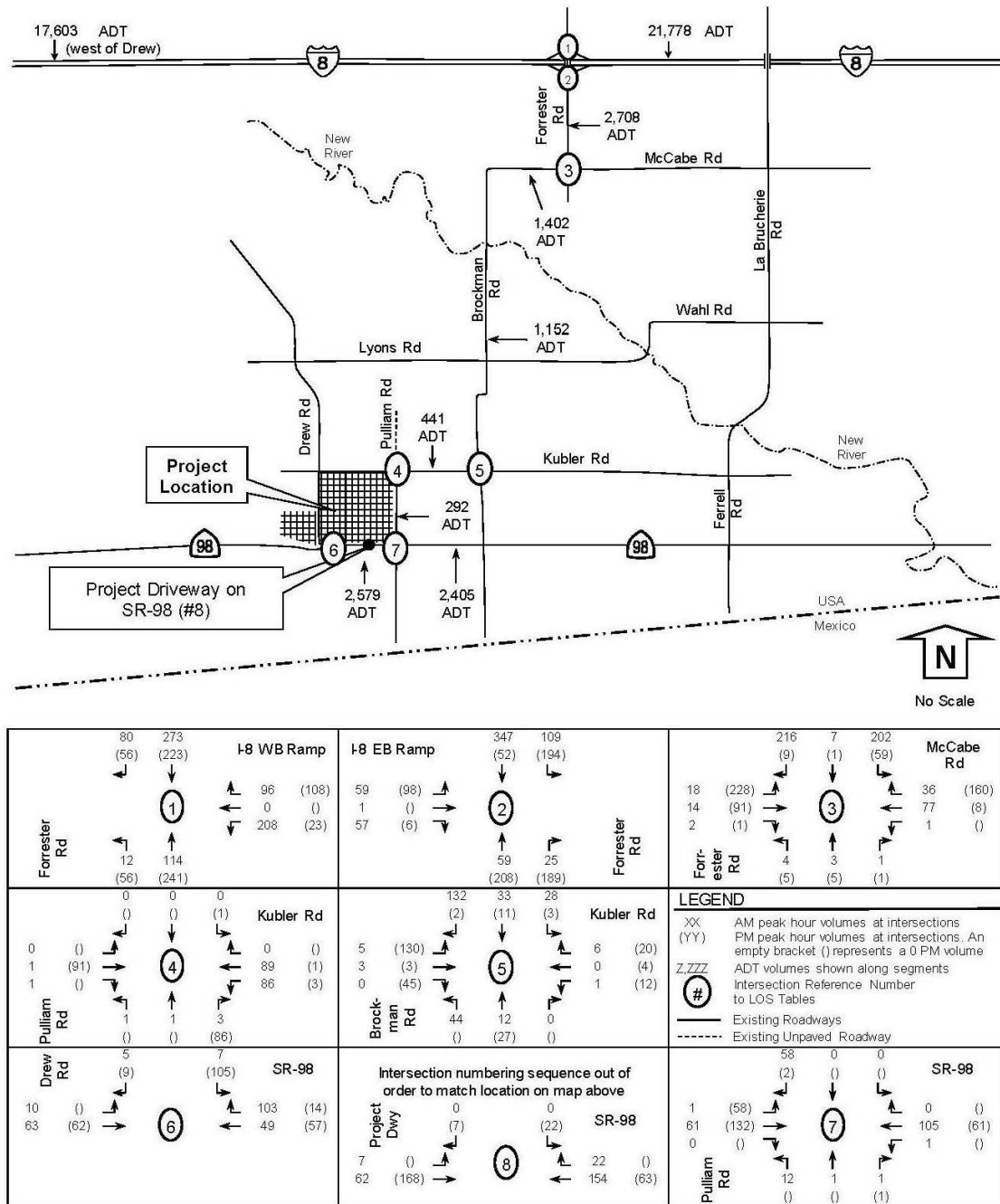


FIGURE 4.3-14A
ACCESS CONFIGURATION #1 –
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

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4.3 TRANSPORTATION



Source: LOS 2019b.

FIGURE 4.3-14B
ACCESS CONFIGURATION #2 –
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

4.3 TRANSPORTATION

TABLE 4.3-32A
ACCESS CONFIGURATION #1
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2019) With Cumulative				Project Daily Volume	(Year 2019) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact ?
Brockman Road McCabe Road to Kubler Road	Major (2U)	890	7,100	0.13	A	262	1,152	7,100	0.16	A	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,534	7,100	0.36	B	174	2,708	7,100	0.38	B	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	179	7,100	0.03	A	262	441	7,100	0.06	A	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	1,140	7,100	0.16	A	262	1,402	7,100	0.20	A	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	30	7,100	0.00	A	131 262	161 292	7,100	0.02 0.04	A	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,296	7,100	0.32	B	153 196	2,449 2,492	7,100	0.34 0.35	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,296	7,100	0.32	B	109	2,405	7,100	0.34	B	None

Source: LOS 2010 2019a.

Notes: Classification based on the Imperial County General Plan, Circulation and Scenic Highways Element, January 29, 2008.

2U = 2-lane undivided roadway.

Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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TABLE 4.3-32B
ACCESS CONFIGURATION #2
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2019) With Cumulative				Project Daily Volume	(Year 2019) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact ?
Brockman Road											
McCabe Road to Kubler Road	Major (2U)	890	7,100	0.13	A	262	1,152	7,100	0.16	A	None
Forrester Road											
I-8 to McCabe Road	Prime (2U)	2,534	7,100	0.36	B	174	2,708	7,100	0.38	B	None
Kubler Road											
Brockman Road to Ferrell Road	Minor (2U)	179	7,100	0.03	A	262	441	7,100	0.06	A	None
McCabe Road											
Brockman Road to Forrester Road	Major (2U)	1,140	7,100	0.16	A	262	1,402	7,100	0.20	A	None
Pulliam Road											
Kubler Road to SR 98	Minor (2U)	30	7,100	0.00	A	262	292	7,100	0.04	A	None
SR 98											
Drew Road to Pulliam Road	State Highway (2U)	2,296	7,100	0.32	B	283	2,579	7,100	0.36	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,296	7,100	0.32	B	109	2,405	7,100	0.34	B	None

Source: LOS 2018 2019b.

Notes: Classification based on the Imperial County General Plan, Circulation and Scenic Highways Element, January 29, 2008.

2U = 2-lane undivided roadway.

Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

4.3 TRANSPORTATION

TABLE 4.3-33
NEAR-TERM (YEAR 2019) WITH PROJECT CONSTRUCTION WITH CUMULATIVE FREEWAY SEGMENT LOS

Freeway Segment	I-8 Drew Road to Dunaway Road				I-8 Forrester Road to Imperial Avenue			
Forecasted (Year 2019)								
ADT	14,500				17,800			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,069	1,172	1,346	1,369	1,364	1,496	1,718	1,748
V/C	0.227	0.249	0.286	0.291	0.290	0.318	0.366	0.372
LOS	A	A	A	A	A	B	B	B
Cumulative With Project	248	385	435	282	237	582	643	280
2019 With Cumulative With Project								
Peak Hour Volume	1,317	1,557	1,781	1,651	1,601	2,078	2,361	2,028
V/C	0.280	0.331	0.379	0.351	0.341	0.442	0.52	0.431
LOS	A	B	B	B	B	B	C	B
Increase in V/C	0.053	0.082	0.093	0.060	0.050	0.124	0.137	0.060
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Impact? = Direct, Cumulative, or None.

Notes: ¹ Capacity of 2,350 pc/hpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² K factor from Caltrans (based on 2017 report), which is the percentage of AADT in both directions.

³ Latest D factor from Caltrans (based on 2017 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2015 report).

Overall, under near-term (Year 2019) With Project Construction With Cumulative conditions, the Project study area intersections, roadway segments and freeway segments were calculated to operate at LOS C or better for both Access Configuration #1 and Access Configuration #2 with **no cumulatively considerable impacts**.

Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS - Long-Term (Year 2027) With Project Construction With Cumulative Conditions

Impact 4.3.9 Implementation of the proposed Project would contribute construction traffic to Project study area intersections, roadway, State Route and freeway segments under Long-Term (Year 2027) With Project Construction With Cumulative Conditions. However, none of the intersections or segments would exceed LOS C or V/C ratios under this scenario. Therefore, cumulative impacts to Project study area intersection, roadway, State Route and freeway segments under Long-Term (Year 2027) With Project Construction With Cumulative Conditions are considered **less than cumulatively considerable** under both the Full Build-Out Scenario and Phased CUP Scenario.

4.0 ERRATA

4.3 TRANSPORTATION

Long-Term (Year 2027) With Project Construction With Cumulative Conditions

This section discusses the addition of construction traffic onto Long-Term (Year 2027) with cumulative conditions. Long-Term (Year 2027) Cumulative Project traffic was used for this scenario. Long-Term (Year 2027) With Project Construction With Cumulative traffic volumes are shown in **Figure 4.3-16** **4.3-15a** (Access Configuration #1) and **Figure 4.3-15b** (Access Configuration #2). Intersection, roadway, State Route and freeway LOS are shown in **Table 4.3-34a** (Access Configuration #1), **Table 4.3-34b** (Access Configuration #2) **Table 4.3-35a** (Access Configuration #1), **Table 4.3-35b** (Access Configuration #2) and **Table 4.3-36**.

Intersection LOS

Table 4.3-34a summarizes intersection LOS under Long-Term (Year 2027) With Project Construction With Cumulative conditions for Access Configuration #1. (Intersection LOS calculations are included in Appendix U of the Draft Traffic Impact Analysis [Appendix C of this EIR and Attachment C of the “Drew Solar Analysis Addressing Caltrans’ 7/1/19 No SR-98 Driveway Comment” Memo and Attachment 1 of the Final EIR]).

TABLE 4.3-34A
ACCESS CONFIGURATION #1
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2027) With Cumulative		(Year 2027) With Cumulative With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	10.3	B	10.9	B	0.6	None
		PM	10.3	B	10.5	B	0.2	None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	12.9	B	13.9	B	1.0	None
		PM	18.2	C	19.6	C	1.4	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	9.39	A	10.4	B	0.5	None
		PM	9.8	A	11.3	B	1.5	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.7	A	9.1	A	0.4	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	9.0	A	9.3	A	0.3	None
		PM	9.1	A	9.3	A	0.2	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A	8.9 9.1	A	0.2 0.4	None
		PM	9.0	A	9.2 9.5	A	0.2 0.5	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.1	A	9.5 9.7	A	0.4 0.6	None
		PM	8.7	A	8.8 9.9	B A	0.1 1.2	None
8) SR 98 at Project West Driveway(U)	Minor Leg	AM	0.0	A	1.0	A	1.0	None
		PM	0.0	A	9.3	A	9.3	None

Source: LOS ~~2018~~ 2019a. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

Notes: ¹Control - (S) Signalized, (U) Un-signalized.

²Delay - HCM Average Control Delay in seconds.

³LOS: Level of Service.

⁴Delta is the increase in delay from project.

⁵Type of impact: none, direct, or cumulative.

Table 4.3-34b summarizes intersection LOS under Long-Term (Year 2027) With Project Construction With Cumulative conditions for Access Configuration #2. (Intersection LOS calculations are included in Appendix U of the Draft Traffic Impact Analysis [Appendix C of this EIR and Attachment C of the “Drew Solar Alternative Access #2 with One SR-98 Access and No Access on Kubler” Memo and Attachment 1 of the Final EIR]).

4.3 TRANSPORTATION

TABLE 4.3-34b
ACCESS CONFIGURATION #2
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE INTERSECTION LOS

Intersection & (Control) ¹	Movement	Peak Hour	(Year 2027) With Cumulative		(Year 2027) With Cumulative With Project			
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³
1) Forrester Road at I-8 WB Ramp (U)	Minor Leg	AM	10.3	B	10.9	B	0.6	None
		PM	10.3	B	10.5	B	0.2	None
2) Forrester Road at I-8 EB Ramp (U)	Minor Leg	AM	12.9	B	13.9	B	1.0	None
		PM	18.2	C	19.6	C	1.4	None
3) Forrester Road at McCabe Road (U)	Minor Leg	AM	939	A	10.4	B	0.5	None
		PM	9.8	A	11.3	B	1.5	None
4) Pulliam Road at Kubler Road (U)	Minor Leg	AM	8.7	A	9.1	A	0.4	None
		PM	8.6	A	9.2	A	0.6	None
5) Brockman Road at Kubler Road (U)	Minor Leg	AM	9.0	A	9.3	A	0.3	None
		PM	9.1	A	9.3	A	0.2	None
6) Drew Road at SR 98 (U)	Minor Leg	AM	8.7	A	9.1	A	0.4	None
		PM	9.0	A	9.6	A	0.6	None
7) Pulliam Road at SR 98 (U)	Minor Leg	AM	9.1	A	9.9	A	0.8	None
		PM	8.7	A	8.9	B A	0.2	None
8) SR 98 at Project West Driveway(U)	Minor Leg	AM	0.0	A	1.0	A	1.0	None
		PM	0.0	A	9.5	A	9.5	None

Source: LOS 2019b. Minor Leg: approach LOS of minor/lesser roadway. All: combined LOS for all approaches.

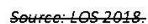
Notes: ¹Control - (S) Signalized, (U) Un-signalized. ²Delay - HCM Average Control Delay in seconds. ³LOS: Level of Service.

⁴Delta is the increase in delay from project. ⁵Type of impact: none, direct, or cumulative.

As shown, under Long-Term (Year 2027) With Project Construction With Cumulative Conditions, all Project study area intersections are calculated to operate at LOS C or better. One intersection (Forrester Road at McCabe Road) would experience a decline LOS A to LOS B in both the AM and PM peak hour. The intersection of Pulliam Road and SR 98 would also decline from LOS A to LOS B in the PM Peak Hour. LOS of all other segments would remain unchanged under cumulative conditions including Forrester Road at McCabe Road which currently operates at LOS C in the PM Peak Hour. In all cases, the increases in traffic resulting from cumulative conditions would not exceed LOS standards. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative intersection traffic. Likewise, cumulative impacts to cumulative intersection LOS would be **less than cumulatively considerable** under Mid-Term (Year 2019) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

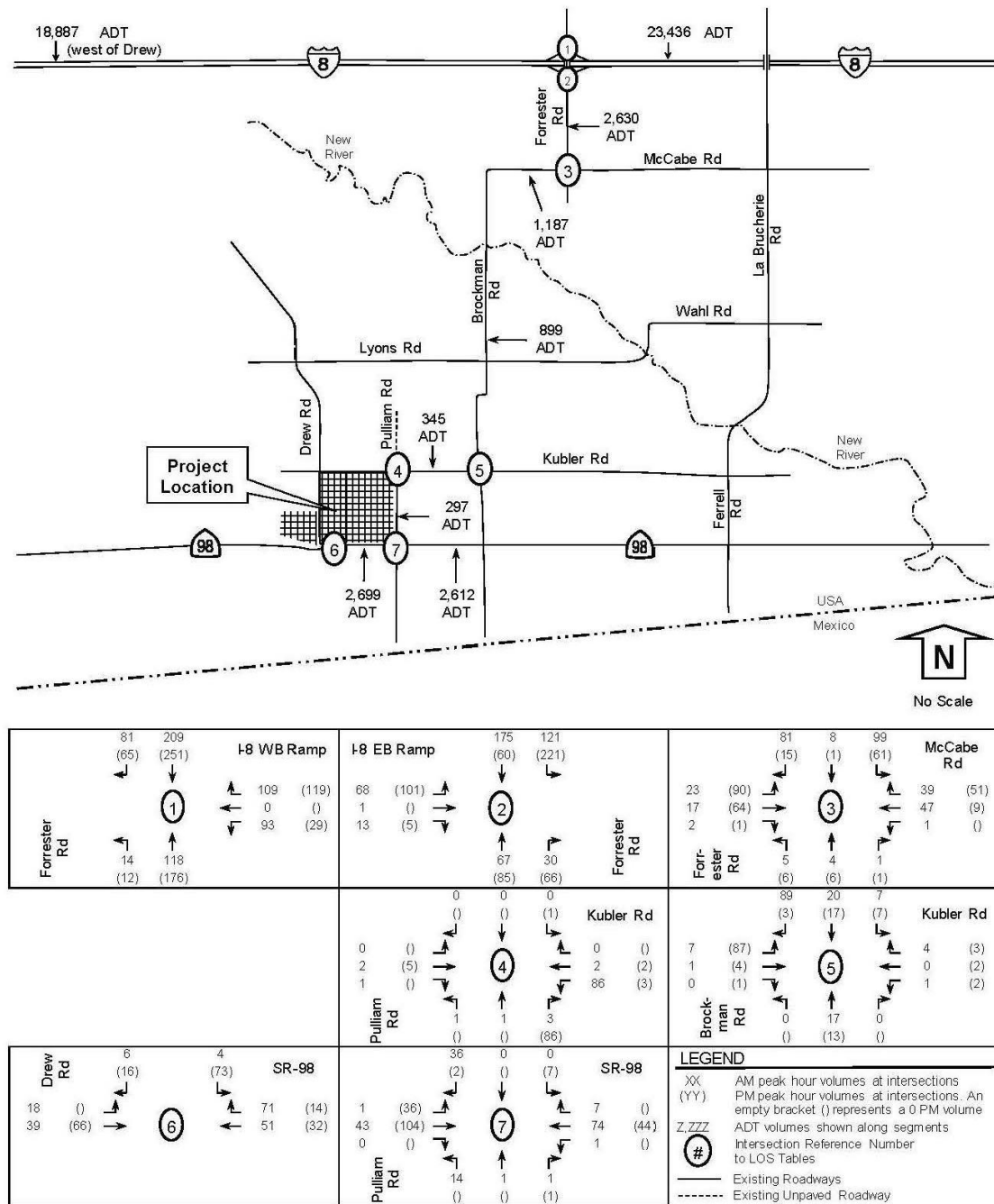
Roadway and State Route Segment LOS

Table 4.3-35a summarizes roadway segment LOS for Long-Term (Year 2027) With Project Construction With Cumulative conditions for Access Configuration #1. **Table 4.3-35b** summarizes roadway segment LOS for Long-Term (Year 2027) With Project Construction With Cumulative conditions for Access Configuration #2. As shown, all segments would continue to operate above LOS C (at LOS A or LOS B). No change in LOS would occur for any segment with the addition of Long-Term (Year 2027) cumulative traffic conditions. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative roadway and State Route segment traffic. Likewise, cumulative impacts to cumulative roadway and State Route segment LOS would be **less than cumulatively considerable** under Long-Term (Year 2027) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.



~~LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES~~

4.3 TRANSPORTATION

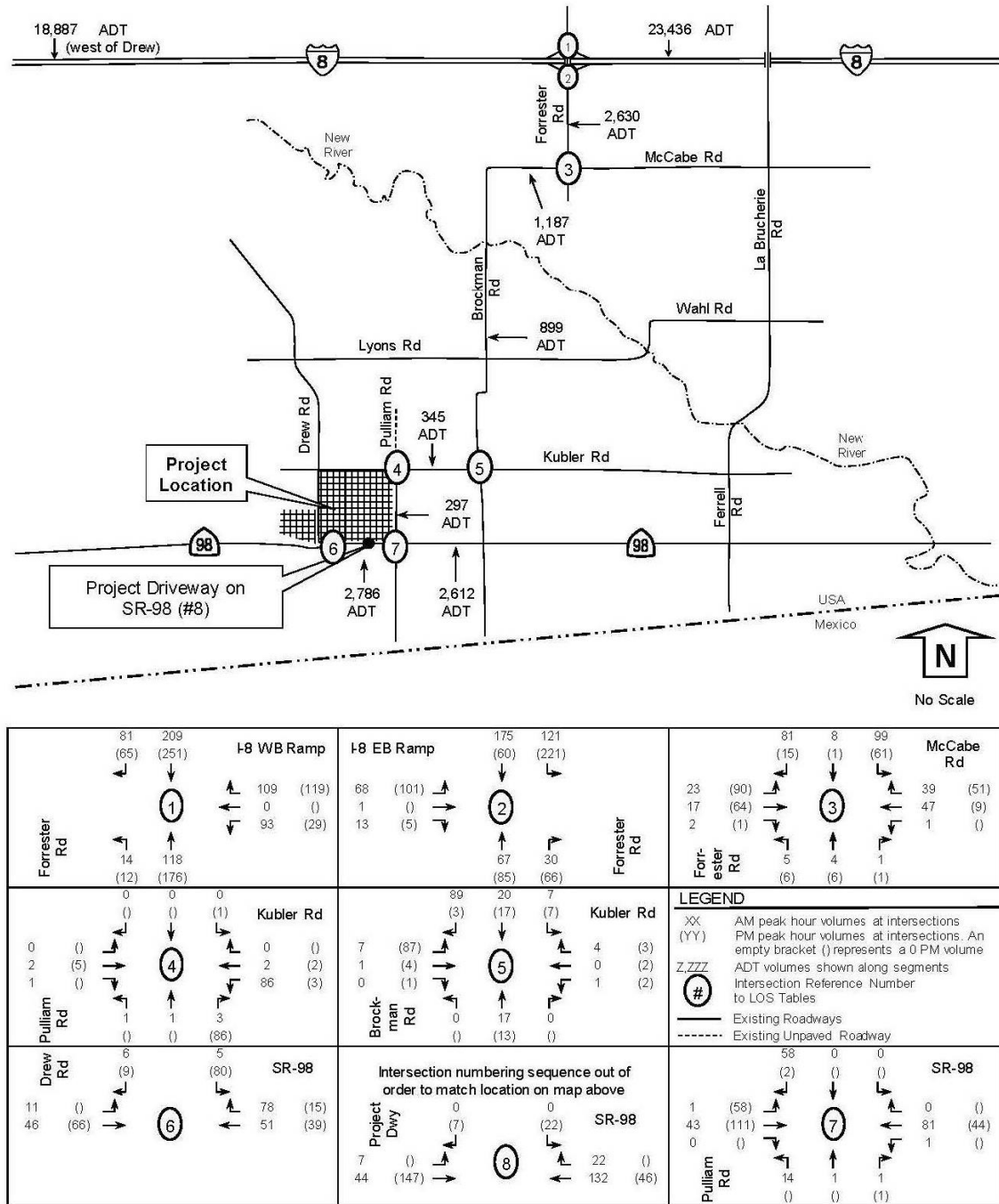


Source: LOS 2019a.

FIGURE 4.3-15A
ACCESS CONFIGURATION #1 –
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

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Source: LOS 2019b.

FIGURE 4.3-15b
ACCESS CONFIGURATION #2 –
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE VOLUMES

4.3 TRANSPORTATION

TABLE 4.3-35A
ACCESS CONFIGURATION #1
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2027) With Cumulative				Project Daily Volume	(Year 2027) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact ?
Brockman Road McCabe Road to Kubler Road	Major (2U)	637	7,100	0.09	A	262	899	7,100	0.13	A	None
Forrester Road I-8 to McCabe Road	Prime (2U)	2,456	7,100	0.35	B	174	2,630	7,100	0.37	B	None
Kubler Road Brockman Road to Ferrell Road	Minor (2U)	83	7,100	0.01	A	262	345	7,100	0.05	A	None
McCabe Road Brockman Road to Forrester Road	Major (2U)	925	7,100	0.13	A	262	1,187	7,100	0.17	A	None
Pulliam Road Kubler Road to SR 98	Minor (2U)	35	7,100	0.00	A	131 262	166 297	7,100	0.02 0.04	A	None
SR 98 Drew Road to Pulliam Road	State Highway (2U)	2,503	7,100	0.35	B	153 196	2,656 2,699	7,100	0.37 0.38	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,503	7,100	0.35	B	109	2,612	7,100	0.37	B	None

Source: LOS 2019 2019a.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway.

Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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4.3 TRANSPORTATION

TABLE 4.3-35B
ACCESS CONFIGURATION #2
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE ROADWAY AND STATE ROUTE SEGMENT LOS

Roadway Segment	Classification (as built)	(Year 2027) With Cumulative				Project Daily Volume	(Year 2027) With Cumulative With Project				
		Daily Volume	LOS C Capacity	V/C	LOS		Daily Volume	LOS C Capacity	V/C	LOS	Impact ?
Brockman Road											
McCabe Road to Kubler Road	Major (2U)	637	7,100	0.09	A	262	899	7,100	0.13	A	None
Forrester Road											
I-8 to McCabe Road	Prime (2U)	2,456	7,100	0.35	B	174	2,630	7,100	0.37	B	None
Kubler Road											
Brockman Road to Ferrell Road	Minor (2U)	83	7,100	0.01	A	262	345	7,100	0.05	A	None
McCabe Road											
Brockman Road to Forrester Road	Major (2U)	925	7,100	0.13	A	262	1,187	7,100	0.17	A	None
Pulliam Road											
Kubler Road to SR 98	Minor (2U)	35	7,100	0.00	A	262	297	7,100	0.04	A	None
SR 98											
Drew Road to Pulliam Road	State Highway (2U)	2,503	7,100	0.35	B	283	2,786	7,100	0.39	B	None
Pulliam Road to Brockman Road	State Highway (2U)	2,503	7,100	0.35	B	109	2,612	7,100	0.37	B	None

Source: LOS 2019b.

Notes: Classification based on January 29, 2008 Circulation and Scenic Highways Element.

2U = 2-lane undivided roadway.

Daily volume is a 24-hour volume.

LOS: Level of Service. LOS based on actual number of lanes currently constructed.

V/C: Volume to Capacity ratio.

Impact? = type of impact (none, cumulative, or direct).

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Freeway Segment LOS

Table 4.3-36 summarizes freeway segment LOS under Long-Term (Year 2027) With Project Construction With Cumulative conditions.

TABLE 4.3-36
LONG-TERM (YEAR 2027) WITH PROJECT CONSTRUCTION WITH CUMULATIVE FREEWAY SEGMENT LOS

Freeway Segment	I-8 Drew Road to Forrester Road				I-8 Forrester Road to Imperial Avenue			
	Forecasted (Year 2027)							
ADT	16,700				20,600			
Peak Hour	AM		PM		AM		PM	
Direction	EB	WB	EB	WB	EB	WB	EB	WB
Number of Lanes	2	2	2	2	2	2	2	2
Capacity ¹	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
K Factor ²	0.1346	0.1346	0.1631	0.1631	0.1346	0.1346	0.1631	0.1631
D Factor ³	0.4770	0.5230	0.4958	0.5042	0.4770	0.5230	0.4958	0.5042
Truck Factor ⁴	0.8712	0.8712	0.8712	0.8712	0.8376	0.8376	0.8376	0.8376
Peak Hour Volume	1,31	1,349	1,550	1,576	1,579	1,731	1,989	2,022
Volume to Capacity	0.262	0.287	0.330	0.335	0.336	0.368	0.423	0.430
LOS	A	A	B	B	B	B	B	B
Cumulative With Project	248	385	435	282	237	582	643	280
2027 With Cumulative With Project								
Peak Hour Volume	1,479	1,734	1,985	1,858	1,816	2,313	2,632	2,302
V/C	0.315	0.369	0.422	0.395	0.386	0.492	0.560	0.490
LOS	B	B	B	B	B	C	C	B
Increase in V/C	0.053	0.082	0.093	0.060	0.050	0.124	0.137	0.060
Impact	None	None	None	None	None	None	None	None

Source: LOS 2018.

Notes: ¹ Capacity of 2,350 pcphpl from CALTRANS' Guide for the Preparation of Traffic Impact Studies, December 2002.

² Latest K factor from Caltrans (based on 2007 report), which is the percentage of AADT in both directions.

³ Latest D factor from Caltrans (based on 2007 report), which when multiplied by K and ADT will provide peak hour volume.

⁴ Latest truck factor from Caltrans (based on 2015 report).

Impact? = Direct, Cumulative, or None.

As shown, both freeway segments were calculated to operate at or above LOS C. However, the AM LOS for the segment of I-8 from Dunaway Road to Drew Road would decrease from LOS A to LOS B in both the eastbound and westbound direction. Likewise, the westbound segment of I-8 from Forrester Road to Imperial Avenue would decline from LOS B to LOS C in the AM Peak Hour going westbound and PM Peak Hour going eastbound with the addition of cumulative traffic. In no case would the increases in traffic resulting from Project construction exceed V/C ratios or LOS standards. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative freeway segment traffic. Likewise, cumulative impacts to cumulative freeway segment LOS would be **less than cumulatively considerable** under Long-Term (Year 2027) With Project Construction With Cumulative conditions under both the Full Build-Out Scenario and Phased CUP Scenario.

Overall, under Long-Term (Year 2027) With Project Construction With Cumulative Conditions, the Project study area intersections, roadway, State Route and freeway segments were calculated to operate at LOS

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4.3 TRANSPORTATION

C or better for both Access Configuration #1 and Access Configuration #2 with **no cumulatively considerable impacts** under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

Cumulative Increase Hazards Due to a Geometric Design Feature

Impact 4.3.10 Implementation of the proposed Project would not require improvements or modifications to any Project study area roadways. Therefore cumulative increases in hazards due to a geometric design feature are considered **less than cumulatively considerable** under both the Full Build-Out Scenario and Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction, Operation and Decommissioning/Reclamation

Multiple County maintained roads provide access throughout the Project Area and to each CUP (refer to **Figure 4.3-11**). Access to each CUP will primarily be via the following paved roads: Pulliam Road, Drew Road, Kubler Road and SR 98. None of these roads would require the addition of left-turn lanes or other geometric design features that could create a hazard. Improvements associated with other cumulative projects identified in **Table 4.3-27** would be assessed on a project-by-project basis and any geometric design features which may be considered a hazard would be address on a project-specific level. Therefore the Project's contribution to the cumulative increases in hazards due to a geometric design feature are **considered less than cumulatively considerable** during Project construction, operation and decommissioning. Likewise, cumulative increases in hazards due to a geometric design feature are considered **less than cumulatively considerable** during Project construction, operation and decommissioning/reclamation under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

Cumulative Increases in Hazards Due to a Geometric Design Feature – Damage to County-Maintained Roadways During Project Construction

Impact 4.3.11 Construction of the proposed Project, in combination with other cumulative projects using Project study area roadways, will require movement of heavy-duty equipment and large vehicles on County roadways not designed to accommodate high volumes of overweight trucks and loads. The high volume of trips in combination with the weight of construction vehicles would deteriorate the surface of Project study area roadways. This is considered a **cumulatively considerable impact** under both the Full Build-Out Scenario and Phased CUP Scenario.

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FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

As described under Impact 4.3.11, above, implementation of the proposed Project has the potential to damage area roadways and other infrastructure (e.g. IID canals and drains) that are not designed to accommodate the volume or weight of traffic associated with construction. Likewise, the number of cumulative projects in the vicinity of the Project Area that would use Project study area roadways would also contribute to wear and tear on these roadways. Given the volume of trips and the weight of vehicles using these roadways, it is anticipated that the proposed Project would result in a **cumulatively considerable contribution** to damage to County-maintained roadways during construction. Likewise, the construction of either the Full Build-Out Scenario/Phased CUP Scenario, in combination with other cumulative projects identified in **Table 4.3-27** that would also use Project study area roadways, would result in a **cumulative considerable impact** with regard to damage to County-maintained roadways under both the Full Build-Out Scenario and Phased CUP Scenario.

Mitigation Measures

Project-specific mitigation measures were identified in association with Impact 4.3.5 to minimize impacts to county roads and repair any damage resulting from construction traffic on county roads. Mitigation measures MM 4.3.5a through MM 4.3.5k would address these impacts as they apply to each CUP.

Significance After Mitigation

Implementation of mitigation measures MM 4.3.5a through MM 4.3.5k would minimize damage to county roads and address any damage to County-maintained roadways attributed to construction of the proposed Project. Following implementation, the Project's contribution to damage to Project Area roadways would be reduced to **less than cumulatively considerable** under both the Full Build-Out Scenario and Phased CUP Scenario.

4.0 ERRATA

SECTION 4.4, AIR QUALITY

Pages 4.4-18 and 4.4-19 of the Draft EIR, the discussion under Impact 4.4.1, has been revised as follows:

“All Project Components

As discussed under the Regulatory Framework, (National Ambient Air Quality Standards [NAAQS] and the California Ambient Air Quality Standards [CAAQS]) the Project Site is in non-attainment areas for NAAQS and CAAQS for ozone and particulate matter. The majority of regional PM₁₀ and PM_{2.5} emissions originate from dust stirred up by wind or by vehicle traffic on unpaved roads (ICAPCD 2009). The Project is located in an area defined by the ICAPCD’s *High Wind Exceptional Fugitive Dust Mitigation Plan* as a “high wind corridor” that is subject to periodic strong westerly winds that create wind-dust channels. Thus ~~there~~, there is an increased potential for high winds to entrain fugitive dust during construction and operation of the Project (Blondell 2019). Other PM₁₀ and PM_{2.5} emissions originate from grinding operations, combustion sources such as motor vehicles, power plants, wood burning, forest fires, agricultural burning, and industrial processes. Ozone is not emitted directly but is a result of atmospheric activity on precursors. NO_x and ROG are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone. Approximately 88 percent of NO_x and 40 percent of ROG regional emissions originate from on- and off-road vehicles (ICAPCD 2010). Other major sources include solvent evaporation and miscellaneous processes such as pesticide application. While the proposed Project would not exceed an ICAPCD threshold for criteria pollutants during either construction (see Table 4.4-7) or operations (see Table 4.4-8), ICAPCD Regulation VIII would be enforced in keeping with the mandatory construction dust control plan and operational dust control plan.”

Page 4.4-23 of the Draft EIR, the following revision has been made to clarify the duration of the CUP

“Decommissioning/Reclamation

Decommissioning/reclamation activities would increase air pollutant emissions as a result of earth-moving and exhaust from diesel equipment. The dust and exhaust generated would be temporary in nature and are anticipated to be similar to levels generated during construction. However, it is anticipated that regulatory compliance similar to or greater than those currently in place (e.g. Regulation VIII) would be required at the time of reclamation. Likewise, BACTs are also anticipated to be more stringent, and cleaner burning equipment is anticipated to be available, at the time of Project decommissioning/reclamation (i.e. 40 years in the future assuming 30 years plus one 10-year extension to the CUP, if approved). In addition, all other cumulative projects with dust and diesel-generated emissions would be required to comply with applicable regulations and BACTs to reduce their individual construction air quality emissions. In this way, each individual cumulative project would reduce decommissioning/reclamation emissions on a project-by-project basis resulting in a **less than cumulatively considerable contribution** to identified criteria pollutants under both the Full Buildout Scenario and Phased CUP Scenario. Because the proposed Project and other cumulative projects would reduce reclamation emissions on a project-by-project basis, emissions resulting in a violation of an air quality standard would be reduced to **less than cumulatively considerable** under both the Full Buildout Scenario and Phased CUP Scenario.”

SECTION 4.5, GREENHOUSE GASES

Page 4.5-10 of the Draft EIR, the bullet discussion under Tier 5 has been revised as follows to clarify the length of the CUP:

“Tier 5 – Off-sets ~~along~~ alone or in combination with the above target Significance Screening Level. Offsets must be provided for a 30- to 40 year project life (30 years plus one 10-year extension to the CUP, if approved), unless the project life is limited by permit, lease, or other legally binding condition.”

SECTION 4.6, GEOLOGY AND SOILS

Page 4.6-30 of the Draft EIR, under “Significance After Mitigation”, the following revisions have been made.

“Implementation of mitigation measure MM ~~4.6.8 4.7.4~~ ~~(identified in Section 4.7 Cultural Resources & Tribal Cultural Resources)~~, would employ paleontological monitoring during excavations or drilling that would be at depths of 10 feet or more. The paleontologist would be empowered to determine the level of monitoring necessary; to halt or divert construction away from large specimens; and to curate fossil specimens. In addition, paleontological monitoring shall be required if decommissioning activities reach a certain depth. Implementation of mitigation measure MM ~~4.6.8 4.7.4~~ would reduce impacts to paleontological resources to **less than significant** for both the Full Build-out Scenario and Phased CUP Scenario.”

Page 4.6-33 of the Draft EIR, the 6th sentence of the paragraph under the discussion of “Decommissioning/Reclamation” has been revised as follows to clarify the length of the CUP:

“All decommissioning activities would be required to implement appropriate fugitive dust control measures consistent with applicable ICAPCD requirements in effect at the time of site closure (i.e. at the end of each CUP or 30 or 40 years [30 years plus one 10-year extension to the CUP, if approved], whichever is later).”

SECTION 4.7, CULTURAL RESOURCES & TRIBAL CULTURAL RESOURCES

Page 4.7-34 and 4.7-35 of the Draft EIR, Mitigation Measure MM 4.7.3 has been revised as follows:

“Mitigation Measure

MM 4.7.3 In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified of the discovery immediately. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

In the event that any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites,

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trails, artifacts are identified during ground disturbance, please contact the Colorado River Indian Tribes' Tribal Historic Preservation Office (CRIT THPO) within 48 hours.

Timing/Implementation: During construction.

Enforcement/Monitoring: Imperial County Planning and Development Services Department, Imperial County Coroner in coordination with NAHC and CRIT THPO."

Mitigation Measure MM 4.7.2 on page 4.7-32 has been revised as follows

"MM 4.7.2a A monitor from the Campo Band of Mission Indians and the Colorado River Indian Tribes shall be present as a Native American monitors for initial ground disturbing activities within the boundaries of the Project site. Following initial disturbance, a determination shall be made by the County in accordance with State regulations if continued monitoring is necessary based on the outcome of any discoveries or lack thereof.

Timing/Implementation: During initial ground disturbing activities/as needed.

Enforcement/Monitoring: Imperial County Planning and Development Services Department/Campo Band of Mission Indians and Colorado River Indian Tribes."

SECTION 4.8, NOISE

No revisions.

SECTION 4.9, AGRICULTURAL RESOURCES

Page 4.9-14 of the Draft EIR, items b, c and d have been revised as follows:

- "b) Permittee shall pay an annual fee of \$20 per acre per year (based on developed acreage defined in the Building Permit) during the post-construction, operational phase of the Project to address the Imperial County Fire/OES expenses for service calls within the Project's Utility/Transmission area. Said fee will be paid to the Fire Department to cover on-going maintenance and operations cost created by the project. A \$100 per acre (based on developed acreage defined in the Building Permit) is to be paid by the Permittee for Fire/OES capital purchases prior to issuance of the initial building permit.
- c) (applies to a & b) Costs associated with ~~items~~ the two above items shall be annually adjusted on January 1st to add a CPI (Los Angeles) increase. Such costs associated with these items can be readjusted in the County's sole discretion if a new ~~service~~ analysis is prepared and that service analysis is approved by both the County and the Permittee.
- d) Fiscal Impacts will remain open in regard to solar generation and battery (energy) storage until meeting with the department head(s) and developer(s), which may include but not limited to: Capital purchases which may be required to assist in servicing this project: costs for services during construction and life of the project: and training. Fiscal Impact negotiations will take place prior to issuance of the initial building permit.

Page 4.9-34 of the Draft EIR, the first sentence under the discussion of "Decommissioning/Reclamation" has been modified as follows to clarify the length of the CUP:

"At the end of the 30-year operational life (up to 40 years assuming 30 years plus one 10-year extension to the CUP, if approved) of the Project's CUPs, the facilities in each of the CUP Areas would be disassembled and removed;"

Page 4.9-40 of the Draft EIR, the last sentence under Table 4.9-17 has been modified as follows to clarify the length of the CUP:

“Furthermore, the conversion would be temporary and last for the duration the Project’s operational life stated in the CUP (i.e., 30 years or up to 40 years assuming 30 years plus one 10-year extension to the CUP, if approved).”

SECTION 4.10, HAZARDS AND HAZARDOUS MATERIALS

No revisions.

SECTION 4.11, HYDROLOGY AND WATER QUALITY

No revisions.

SECTION 4.12, BIOLOGICAL RESOURCES

Page 4.12-3 of the Draft EIR, has been revised to include the following text following the first paragraph under the discussion of the Migratory Bird Treaty Act:

“A. Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations that protect migratory birds, (including their parts, eggs, and nests) from killing, hunting, pursuing, capturing, selling, and shipping unless expressly authorized or permitted. Generally, the list of species protected under the MBTA includes those where evidence of natural occurrence in the United States or its territories exists, and the documentation of such records has been recognized by the American Ornithologists Union or other competent scientific authorities. Species not protected under the MBTA include those whose occurrences in the United States are strictly the result of intentional human introduction.

“The MBTA prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 U.S.C. 703 et seq.). In December 2017, Department of Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) interpreting the MBTA, as follows:

“Interpreting the MBTA to apply to incidental or accidental actions hangs the sword of Damocles over a host of otherwise lawful and productive actions, threatening up to six months in jail and a \$15,000 penalty for each and every bird injured or killed. As Justice Marshall warned, “the value of a sword of Damocles is that it hangs—not that it drops.” Indeed, the mere threat of prosecution inhibits otherwise lawful conduct. For the reasons explained below, this Memorandum finds that, consistent with the text, history, and purpose of the MBTA, the statute’s prohibition on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs.”

Page 4.12-30 of the Draft EIR, the first bullet at the top of the page under mitigation measure 4.12.1a has been eliminated:

~~“● Night-time construction should be minimized to the extent possible. However, if night-time activity (e.g., equipment maintenance) is necessary, then the speed limit shall be 10 mph.”~~

Page 4.12-34 of the Draft EIR, under “Mitigation Measures”, mitigation measure MM 4.12.1e has been added:

“Implement mitigation measure MM 4.12.1a, MM 4.12.1b, ~~and~~ MM 4.12.1d and MM 4.12.1e.”

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SECTION 4.13, PUBLIC SERVICES AND UTILITIES

Page 4.13-17 of the Draft EIR, the text under IID Interim Water Supply Policy for Non-Agricultural Projects has been revised to reflect an update to the WSA (September 2019):

“The Imperial Irrigation District (IID) has adopted an Interim Water Supply Policy for Non-Agricultural Projects (IWSP), from which water supplies can be contracted to serve new developments within IID’s water service area. For applications processed under the IWSP, applicants are required to pay a processing fee and, after IID board approval of the corresponding agreement, are required to pay a reservation fee(s) and annual water supply development fees. The IWSP sets aside 25,000 acre-feet annually (AFY) of IID’s Colorado River water supply to serve new non-agricultural projects. As of ~~June 2017~~ August 2019, a balance of 23,800 AFY remains available under the IWSP for new non-agricultural projects ensuring reasonably sufficient supplies for such water users (Fusco 2019). The Project site lies within IID’s Imperial Unit and as such is eligible to receive water service (Fusco 2018b).”

Page 4.13-18 of the Draft EIR, the second full paragraph has been revised as follows to reflect an update to the WSA (September 2019):

“The proposed Project is located on agricultural land owned by the IID. Water is supplied to the Project site via IID’s via existing untreated irrigation canals. Historical water deliveries to the Project site for agricultural use averaged approximately ~~4,618~~ 4,481 between 2003 and 2017 (Fusco ~~2018b, p. 6~~ 2019).”

Page 4.13-18 of the Draft EIR, the following text has been added following Table 4.13-4 to reflect an update to the WSA (September 2019):

“Domestic water will be used for sanitary water use potable water will be brought into the site via transport truck through a third-party water provider (Fusco 2019, p. 7).”

The Project will need to contract with IID to deliver up to 116 AFY of untreated water via gates on the Wormwood and Woodbine systems. The Project could potentially draw from all delivery gates listed in Table 4.13-4. The Project is anticipated to use approximately 60 AFY under buildout conditions for dust suppression, fire control, panel washing, sanitary and potable use (Fusco 2019, p. 7).”

Page 4.13-22 of the Draft EIR, the following text has been added to the discussion of “Construction” to reflect an update to the WSA (September 2019):

“Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for Municipal Commercial, Industrial temporary water use. Water would be picked up from a nearby canal or lateral and delivered to the construction location by water trucks (Fusco 2019, p. 37). During construction, on-site water treatment facilities may also be constructed within each CUP where an O&M Building Complex is constructed (refer to Figure 2.0-11 in Chapter 2.0, Project Description to see the layout of an O&M Complex). Each CUP/ Project phase may have its own O&M Building Complex, and Phase 5 may have two O&M Building Complexes. Bottled water will be trucked to the site for drinking water. Construction related to on-site water treatment facilities would be limited to CUPs where they are to be installed, with no connection to existing public systems. Therefore, impacts resulting from potential construction of new water treatment facilities are considered **less significant** under both the Full Build-out Scenario and the proposed Phased CUP Scenario.”

Page 4.13-22 and 4.13-23 of the Draft EIR, the paragraph under “Operation” has been revised as follows to reflect an update to the WSA (September 2019):

“An on-site water treatment facility may be constructed at each CUP with an O&M Building Complex. Each phase may have its own O&M Building Complex, and Phase 5 may have two O&M Building Complexes. The on-site water treatment facilities would provide the appropriate panel wash water or potable water requirements to provide water during Project operation. The Imperial County Building Code requires potable water to be connected to all plumbing fixtures. ~~However, IID does not allow its water to be consumed by humans. As such, while potable water will be connected to plumbing fixtures, bottled water will be provided for drinking water.~~ Potable water will be obtained for the duration of the Project from a state-approved provider²⁵ and will be trucked to the site. Sanitary water will be provided through a domestic 2” service pipe under the IWSP Water Supply Agreement (Fuscoe 2019, p. 6). Untreated Colorado water will be supplied to the Project via the adjacent delivery gates. Currently, the Project site is used for agriculture and received deliveries from the Wormwood Canal Gates 11, 11a, 12, 13, and 14 and the Woodbine Canal Gates 41, 42, 43a, 44 and 57 (Fuscoe 2019, p. 37).”

Page 4.13-25 of the Draft EIR, the data for years 2016 and 2017 in Table 4.13-5 has been revised as follows to reflect an update to the WSA (September 2019):

2016	3,100	105	100	67.7	130.8	41	100.0	11.5	555.2	2,544.8
2017	3,100	105	100	67.7	150.3	45	91.0	11.5	570.2	2,529.8

Source: Fuscoe 2018b, p. 24 34.

Note: Shaded columns represent volumes of water that may vary.

1. 2003 through ~~2015~~ 2017, volumes are adjusted for actual USBR Decree Accounting values; IID

Page 4.13-26 of the Draft EIR, the first sentence of the second paragraph under Table 4.13-6 has been revised as follows to reflect an update to the WSA (September 2019):

“As of ~~June 2017~~ August 2018, IID’s IWSP had a remaining balance of water equal to 23,800 AFY available for new non-agricultural projects such as the Proposed Project (Fuscoe 2018b, p. 39). Page 4.13-26 of the Draft EIR, the second paragraph under the discussion of “Construction” has been revised as follows to clarify the length of the CUP:”

Page 4.13-26 of the Draft EIR, the second paragraph under the discussion of “Construction” has been revised as follows to clarify the length of the CUP:

“Due to the proposed Project phasing under the development agreement, it is unknown which year within the first 10 years of the 40-year (10 years from Development Agreement plus 30 years for the CUP) CUPs the Project will commence construction. It is possible that construction will commence in 2019 at one time, or over five phases over a 10-year period. Regardless of construction phasing, total construction and decommissioning water demands are anticipated to be 1,200 AF each. In order to provide a conservative assessment, the WSA assumed that all the CUPs will commence construction in 2019 at once to allow for the longest fully operational lifetime of the Project (39 years) (Fuscoe 2018b, p. 41). Decommissioning of the Project would occur immediately after the 40-year CUP term (10 years from Development Agreement plus 30 years for the CUP) in year 41 and is assumed to take one year. Therefore, an amortized water demand of 116 AFY level for 41 years is assumed. This would result in a total water demand of 4,740 AF as shown in **Table 4.13-6** below (Fuscoe 2018b, p. 39).”

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Page 4.13-26 of the Draft EIR, the fourth sentence under the paragraph “Operation” has been revised as follows to reflect an update to the WSA (September 2019):

~~“To date~~ As of August 2018, a balance of 23,800 AFY remains available under the IWSP for new non-agricultural projects ensuring reasonably sufficient supplies for such ~~water users projects~~ (Fuscoe 2018b, p. 5 6).”

Page 4.13-27 of the Draft EIR, the paragraph under Table 4.13-7 has been revised as follows to reflect an update to the WSA (September 2019):

“Under the Full Build-out Scenario, operation and maintenance water use would not result in a significant decrease in water supply. The WSA estimates project operations and maintenance would require 60 AF/Y needed for Project operations (**Table 4.13-7**) and maintenance (2,340 AF total amortized over a 39-year operational period) (**Table 4.13-6**) needed for Project operations and maintenance is much less than the needs of existing and historic agricultural uses of an average of ~~4,618~~ 4,481 AF/Y (average between 2003 and 2017).³ The estimated water demand over the total lifespan of the Project inclusive of Project construction, operation and maintenance, and decommissioning is estimated at 116 AF/Y (**Table 4.13-6**), representing a 97 percent reduction from the water delivered for agricultural uses on the proposed solar field site parcels (Fuscoe 2018b, p. 42). The 60 AF/Y operational water demand represents less than 0.3% of the unallocated supply set aside for non-agricultural projects while the 116 AF/Y lifetime water demand represents 0.5% of the unallocated supply set aside for non-agricultural projects. Neither operational nor lifetime water demand would affect IID’s ability to provide water to other users in IID’s service area (Fuscoe 2019, p. 6). Therefore, impacts to water supply during operations and maintenance, under both the Full Build-out Scenario and Phased CUP Scenario, are considered **less than significant**. ”

Page 4.13-27 of the Draft EIR, the paragraph under the discussion of “Decommissioning/Reclamation” has been revised as follows to clarify the length of the CUP and reflect an update to the WSA (September 2019):

“At the end of the Project’s operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities and would occur immediately after the 40-year CUP term (10 years from Development Agreement plus 30 years for the CUP) in year 41. Decommissioning is assumed to take one year. As such, demand for water supply during decommissioning is anticipated to be the similar to demand experienced during construction (1,200 AF) (**Table 4.13-6**). Therefore, impacts associated with water supply during decommissioning are anticipated to be **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario. Reclamation water demands are estimated to be similar to existing and historic agricultural uses (i.e. average of ~~4,618~~ 4,481 AF/Y).”

Page 4.13-28 of the Draft EIR, the second sentence of the second paragraph under “Construction, Operation, and Decommissioning/Reclamation” has been revised as follows to reflect an update to the WSA (September 2019):

“Demand for water service for existing and historical agricultural uses is estimated at 97 percent greater (4,365 AF/Y) than would be required for the Proposed Project (~~Fuscoe 2018b, p. 42~~) from the 10-year historic average (Fuscoe 2019, p. 49).”

CHAPTER 5.0, ALTERNATIVES

No revisions.

CHAPTER 6.0, OTHER CEQA REQUIRED CONSIDERATIONS

Page 6.0-5 of the Draft EIR, the last bullet describing the Development Agreement has been revised as follows to clarify the length of the CUP:

“A Development Agreement between the County and the Applicant to enable and control a phased build-out of the Project that is capable of meeting changing market demands by authorizing initiation of the CUP or CUPs anytime within a 10-year period. Pursuant to the terms of the Development Agreement, thereafter, the CUPs would be valid for the remaining period of 40 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term.”

Page 6.0-6 of the Draft EIR, the last two sentences of the first paragraph have been revised as follows to clarify the length of the CUP:

“Thereafter, the CUPs are valid for the remaining period of 40-30 years from the date of the CUP approval. The requested Development Agreement would provide flexibility to allow the start of construction to commence for up to 10 years after the CUPs are approved. Pursuant to the terms of the Development Agreement, the CUPS may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term.”

Page 6.0-8, second to the last sentence in the discussion of 6.4.2 Secondary Effects of Growth has been revised as follows to clarify the length of the CUP:

“Once operational, the Project would require limited trips to each CUP for operation and maintenance activities during the operational lifespan of each CUP which is expected to be operate for 30 to 40 years (10 years from Development Agreement plus 30 years for the CUP).”

Page 6.0-8 of the Draft EIR, the last sentence of the paragraph under “6.5.1 Introduction” has been revised as follows to clarify the length of the CUP:

“Moreover, the Applicant is required to restore the solar field site parcels to pre-Project conditions at the end of each CUP which could operate for a total permitted term up to 40 of 40 years years from CUP approval date. Pursuant to the terms of the Development Agreement, the CUPs may have up to a total permitted term of forty (40) years. The Development Agreement shall provide up to ten (10) years for the CUP to commence operations or commence construction. Upon commencement the CUP shall have the remainder of any time left under the 10-year Development Agreement, plus an additional thirty (30) year term.”

CHAPTER 7.0, LIST OF PREPARERS

No revisions.

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CHAPTER 8.0, REFERENCES

- American Cancer Society Website. 2019. <https://www.cancer.org/cancer/cancer-causes/diesel-exhaust-and-cancer.html> Accessed October 30, 2019. Referenced in text as (American Cancer Society 2019).
- Barrett, Marie S. Biologist. 2019. Letter RE Drew Solar Environmental Impact. October 23, 2019. Referenced in text as (Barrett 2019)
- Environmental Laboratory 1987. *"Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterway Experiment Station.* Referenced in text as (Environmental Laboratory 1987).
- Fuscoe Engineering, Inc. 2019. Drew Solar Water Supply Assessment. February 2018. Revised August 27, 2018. Second Revision September 10, 2019. Referenced in text as (Fuscoe 2019).
- San Diego Zoo. Website <https://institute.sandiegozoo.org/species/burrowing-owl> Accessed October 30, 2019. Referenced in text as (San Diego Zoo 2019).
- Wilkerson, Robert L. and Sigel, Rodney B. 2011. Assessing Changes in Distribution and Abundance of BUOW in CA. Accessed at : https://www.birdpop.org/docs/pubs/Wilkerson_and_Siegel_2010_Assessing_Changes_in_Distribution_and_Abundance_of_BUOW_in_CA.pdf Referenced in text as (Wilkerson and Sigel 2010).

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