

CHAPTER 2.0

PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION

Information identified in this chapter regarding the proposed Seville 4 Solar Project is derived on technical studies, mapping, figures, and the Conditional Use Permit (CUP) application submitted to the Imperial County Planning & Development Services Department (ICPDSD) by Titan Solar II, LLC (i.e. the Applicant). This Project Description was developed, in part, on the “Titan Solar II LLC Seville 4 Solar Project Description” dated April 2017 (Titan 2017) as well as information from the Applicant. Information referring to land disturbance, equipment, schedule, mileage, and workforce is based on the most up-to-date information available from the Applicant and generally represents conservative estimates. The internal configuration of the Project may change within the area analyzed based on final engineering and permit requirements for the various components.

2.1.1 INTRODUCTION

This chapter of the Environmental Impact Report (EIR) describes the Seville 4 Solar Project (“Project” or “Proposed Project”) proposed by Titan Solar II, LLC. The Project is a proposal to build a nominal 20-megawatt (MW) alternating current (AC) solar generation facility using photovoltaic (PV) technology. The entire Project is proposed on private land. The Project consists of the solar generation facility; an extension of the existing private access road, a 34.5-kilovolt (kV) generation intertie line (Gen-Tie Line), the Seville 4 Substation (i.e. Project substation) and expansion of the adjacent Imperial Irrigation District (IID) Switching Station. The proposed Project substation would increase the voltage to 92 kV, then deliver the generated power to the existing IID Switch Yard and IID 92-kV transmission line.

TERMINOLOGY

To understand the description of the proposed Project and the terminology used throughout the analysis, the following definitions are provided.

Project site – the area encompassed by the boundary of the Seville 4 Solar Project under either the Fixed-Frame Configuration (refer to Figure 2.0-5A) or the Horizontal Single-Axis Tracker Configuration (refer to Figure 2.0-5B).

Project area – the area inclusive of the Project site (on Lot 8), the private access road, Seville 4 Substation and IID Switching Station (on Lot D) and Gen-Tie Line (through Lots A and 2).

Property - The “Property” refers to the major subdivision/tract map (00988) that created eight individual lots (Lots 1 thru 8) and four common development interest lots (Lots A thru D) on the former 2,440-acre Allegretti Farms property.

Seville Solar Farm Complex – refers to the previously approved and partially developed solar farm within the Property. Lot 8 is included as an area of future development within the Seville Solar Farm Complex.

2.1.2 PROJECT BACKGROUND

The Applicant is proposing to construct, operate and reclaim a solar generation facility on approximately 153 to 181 acres (inclusive of all components – solar field, Gen-Tie Line, Seville 4 Substation, roads, retention basins, etc. - depending on the configuration selected) located in west-central Imperial County, California. The focus of this EIR is on the construction, operation and reclamation aspects of the Project. As reclamation would occur in approximately 30 years (or 40 years if a 10-year extension is requested and approved), additional environmental review may be required in the future prior to undertaking these activities.

On April 13, 2017, the Applicant submitted the following permit applications to ICPDSD.

2.0 PROJECT DESCRIPTION

THIS PAGE INTENTIONALLY LEFT BLANK.

- One General Plan Amendment (GPA) (17-0002) to add the Renewable Energy “RE” Overlay Zone designation to the existing Agriculture land use designation;
- One Zone Change (ZC 17-0001) to add the “RE” Renewable Energy Overlay Zone to the existing “A-2” General Agriculture zone. Pursuant to Section 9170101 (“RE” RENEWABLE ENERGY OVERLAY ZONE) of Title 9 of the Imperial County Code (Land Use Ordinance), land classified in some other (non-overlay) zone may also be classified in the “RE” Renewable Energy Overlay Zone by the County Board of Supervisors if a future renewable energy project would be located adjacent to the existing “RE” Overlay Zone and the project was not located in a sensitive area and it would not result in any significant environmental impacts.
- One CUP (17-0006) application package for the proposed Seville 4 Solar Project to be located on a portion of the 572.10 acres comprising Lot 8 of Tract Map 00988, Section 25, T12S, R9E. Pursuant to Section 91703.02 (CONDITIONAL USE PERMITS) of Title 9 of the Imperial County Code (Land Use Ordinance), Renewable Energy Projects must be located within the Renewable Energy Overlay Zone and may be permitted only through the issuance of a CUP as approved by the Approving Authority unless otherwise allowed by applicable law.

This EIR is being prepared to analyze the potential environmental impacts of the proposed Project and fulfill the requirements of the California Environmental Quality Act (CEQA).

2.1.3 SITE LOCATION

The Project site is located at 2085 “H” West Highway 78, Borrego Springs, CA 92004 in west-central Imperial County, California, approximately eight miles west of the junction of SR 78 and SR 86, and approximately five miles east of the San Diego County line. The Project site is also approximately 12 miles west of the southern tip of the Salton Sea and bordered on the east by the unpaved section of Pole Line Road south of SR 78. Specifically, the Project site is in Section 25, Township 12 South (T12S), Range 9 East (R9E), San Bernardino Baseline and Meridian (SBB&M).

Figure 2.0-1 depicts the regional location of the Project within Lot 8. **Figure 2.0-2** shows the Project site, Lot 8 and surrounding vicinity.

Figure 2.0-3 is an aerial photograph of the Property showing the existing numbered lots (1 thru 8), as well as the completed, pending and proposed solar projects. **Figure 2.0-4** shows the alignment of the Gen-Tie Line through the existing lots to its termination at Lot D.

2.1.4 OWNERSHIP

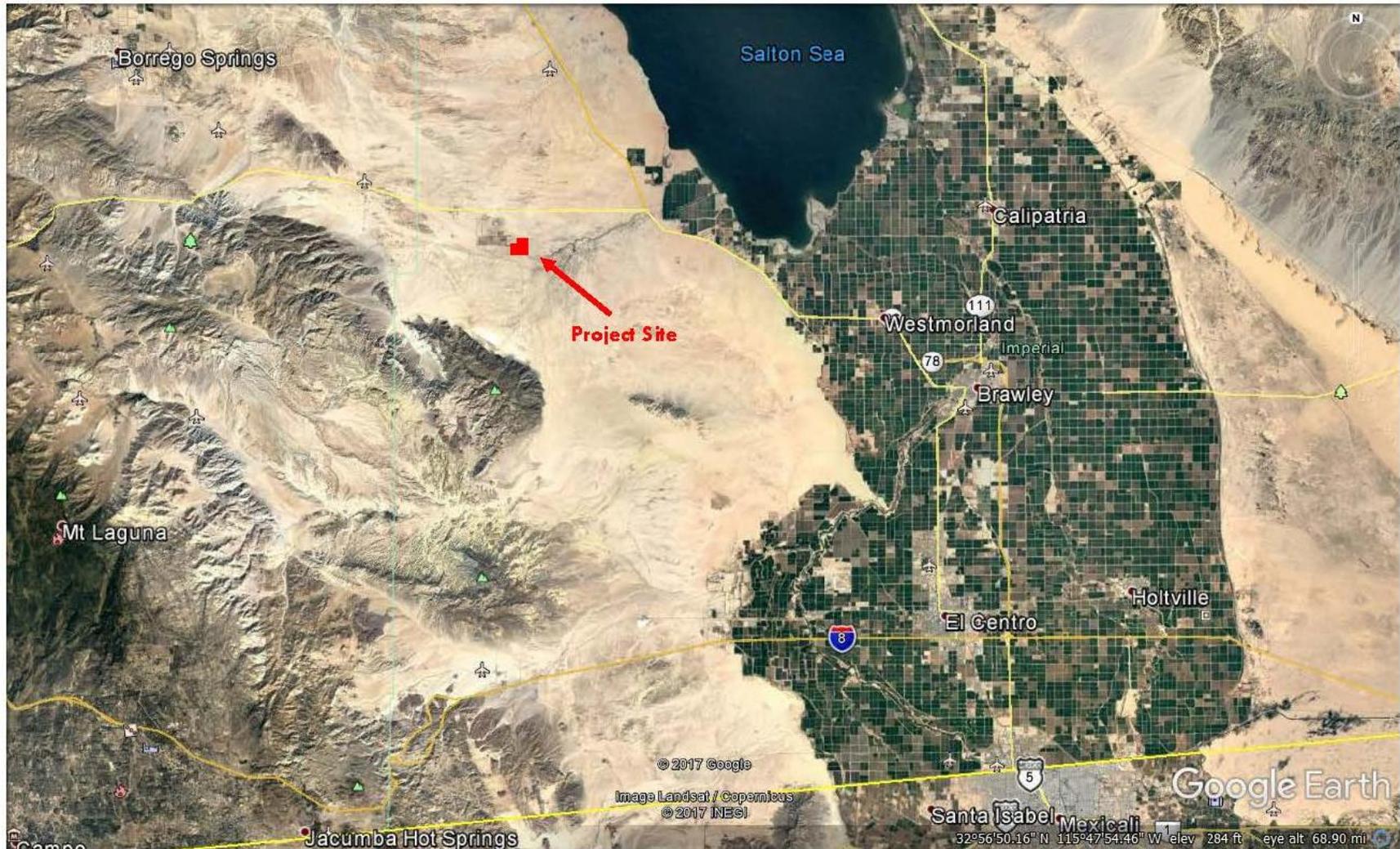
The property is owned by Solana Energy Farms I, LLC. Titan Solar II, LLC has acquired an option to purchase the land to be developed as the Seville 4 Solar Project and rights to acquire easements across other portions of the Property to develop access roads and/or electric transmission/distribution lines.

2.1.5 SEVILLE 4 SOLAR PROJECT CHARACTERISTICS

A. EXISTING USES AND FEATURES

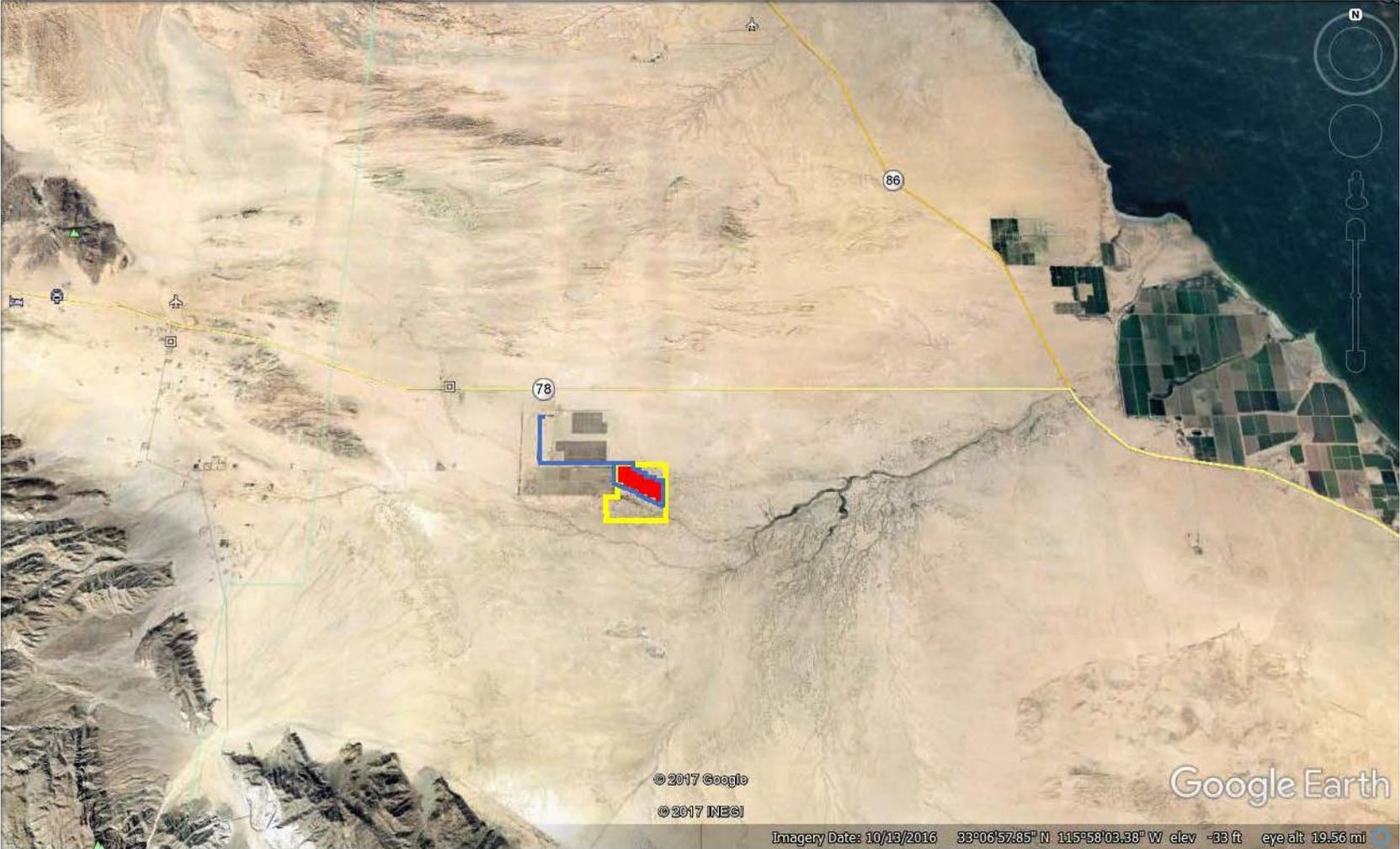
The Project site is comprised of flat-lying, very low gradient desert lands and approximately 60 acres of idle agricultural fields. San Felipe Creek, in its natural state, previously flowed through Lot 8 in a southeasterly direction. In the 1970’s the Creek was diverted around the southwestern corner of Lot 1 by an earthen berm constructed along the western boundary of Lots 1 and 7 (refer to **Figure 2.0-5A** and **Figure 2.0-5B**).

2.0 PROJECT DESCRIPTION



Source: Google Earth 2017.

FIGURE 2.0-1
REGIONAL LOCATION MAP



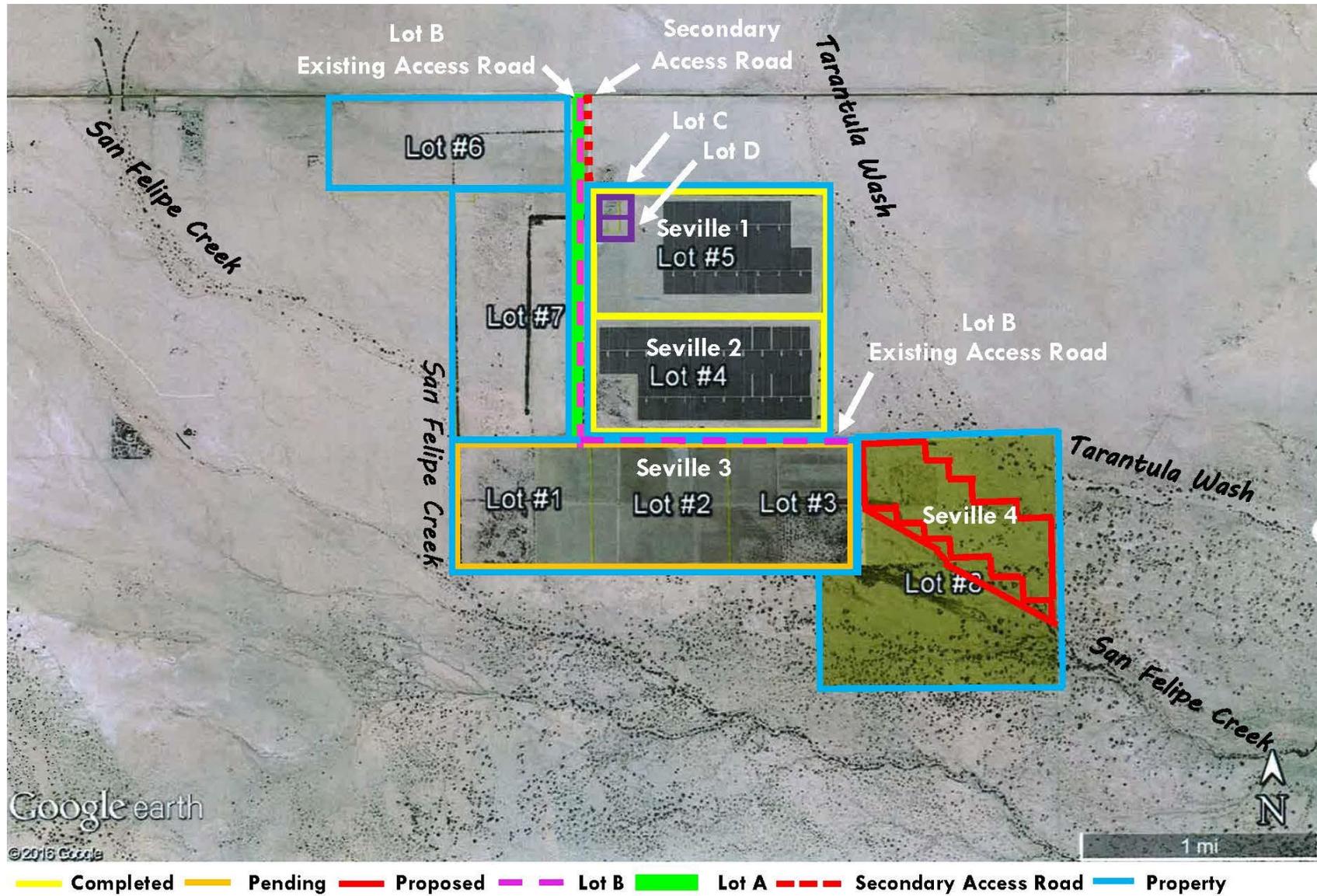
Not to scale.

-  Lot 8 Boundary
-  Project Site
-  Project Area Boundary

Source: Base Map Google Earth 2017.

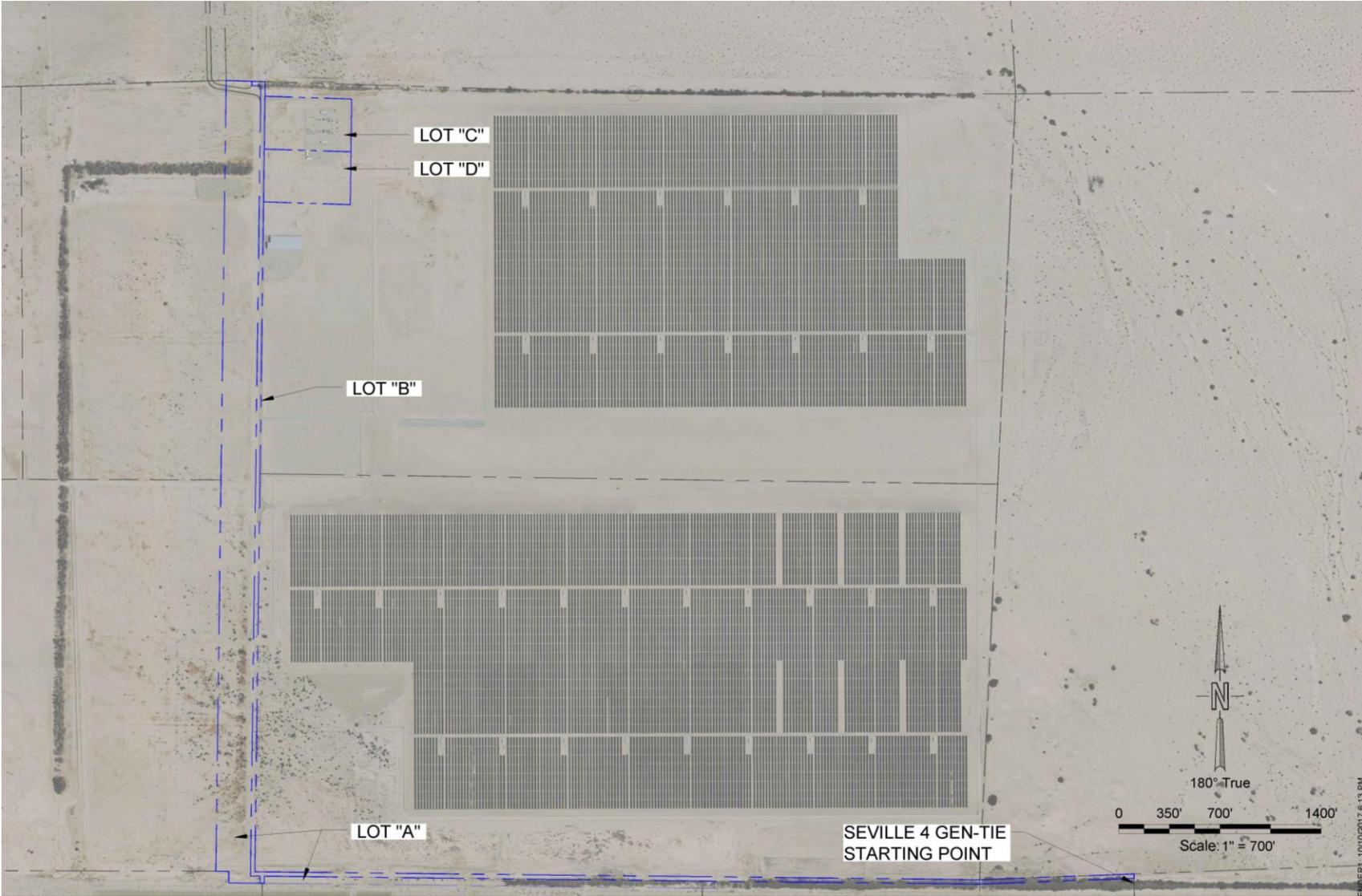
**FIGURE 2.0-2
PROJECT VICINITY MAP**

2.0 PROJECT DESCRIPTION



Source: Base Map Google Earth 2016, Overlay EGI 2017.

FIGURE 2.0-3
SEVILLE SOLAR FARM COMPLEX LOT LAYOUT



Source: Base Map Google Earth 2016, Overlay ZGlobal n.d.

FIGURE 2.0-4
LOTS A, B, C AND D AND GEN-TIE ALIGNMENT

2.0 PROJECT DESCRIPTION

As measured from Google Earth, Lot 8 has an overall slope to the southeast at an estimated average low gradient of 0.45 percent. Elevations across the Project site range from a high of approximately 44 feet below mean sea level (msl) at the northwest corner to a low of approximately 59 feet below msl at the southeast corner.

Agricultural activities on the Allegretti Farms land to the west of Lot 8 were suspended within the last few years. The most recent farming occurred in 2012 on small area of Lot 3 planted with grain crops.

B. GENERAL PLAN AND ZONING DESIGNATIONS

The Imperial County Land Use Plan designates the Project site as “Agriculture” (refer to Figure 4.2-1 in Section 4.2, Land Use). Lands on which the Seville 4 Solar Project is proposed are zoned A-2 - General Agriculture (refer to Figure 4.2-2 in Section 4.2, Land Use). Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed as conditional uses in Agricultural zones (Land Use Ordinance, Title 9, Division 5, Sections 90508.02 and 90509.02). In keeping with the provisions of the zoning designations, the Applicant is seeking a CUP for the proposed Seville 4 Solar Project from the ICPDSD.

Development of a solar facility would preclude the use of approximately 146 (Fixed-Frame Configuration) to 174 acres (HSAT Configuration) acres of Lot 8 for agricultural production for life of the Project (i.e. 30 to 40 years (if a 10-year extension is requested and approved) of operations plus another 5± years for construction and reclamation combined). However, as previously noted, the Project site, although designated as Agriculture, zoned A-2, and part of the 2,440-acre Allegretti Farms property, only had a small portion of acreage that was farmed. Approximately 60 acres in the northwest portion of the proposed Project site (under either the HSAT or Fixed-Frame configuration) was previously farmed. Agricultural use of the Project site appears to be no more recent than 2008. At the end of the useful life of the Project, the solar facility would be removed and reclaimed to approximate the existing low gradient desert lands or idle farmland.

C. PROJECT COMPONENTS

Each of the components of the proposed Project is described in detail below. The components would be installed as part of construction, in use during operation, and removed and decommissioned as part of reclamation.

The net electrical output of the proposed Project is anticipated to be approximately 20 MWSAC. The actual net electrical output of the Project will depend upon the technology selected and final design and layout.

Solar Technology

The Project proposes to use either thin film or crystalline solar photovoltaic (PV) technology modules mounted on either fixed frames or horizontal single-axis tracker (HSAT) systems. The Fixed-Frame Configuration would occupy 146 acres including 128 acres of panels and an 18-acre retention basin in the southeast portion of the Project site (**Figure 2.0-5A**). The HSAT Configuration would occupy 174 acres including 156 acres of panels and six retention basins totaling 18-acres (**Figure 2.0-5B**). The entire Project including an additional 7 acres associated with the Gen-Tie, Seville 4 Substation, IID Switch Station, and access road extension would bring total acreage to 153 acres for the Fixed-Frame Configuration and 181 acres for the HSAT Configuration.

Fixed-Frame Configuration (146 Acres Project Site Only)

The Fixed-Frame PV module arrays would be mounted on racks that would be supported by driven piles. The depth of the piles would be dependent on the recommendations of the Geotechnical Report prepared for the Project. The fixed-frame racks would be secured at a fixed tilt of 20° to 25° from

horizontal facing a southerly direction (**Figure 2.0-6A**). Current Project design would have individual PV modules each approximately 3.25 feet wide by 6.5 feet long (depending on the specific PV technology selected), mounted two high on a fixed frame, providing a two-foot ground clearance and resulting in the tops of the panels at approximately 7.5 feet above the ground.

Figure 2.0-7 is a preliminary site plan which shows the Fixed-Frame PV modules arranged in analysis spaced approximately 20 to 25 feet apart (pile-to-pile) to maximize performance and to allow access for panel cleaning (if necessary). These arrays would be separated from each other and the perimeter security fence by nominal 20-foot wide roads.

HSAT Configuration (174 Acres Project site only)

If HSAT technology is used, the PV modules would rotate around the north-south HSAT axis so that the PV modules would continuously face the sun as it moves across the sky throughout the day (see **Figure 2.0-6B**). The PV modules would reach their maximum height (up to nine feet above the ground, depending on the final design) at both sunrise and sunset when the HSAT is rotated to point the modules at the rising or setting sun. At noon, or when stowed during high winds, when the HSAT system is rotated so that the PV modules are horizontal, the nominal height would be approximately six feet above the ground, depending on the final design.

The individual PV systems would be arranged in large arrays. PV systems would be placed on columns spaced approximately ten feet apart to maximize operational performance and to allow access for panel cleaning and maintenance. Current Project design would have individual HSAT PV modules, each approximately two feet wide by four feet long (depending on the specific PV technology selected), mounted on a frame which is attached to an HSAT system. These HSAT arrays would be separated from each other and the perimeter security fence by nominal 20-foot wide roads consistent with agency emergency access requirements.

Electrical Power System

Electricity generated by the PV modules would be collected by a direct current (DC) collection system routed underground in trenches. This DC power would be delivered to one of the pad-mounted inverters in weatherproof enclosures located within the arrays (see **Figure 2.0-5** and **Figure 2.0-6**). The inverters would convert the DC power to 34.5-kV, three-phase alternating current (AC). Underground collection lines would transmit the electricity to the new Project collection station in the northwestern corner of the Project site (see **Figure 2.0-6A** and **Figure 2.0-6B**).

Gen-Tie

The electrical energy produced by the Seville 4 Solar Project would be conducted to the proposed Seville 4 Substation from the Project collection station via the proposed above-ground 34.5-kV Gen-Tie Line located on common development interest Lot A of Tract Map No. 00988. The electricity would be delivered to the proposed Seville 4 Substation on Lot D (see **Figure 2.0-4**).

Substation

A Seville 4 Substation would be constructed in common development interest Lot D of Tract Map No. 00988 (see **Figure 2.0-5A** and **Figure 2.0-5B**). This substation would take delivery of the 34.5-kV power from the Project collection station Gen-Tie Line and increase the voltage of the electricity to 92 kV for metering and delivery to the IID electric grid. The substation would include a transformer, circuit breakers, meters, disconnect switches microwave or other communication facilities and an electrical control building. The Project's power would then be transmitted by the IID to the point of interconnection with the utility which has agreed to purchase the output from the Seville 4 Solar Project pursuant to a power purchase agreement (PPA).

2.0 PROJECT DESCRIPTION

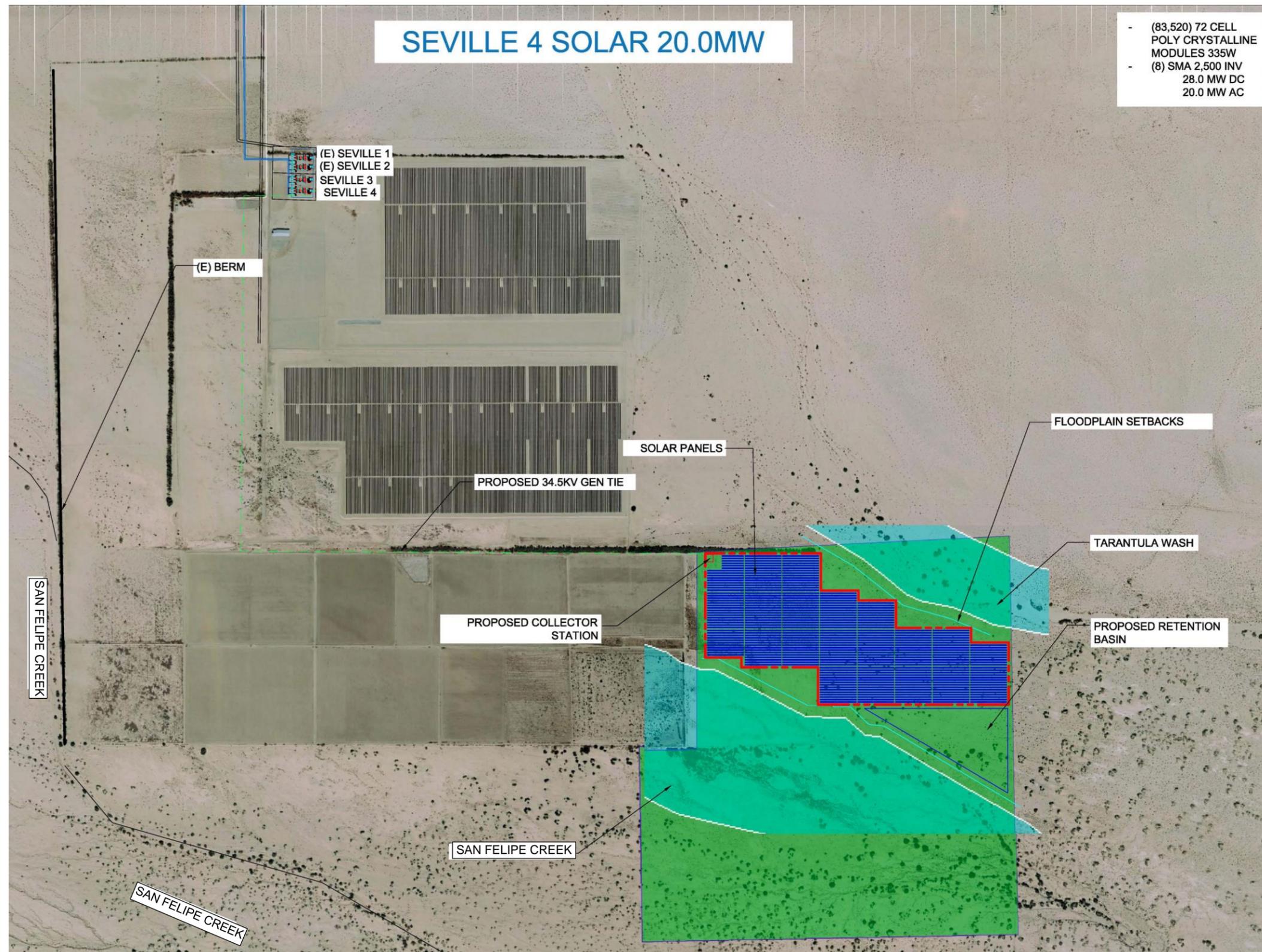


FIGURE 2.0-5A
FIXED-FRAME CONFIGURATION PRELIMINARY SITE PLAN

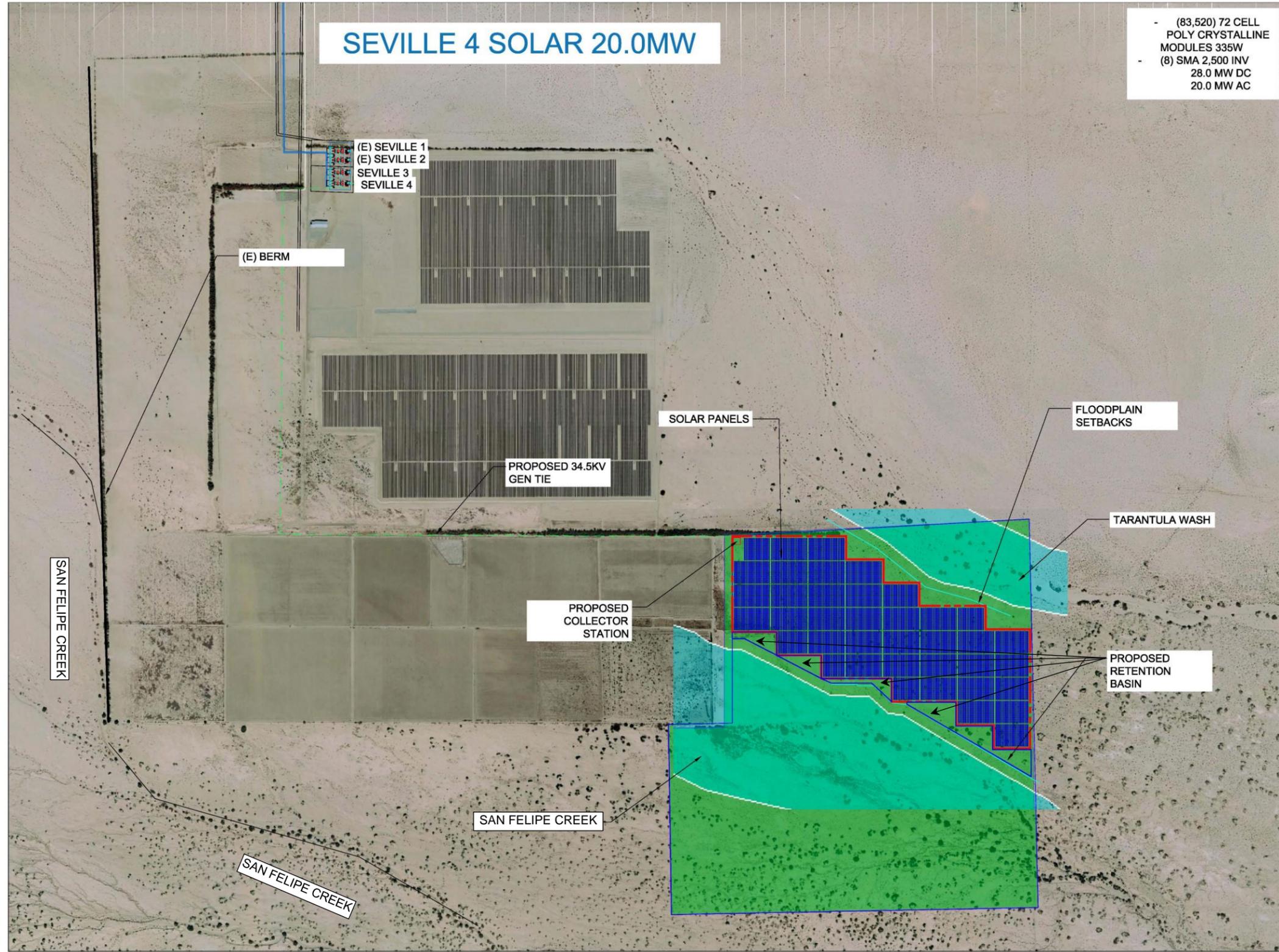
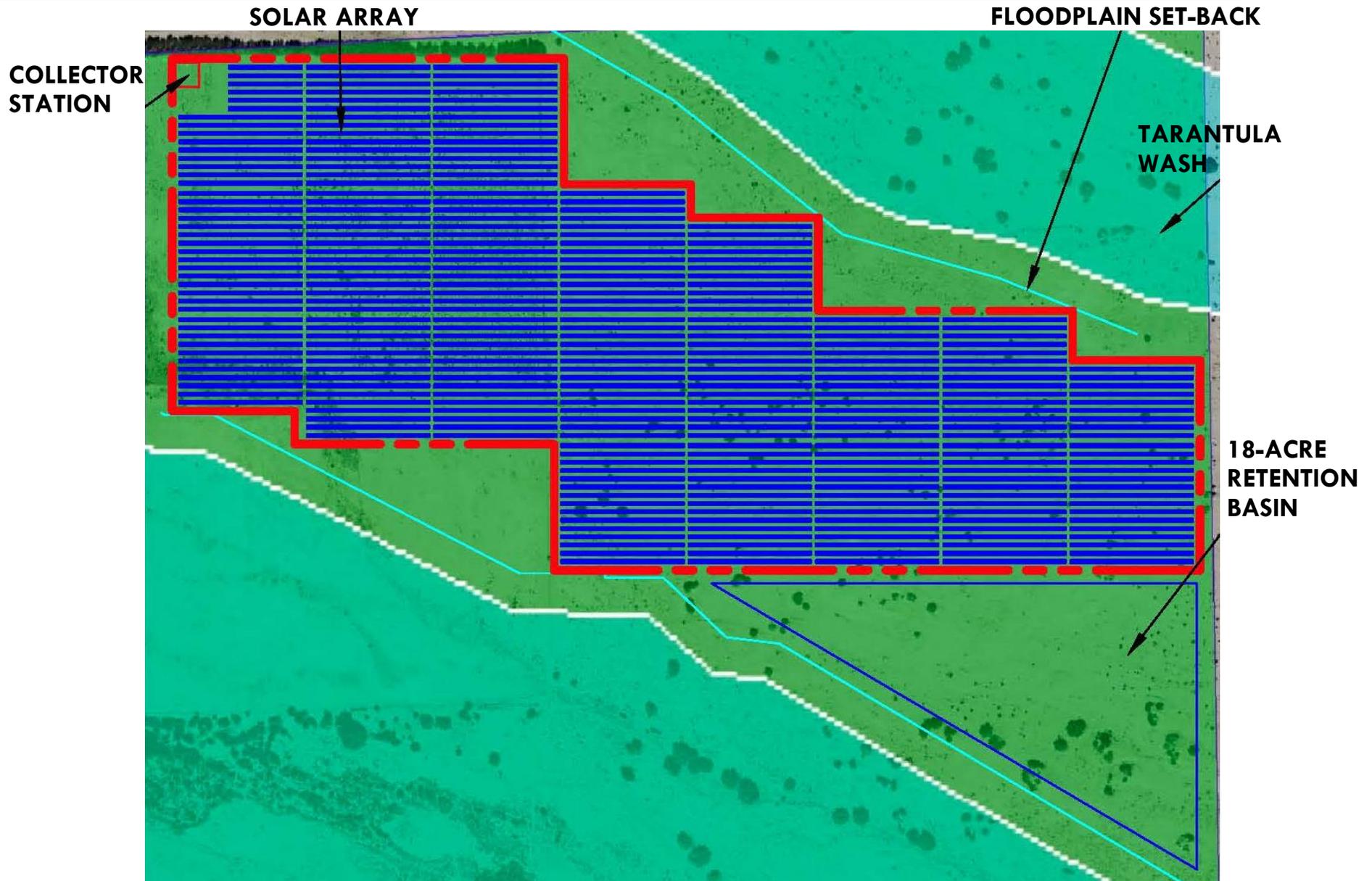


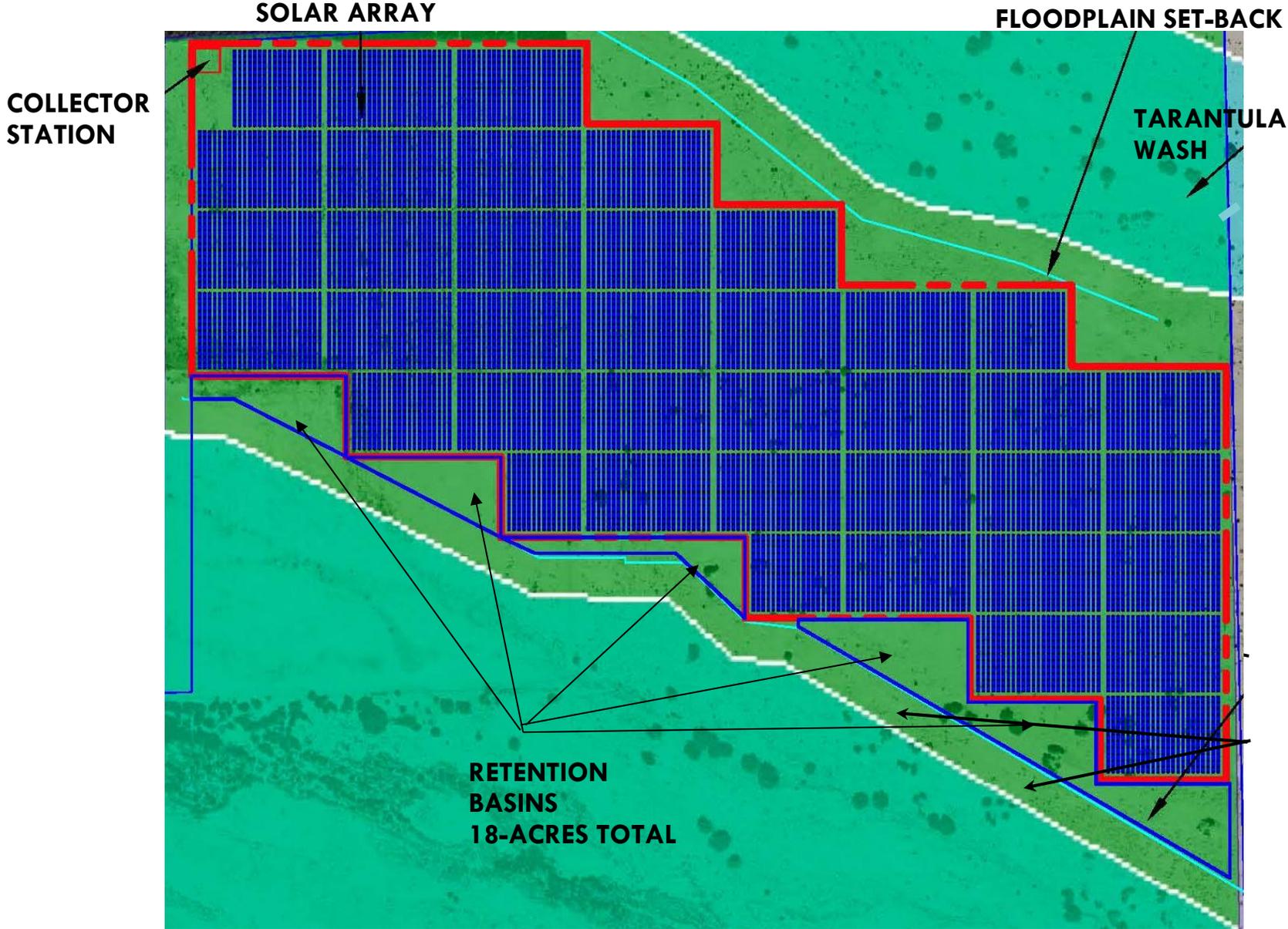
FIGURE 2.0-5B
HSAT CONFIGURATION PRELIMINARY SITE PLAN

2.0 PROJECT DESCRIPTION



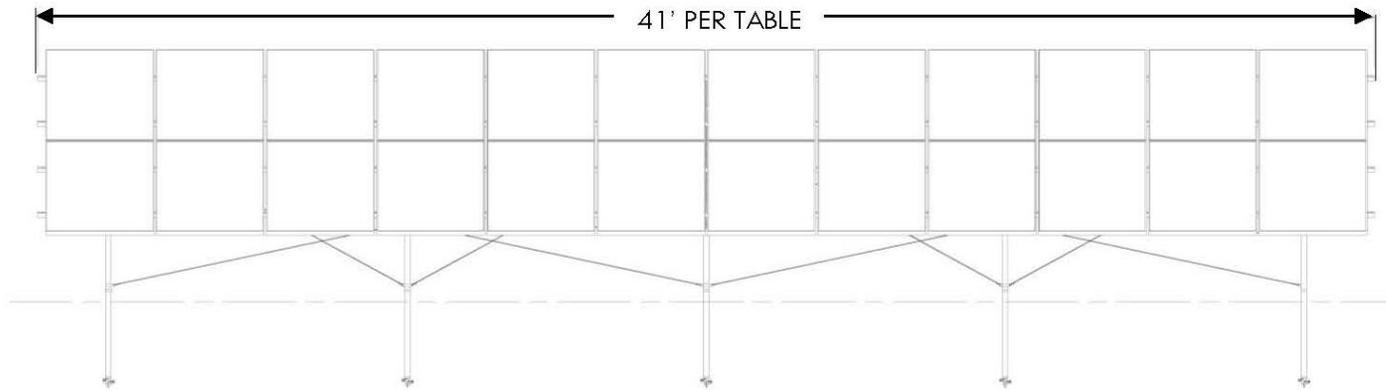
**FIGURE 2.0-6A
FIXED-FRAME CONFIGURATION**

Seville 4 Solar Project
Draft EIR

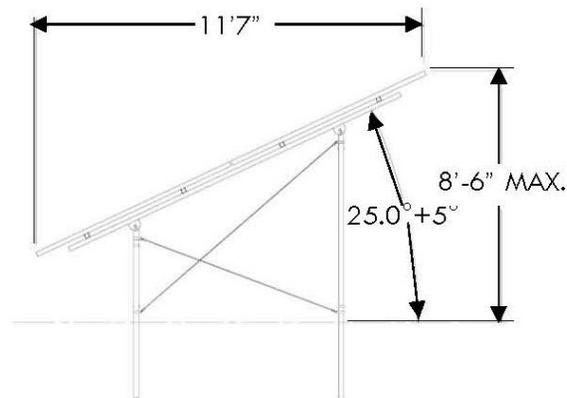


**FIGURE 2.0-6B
HSAT CONFIGURATION**

2.0 PROJECT DESCRIPTION

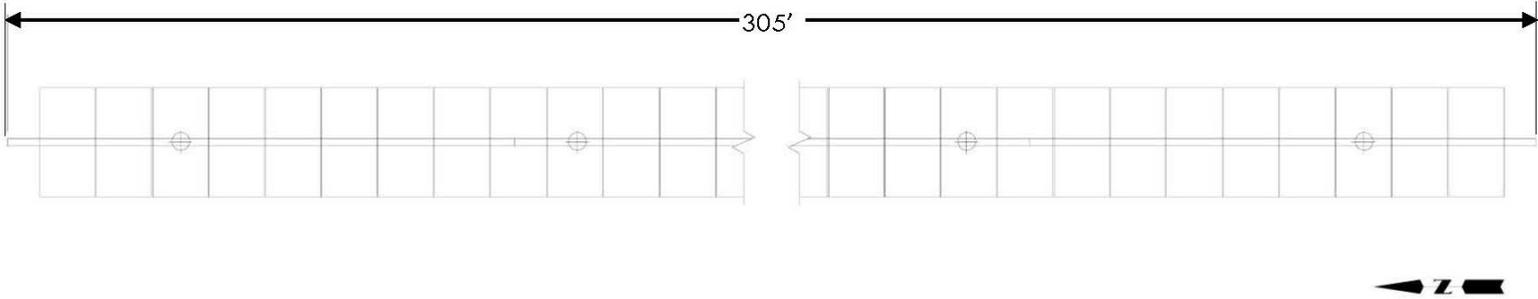


FIXED TILT – PLAN VIEW, TYPICAL

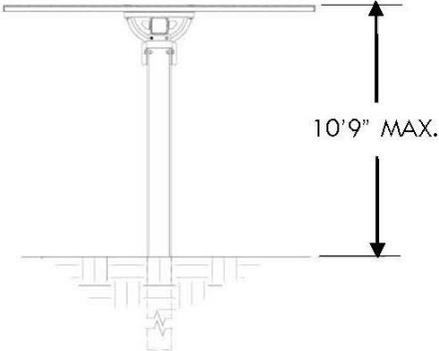


FIXED TILT – ELEVATION VIEW, TYPICAL

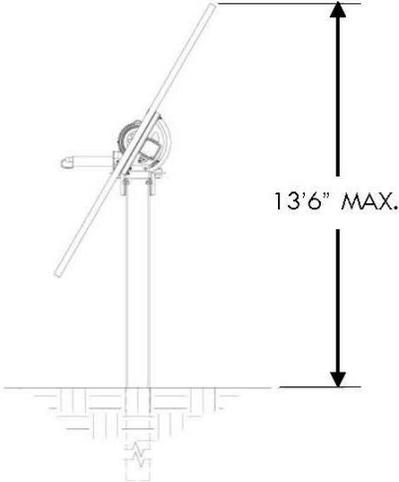
FIGURE 2.0-7A
FIXED FRAME PLAN VIEW AND ELEVATION



TRACKER – PLAN VIEW, TYPICAL



TRACKER – STOWED ELEVATION, TYPICAL



TRACKER – 1

FIGURE 2.0-7B
HSAT PLAN VIEW AND ELEVATION

2.0 PROJECT DESCRIPTION

would be remotely monitored 24 hours per day 7 days per week. In addition, routine unscheduled rounds may be made by the security team monitoring the site.

Site Access

Primary access to the Property, including Lot 8, is available via an existing private access road from the north off SR 78. This primary access road is provided with 30-foot double swing gates with a coded entry and "Knox Box"® over-ride for emergency vehicle access. Secondary access to the Property is also a gated, private road from SR 78 which continues to be available for access to any agricultural operations on the Property, and for secondary emergency access to the Property.

Internal to the Seville Solar Farm Complex, a network of private roads provide construction, operations and maintenance access to all lots and existing solar facilities developed as part of Seville 1 Solar and Seville 2 Solar. Legal and physical access is provided by a common interest development access road corridor (Lot B) from SR 78 through Lot 6 and Lot 7, then all the way to Lot 8, between Lots 4 and 5 on the east and north and Lot A and Lot 3 on the west and south.

Internal to the Project site, nominal 20-foot wide roads would be developed between the PV arrays as well as around the perimeter of the Project site inside the perimeter security fence. These roads would provide access to all areas for maintenance and emergency vehicles.

D. PROJECT CONSTRUCTION

Construction Activities

Construction activities would primarily involve grubbing; grading of the Project site to establish access roads and pads for electrical equipment (inverters and step-up transformers); trenching for underground electrical collection lines and the installation of solar equipment and security fencing. The preliminary site plan drawings for the Fixed-Frame and HSAT configurations are provided as **Figure 2.0-5** and **Figure 2.0-6A** and **Figure 2.0-6B**, respectively.

Dust generated during construction would normally be controlled by watering and, as necessary, the use of other dust suppression methods and materials accepted by the Imperial County Air Pollution Control District (ICAPCD) or the California Air Resources Board (CARB). A temporary, portable construction supply water container would be located at the Project site at the beginning of construction and removed at the end of construction.

The number of on-site construction workers for the proposed Project facilities is not expected to exceed 136 workers at any one time. On-site parking would be provided for all construction workers.

Storm Water Retention

The Project site currently drains generally to the southeast at a gentle gradient of about 0.45 percent. To retain the total volume of a three-inch precipitation event covering the entire Project site with no reduction from infiltration storm water, retention basin(s) would be constructed on the Project site (see **Figure 2.0-6A** and **Figure 2.0-6B**). The Applicant has proposed two potential configurations: 1) a 156-acre Horizontal Single-Axis Tracker (HSAT) PV project with 18-acres of retention basins (total project acreage = 174 acres) in the southern portion of the site; or 2) a 128-acre Fixed Frame PV project with a single 18-acre retention basin (total project acreage = 146 acres) in the southeastern portion of the site. These retention basin(s) would be emptied within 72 hours (through draining, evaporation or infiltration or any combination thereof) in order to provide mosquito abatement. In the unlikely event that conditions prevent removal of accumulated storm water from any of the retention basins within 72 hours, measures would be implemented to control mosquito breeding in the affected basin consistent with the

requirements of the Imperial County Health Department, Environmental Health & Consumer Protection Services, Vector Control Program.

E. SITE OPERATIONS

Once construction is completed, the Seville 4 Solar Project would be remotely controlled. No employees would be based at the Project. Primary security-related monitoring would be done remotely. Access to the Project site would be infrequent and limited to authorized personnel.

Water Resource Requirements

Water for Construction

Water for construction (primarily dust control) would be provided by the Ranch Oasis Mutual Water Company established in 1994 by Allegretti & Co. for this purpose. It is estimated that up to 140 acre-feet of water would be needed for site grading and dust control over the expected Project construction period.

Water for Operations

Water for washing the PV modules, if required, would also be provided by the Ranch Oasis Mutual Water Company. The volume of water to be used for PV module washing and dust control, if needed, is estimated at up to 5 acre-feet per year.

Waste

Some waste material would be generated during site preparation activities. Waste from grubbing activities is anticipated to be handled on site. Alternatively, the grubbed material would be taken to an approved landfill. The Project will also contract with a recycler to properly recycle waste materials generated by construction (wire, cardboard, pallets, plastic, etc.) and will issue a certificate for proper recycling of material waste.

Trash generated by construction workers would be transported to a local landfill authorized to receive this waste for disposal. Portable toilets would be located on-site during construction and sanitary waste would be removed from the site by a local contractor.

No general waste is expected to be generated during normal operations. Sanitary waste generated during Project maintenance operations would be handled by bringing portable toilets to the Project site with waste removed periodically by a local contractor.

No hazardous waste is expected to be generated from the Project during either construction or normal Project operations.

Fire Prevention

The construction site and internal roads would be cleared of all vegetation. The cleared areas would be maintained throughout construction and operations. Fire extinguishers would be available around the construction site. Fire water tanks capable of storing 20,000 gallons would be constructed on the Project site and kept filled during operations to fight potential fires. Water that is used for construction would also be available for firefighting. Personnel would be allowed to smoke only in designated areas.

Emergency Services

The Project preliminary site plans have been prepared to accommodate the requirements of emergency services which may need to respond to a call at the Seville 4 Solar Project. The Project site is accessible from both a primary and secondary access driveway. These driveways are each provided with 30-foot double swing gates with "Knox Box" for keyed entry. Nominal 20-foot wide roads would be provided

2.0 PROJECT DESCRIPTION

between the PV arrays as well as around the perimeter of the Project site inside the perimeter security fence to provide access for emergency vehicles.

F. CONSTRUCTION PROCESS

Project construction would consist of different activities which would be undertaken in phases. Construction is expected to include eight activities (CalEEMod “phases”): access road (all-weather) construction; grading/fencing; racking installation; solar panel installation; system wiring and trenching; inverter installation; Gen-Tie Line construction; and Seville 4 Substation and IID Switching Station construction. Some of the eight activities are expected to overlap another construction activity. Construction of the Project is estimated to take approximately six months.

Following site preparation, construction of the Project would commence with the building of the internal road network. The existing access road to the south off of SR 78 would be used as the primary construction and permanent access for the Project. The internal road network on Lot B (**Figure 2.0-3**) lands would provide access to the Seville 4 Solar Project site during construction as well as during operation and maintenance.

Approximately 2.4 miles of new 34.5-kV Gen-Tie Line would be constructed on Lot A and on the northern boundaries of Lots 1, 2 and 3 and to the west of the north-south access road (**Figures 2.0-4, Figure 2.0-5A and Figure 2.0-5B**).

A temporary, portable construction management office would be located on the Project site or the adjacent Seville 3 Solar Project at the beginning of construction and removed at the end of construction. This structure would be installed in compliance with all local regulations.

Approximately 100 acres in the northwestern portion of Lot 8 has been previously graded and farmed (60 acres fall within the boundaries of the proposed Project). Fine grading would be required to establish internal access roads and pads for electrical equipment (inverters and step-up transformers).

Grading would likely be followed by trenching for installation of the underground electrical collection lines; installation of the support piles, solar frames, PV panels and inverters; and construction of the Gen-Tie Line.

The Seville 4 Substation would be built in parallel with the grading and installation of the solar arrays. The Project substation would be constructed in Lot C or D (see **Figure 2.0-5**), immediately south of the new IID Switching Station. The Project Substation and IID Switching Station would occupy less than three acres. Construction of the Project Gen-Tie Line would also occur simultaneously with construction of the Project substation.

Acreage disturbed for each configuration was calculated and quantified. **Table 2.0-1** estimates the total surface disturbance associated with construction of the Project Fixed- Frame Configuration. **Table 2.0-2** estimates the total surface disturbance associated with construction of the HSAT Configuration.

Dust Control

Dust generated during construction would be controlled by watering and, as necessary, the use of other dust suppression methods and materials accepted by the ICAPCD or the CARB. During grading, actively disturbed on-site areas and unpaved roads would be watered at least three times a day as necessary to reduce fugitive dust emissions. In addition, speeds would be limited to 15-mile per hour (mph) speed during construction.

2.0 PROJECT DESCRIPTION

**TABLE 2.0-1
CONSERVATIVELY CALCULATED PROJECT DISTURBED ACRES - FIXED-FRAME CONFIGURATION**

Property/Project Component	Disturbed Acres
Project Site (portion of Lot 8)	146
Project Gen-Tie Line ¹ (Lots 1, 2 and 3)	2
Common Access Roads ²	2
IID Switch/Seville 4 Substation (Lots C and D)	3
Total Project Disturbance	153

Source: Titan 2017.

¹Gen-Tie (worst case) = 2.4 miles (5,280 feet x 5) feet = 63,360 ÷ 43,560 = 1.45 acres ≈ 2 acres.

²Access roads (worst case) = 3,000 feet (width of Lot 3) * 25 feet wide 1.72 acres ≈ 2 acres.

**TABLE 2.0-2
CONSERVATIVELY CALCULATED PROJECT DISTURBED ACRES - HSAT CONFIGURATION**

Property/Project Component	Disturbed Acres
Project Site (portion of Lot 8)	174
Project Gen-Tie Line ¹ (Lots 1, 2 and 3)	2
Common Access Roads ²	2
IID Switch/Seville 4 Substation (Lots C and D)	3
Total Project Disturbance	181

Source: Titan 2017.

¹Gen-Tie (worst case) = 2.4 miles (5,280 feet x 5) feet = 63,360 ÷ 43,560 = 1.45 acres ≈ 2 acres.

²Access roads (worst case) = 3,000 feet (width of Lot 3) * 25 feet wide 1.72 acres ≈ 2 acres.

Construction Duration

Construction of the Project is expected to take approximately six months to complete. Construction of the Project may overlap with construction of the adjacent Seville 3 Solar Project by one to three months.

Construction Workers

The number of on-site construction workers is not expected to exceed 136 workers at any one time. On-site parking would be provided for all construction workers.

Construction Traffic

An estimated 17 trucks would deliver materials to the Project site at staggered times throughout the day during construction. To provide a worst-case scenario, all construction workers and trucks are assumed to arrive during the AM peak hour and depart during the PM peak hour. In addition, all workers are assumed to drive separate vehicles to and from the Project site. **Table 2.0-3** summarizes the assumed Project construction vehicle trip generation.

As previously noted, the Project site would be accessed from SR 78. It is assumed that approximately one-third of the construction worker traffic would travel to and from the west (i.e., in San Diego County and other local residential developments) while the remaining two-thirds would originate from various Imperial Valley cities to the east.

TABLE 2.0-3

2.0 PROJECT DESCRIPTION

SEVILLE 4 SOLAR PROJECT - CONSTRUCTION TRIP GENERATION

Use	Total Daily Trips	PVE ¹	Total Daily Trips	AM Peak ² Inbound Trips	AM Peak ² Outbound Trips	PM Peak ³ Inbound Trips	PM Peak ³ Outbound Trips
Workers	136	1	2/Worker	136	0	0	136
Haul Trucks	17	3	2/Truck	51	0	0	51
Total				187	0	0	187

Source: Titan Solar II, LLC 2017.

¹PVE = passenger vehicle equivalent. ²7:00 am and 9:00 am ³4:00 pm to 6:00 pm

Storm Water

Storm water retention basin(s) would be constructed on the Project site during grading. Both the Fixed-Frame Configuration and HSAT Configuration include 18 acres of storm water retention.

Staging Areas

Staging and construction parking would be located either on the disturbed lands of the adjacent Seville 3 Solar Project or in the northwest corner of the Project site. No additional disturbance beyond what is currently anticipated and accounted for in **Table 2.0-1** or **Table 2.0-2** would be necessary to accommodate staging of equipment and vehicles.

Waste

Small amounts of trash would be generated during construction from packaging materials delivered to the Project site. Construction related waste would be transported to a local landfill authorized to accept this waste for disposal or an appropriate recycling center authorized to accept recyclable materials.

Hazardous Materials

Very little hazardous waste (waste oil and lubricants, spill clean-ups, etc.) is expected to be generated from the Project during construction. Fuel that may be used on site during construction would be stored in secondary containment. The Project will also be required to comply with State laws and County Ordinance restrictions which regulate and control hazardous materials.

Water

It is estimated that up to 140 acre-feet of water would be needed for site grading and dust control over the Project construction period. This water would be obtained from the Ranch Oasis Mutual Water Company established in 1994 by Allegretti & Co. Potable drinking water will be supplied by a local provider.

Sanitation

Portable toilets would be located on site during construction and sanitary waste would be removed by a local contractor.

Off-Site Construction Activities

Off-site construction activities (those outside of the Project site but within the Project area) would include improvement or construction of the required access road, in Lot B, construction of the aboveground Gen-Tie Line in Lot A and across the north end of Lot 3, and construction of the Seville 4 Substation and IID switching station in Lot D (**Figure 2.0-4**).

G. OPERATIONS AND MAINTENANCE

Once the IID Switching Station, plus the Project's substation and Gen-Tie Line have been constructed, the solar panels installed for the Project will begin delivering power through the IID system and operation of the Project will have begun. The Project will operate 365 days a year and generate power during daylight hours. Access to the Project site would be off-limits to the public and only authorized personnel would be allowed on site.

Maintenance Activities

The Seville 4 Solar Project is not expected to have a regular on-site staff. Workers may occasionally be required to maintain the common access roads, maintain stormwater retention basin(s), clean the solar panels, and/or perform specific maintenance activities (e.g. weed abatement). If necessary, dust may be controlled during operations by the periodic application and maintenance of soil binders to exposed soil surfaces.

Panel Washing

Periodic washing of the PV modules (possibly four workers every six months) may be needed to remove dust in order to maintain power generation efficiency. Water for washing the PV modules, if required, would be provided by the Ranch Oasis Mutual Water Company. The volume of water to be used for PV module washing and dust control, if needed, is estimated at up to 5-acre-feet per year. Each washing is expected to take less than one week to complete.

Weed and Vegetation Management

Invasive / weedy species would be controlled and any non-invasive vegetation that re-establishes within the Project site would be controlled within the solar field. Vegetation growing within the boundaries of the Project area would be periodically removed manually and/or treated with herbicides.

Miscellaneous

Other maintenance activities that would be conducted include periodic testing of equipment, inspection and repair of project components, and maintenance of on-site roads and drainage systems (i.e. retention basin[s]).

Electricity Consumption

The proposed Project may consume an estimated 250 kW-hours (Fixed-Frame) or 300 kWh (HSAT) of electrical energy daily from the IID power system. This energy would be used to operate the solar panel trackers, the on-site security system and the solar facility monitoring and control system when the solar panels are not generating power.

Noise

Operational noise would be generated by solar equipment including the transformers, inverters, trackers (HSAT Configuration only). The Seville 4 Substation and the IID 92-kV transmission line. Vehicle traffic associated with operations and maintenance would also generate some noise on site and on local roads.

Air Quality

Normal operations of the Project would not result in any direct air emissions from the electricity production process as the PV solar panels convert sunlight directly into DC electricity. No fossil fuels are consumed in the process and no pollutants are emitted during normal operations. Daily air pollutant emission sources are anticipated to be limited to vehicular traffic and small engines associated with operations and maintenance activities.

2.0 PROJECT DESCRIPTION

Hazardous Material Handling and Storage

The Project would not use or store appreciable quantities of hazardous chemicals within the Project site during normal operations. Any hazardous materials brought to the site would be required to comply with all applicable local, state and federal regulations.

H. DECOMMISSIONING AND RECLAMATION PLANS

The proposed Project is expected to operate for 30 to 40 years (if a 10-year extension is requested and approved). At the end of its useful life, the Applicant proposes to decommission the Project and reclaim the area associated with surface disturbance. The roads constructed on Lot B to access each of the parcels created under the major subdivision would not be decommissioned or reclaimed.

The sequence for decommissioning would include dismantling and demolition of above-ground structures; concrete removal; removal and dismantling of underground utilities; and final site contour. As part of decommissioning, all solar equipment and other on-site facilities (concrete footings, solar generation facilities, electrical switchyard and substation facilities, and foundations) would be removed and salvaged if economically feasible. Any materials used for surfacing the access roads internal to the solar project would either be plowed under (if the origin of the road surfacing material is from on-site) or taken off site for re-use or disposal (if the origin of the road surfacing material used is from off-site). Any on-site retention basins would be backfilled and compacted as necessary. The on-site soils would be ripped to the depth necessary to remove all miscellaneous buried solar project equipment.

The Reclamation Plan to be submitted to the ICPDSD will consider decommissioning as part of reclamation. After the solar farm site is cleared and contoured, it would be reclaimed to its end state to approximate the existing desert lands or idle farmland. The Project site would be cleaned and balanced with on-site soils. All of the reclamation activities would implement appropriate fugitive dust control measures consistent with ICAPCD requirements in effect at the time of the closure.

I. DESIGN FEATURES AND BEST MANAGEMENT PRACTICES

Table 2.0-4 identifies draft Applicant-proposed measures that would be incorporated into the proposed Project to reduce impacts to resources.

**TABLE 2.0-4
APPLICANT PROPOSED MEASURES INCLUDED AS PART OF THE SEVILLE 4 SOLAR PROJECT**

AESTHETICS
<i>Visibility</i>
The proposed Project does not include lighting. The solar panels would be constructed to absorb light and minimize any potential glare.
<i>Glint and Glare</i>
The Project PV modules are specifically designed to absorb light, rather than reflect it. PV modules are dark in color and have a coating that enables the panel to absorb as much of the available light as possible.
AIR QUALITY
Fugitive dust would be controlled during construction and operations as required by the Imperial County Air Pollution Control District (ICAPCD) Regulation VIII. A Dust Control Plan would be prepared in conformance with ICAPCD requirements to address construction and earthmoving activities, track-out, open areas and unpaved roads. It would include information on the dust suppressants to be applied and the specific surface treatment(s) and/or control measures to be utilized to control track-out where unpaved and/or access points join paved public access roads. During operations, dust would

**TABLE 2.0-4
 APPLICANT PROPOSED MEASURES INCLUDED AS PART OF THE SEVILLE 4 SOLAR PROJECT**

be controlled by the periodic application of chemical stabilization agents (soil binders) to exposed soil surfaces.
BIOLOGICAL RESOURCES
<i>Burrowing Owl</i>
If burrowing owl are identified within the development areas during pre-construction burrowing owl/migratory bird surveys, potential impacts would be reduced to a level below significance by implementing mitigation measures to avoid occupied owl burrows, passively relocate owls/burrows (if avoidance is not possible), cover or cap construction piping/materials greater than three inches in diameter, and acquire and protect burrowing owl foraging habitat.
HAZARDS AND HAZARDOUS MATERIALS
Fuel that may be used on site during construction would be stored in secondary containment.
HYDROLOGY AND WATER QUALITY
<i>Flood Hazard</i>
To minimize flood hazards and risk, all Project site solar structures will be located outside the FEMA 100-year flood zone.
<i>Construction Activities</i>
A Notice of Intent (NOI) to comply with the general permit for construction activities would be filed with the State Water Resources Control Board (SWRCB), and the required Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented consistent with the requirements of the SWRCB.
GEOLOGY AND SOILS
<i>Geologic Hazards</i>
Solar panels and inverters/interconnection facilities will be designed to meet seismic design requirements.
TRANSPORTATION AND CIRCULATION
Traffic control crews would be used as needed to ensure that people are aware of the presence of crossing or slow-moving construction vehicles. Following construction, or during construction as necessary to maintain safe driving conditions, any damage to existing roadways caused by construction vehicles would be repaired.
PUBLIC HEALTH AND SAFETY
<i>Fire Prevention</i>
The construction site and access roads would be cleared of all vegetation. The cleared areas would be maintained throughout construction and operation of the Project. Fire extinguishers would be available throughout the construction sites. Water used for construction would also be available for fire-fighting. Personnel would be allowed to smoke only in designated areas.
<i>Emergency Services</i>
The Project site is within the jurisdiction of the Imperial County Fire Department and the Imperial County Sheriff's Department. The Project site incorporates a variety of security features and will pose a very small fire risk. Fire water tank(s) capable of storing 20,000 gallons would be constructed on the Project site and kept filled during operations to fight potential fires. The Project site is accessible from both a primary and secondary access driveway. These driveways are each provided with 30-foot double swing gates with "Knox Box" for keyed entry. Nominal 20-foot wide roads are proposed between the

2.0 PROJECT DESCRIPTION

TABLE 2.0-4
APPLICANT PROPOSED MEASURES INCLUDED AS PART OF THE SEVILLE 4 SOLAR PROJECT

PV arrays, as well as around the Project site inside the perimeter security fence to provide access for operational and emergency vehicles.
Security
The Project site incorporates a variety of features to protect the site including security fencing around the perimeter of the site prior to commencement of construction. Access to the site would be limited to authorized site construction workers and operations personnel. In addition, a motion detection system and closed-circuit camera system may also be installed.

Source: Titan Solar II, LLC 2017.

2.2 ALTERNATIVES

2.2.1 ALTERNATIVE 1 – ENVIRONMENTALLY SENSITIVE AVOIDANCE ALTERNATIVE

The Environmentally Sensitive Avoidance Alternative would shift the eastern boundary of the Fixed-Frame Configuration and HSAT Configuration approximately 200 feet to the west. Both configurations would be adjusted to fit into the same overall footprints in Lot 8 and designed to produce 20 MW of electricity. The purpose of the Environmentally Sensitive Avoidance Alternative is to avoid the Environmentally Sensitive Area containing cultural resources identified in the 200-foot wide eastern strip. This alternative would avoid potential impacts to cultural resources that have not yet been evaluated for eligibility for listing in the California Register of Historic Resources (CRHR).

2.2.2 ALTERNATIVE 2 - NO PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(1) requires that a No Project Alternative be analyzed in order to allow the decision-makers to compare the impacts of approving a proposed Project with the impacts of not approving the proposed Project. Under the No Project Alternative, the proposed Seville 4 Solar Project would not be developed. No GPA, Zone Change or CUP application would be approved. The Project site could remain in its existing condition as low gradient desert lands and idle farmland reverting to open desert.

These are discussed in detail in Chapter 6.0, Alternatives.

2.3 INTENDED USES OF THE EIR/AUTHORIZING ACTIONS

The County will serve as the Lead Agency regarding CEQA and the Applicant's request for a CUP, GPA and Rezone and other required County and state approvals.

2.3.1 DISCRETIONARY ACTIONS AND APPROVALS

A. COUNTY OF IMPERIAL

In conformance with Sections 15050 and 15367 of the CEQA Guidelines, the County of Imperial has been designated the "lead agency," defined as, "the public agency which has the principal responsibility for carrying out or approving a project." Discretionary actions and approvals by the Imperial County Planning Commission and/or Board of Supervisors for the proposed Project or its alternatives may include, but are not limited to:

Certification of the Final EIR

After the required public review for the Draft EIR, Imperial County will respond to written comments, edit the document, and produce a Final EIR to be considered for certification by the Board of Supervisors prior to making a decision on the Project.

Mitigation Monitoring and Reporting Program

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

General Plan Amendment

The proposed Project will require approval of one General Plan Amendment (GPA) (17-0002) to add the Renewable Energy “RE” Overlay Zone designation to the existing “Agriculture” designation.

Zone Change

One Zone Change (ZC 17-0001) to add the “RE” Renewable Energy Overlay Zone to the existing “A-2” General Agriculture zone. Pursuant to Section 91701.01 (“RE” RENEWABLE ENERGY OVERLAY ZONE) of Title 9 of the Imperial County Code (Land Use Ordinance), land classified in some other (non-overlay) zone may also be classified in the “RE” Renewable Energy Overlay Zone by the County Board of Supervisors if a future renewable energy project would be located adjacent to the existing “RE” Overlay Zone and the project was not located in a sensitive area and it would not result in any significant environmental impacts.

Conditional Use Permit

The proposed Project will require approval of one Conditional Use Permit (CUP 17-000) by Imperial County to allow construction and operation of a 20-MW solar energy project.

2.3.2 SUBSEQUENT/CONCURRENT ENTITLEMENTS TO IMPLEMENT THE PROPOSED PROJECT

A variety of entitlement actions and permits may be required from Imperial County to implement the individual components of the proposed Project:

- Grading Plan for the solar energy project and the access road.
- Building Permits

B. SITE PLAN

Site Plan and Architectural Review is required for all non-residential projects and will be conducted for the proposed Project.

2.3.3 ACTIONS AND APPROVALS BY OTHER AGENCIES

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

C. PERMIT REQUIREMENTS

The following permits/approvals may be required for the Project from the specified agencies, although some may not be applicable:

- Conditional Use Permit (Imperial County Planning & Development Services Department)
- Adoption of Renewable Energy Overlay Zone (Imperial County Board of Supervisors)
- Grading Permits (Imperial County Planning & Development Services Department)
- Building Permits (Imperial County Planning & Development Services Department with approval by Imperial County Public Works Department)

2.0 PROJECT DESCRIPTION

- Dust Control Plan (Imperial County Air Pollution Control District)
- Rule 310 Exemption (Imperial County Air Pollution Control District)
- General Construction Storm Water Permit Notice of Intent/Storm Water Pollution Prevention Plan (California State Water Resource Control Board)
- Stream or Lake Bed Alterations Agreement (California Department of Fish and Wildlife)
- Clean Water Act Section 404 Permit (U.S. Army Corps of Engineers)
- Nationwide Permit (No. 12) (U.S. Army Corps of Engineers)
- Endangered Species Act (Section 7) Consultation (U.S. Fish and Wildlife Service)
- Consultation for Sensitive Species (California Department of Fish and Wildlife)
- Consultation for Bird and Bat Conservation Strategy (U.S. Fish and Wildlife Service)
- Construction Traffic Control Plan (California Department of Transportation)
- Imperial County Agricultural Commissioner's Office (Agree to a Pest Management Plan)