

# **NOTICE OF PREPARATION/INITIAL STUDY CHECKLIST**

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## **Pelicans Jaw Hybrid Solar Project by Pelicans Jaw Solar, LLC**

Conditional Use Permit No. 3, Map No. 5  
General Plan Amendment No. 2, Map No. 5

PLN20-01383

(PP21124)

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# Introduction

Pursuant to the California Environmental Quality Act (CEQA), the Kern County Planning and Natural Resources Department (County) will initiate the preparation of an Environmental Impact Report (EIR) for the Pelicans Jaw Hybrid Solar Project (project) in the unincorporated area of northwestern Kern County, California. The purpose of this Notice of Preparation and Initial Study is to present the scope of the environmental analysis proposed by the County for the EIR for consideration by project stakeholders, including responsible and trustee agencies and the public, during the scoping period. The analysis provided in this Initial Study relies on information in the Kern County General Plan and other site-specific investigations undertaken by Pelicans Jaw Solar LLC (the Applicant) in support of the project's Conditional Use Permit (CUP) application: 10-Year Farming History Report, Agricultural Conversion Technical Study, Geological Assessment, Phase I Environmental Site Assessment, and Water Supply Assessment.

## 1. Project Description

### 1.1. Project Location

The proposed Pelicans Jaw Hybrid Solar Project is a proposal by Pelicans Jaw Solar, LLC (project proponent) to construct and operate a photovoltaic (PV) solar facility and associated infrastructure to generate up to 500 megawatts (MW) of renewable electrical energy and a Battery Energy Storage System (BESS) capable of storing approximately 2,000 megawatt hours (MWh) of energy within approximately 100 acres of the overall 3,943 acres of privately-owned land.

The project site is located on 3,943 acres of private property in unincorporated Kern County, California, adjacent to the southern border of Kings County with direct access from Interstate 5 (I-5) located approximately 2 miles to the west. The project site is situated within portions of Sections 4, 5, 6, 8, 9, 15, 16, and 22 of Township 25 South, Range 21 East, San Bernardino Base and Meridian. The project site is generally bordered by Kern and Kings County line to the north, Lost Hills Road to the east, Twisselman Road to the south, and I-5 to the west. See **Figure 1-1: Regional Vicinity Map**, **Figure 1-2: Local Vicinity Map**, and **Figure 1-3: USGS Topographic Map** which also shows proposed access routes being considered.

The project site is located entirely within Kern County to the west of the Kern River Channel. The topography is characterized by an overall slope to the east/northeast. Elevations range from approximately 212 feet above mean sea level near the northeastern corner of the project site to approximately 223 feet above mean sea level at the central portion of the site. The project site and surrounding properties are currently vacant and have been used for cattle and sheep grazing since 2012. No crop cultivation has occurred on the project site within the last 10 years (between 2012 and 2022).

The project site comprises 26 parcels of land in Kern County, which are listed in **Table 1-1: Project Assessor Parcel Numbers and Corresponding Map Codes, Existing and Proposed Zoning, and Acreage**. **Table 1-1** provides Assessor's Parcel Number (APN), land use designation, existing zoning, and acreage of each parcel. The parcels with APNs are also shown in **Figure 1-4: Existing Parcel Map**.



**TABLE 1-1: PROJECT ASSESSOR PARCEL NUMBERS AND CORRESPONDING MAP CODES, EXISTING AND PROPOSED ZONING, AND ACREAGE**

APN	General Plan Map Code Designation	Existing Zoning	Acres
<b>CUP Parcels</b>			
044-101-02	8.1/2.5, 8.3, 8.3/2.5	A	87.29
044-101-03	8.1/2.5, 8.3, 8.3/2.5	A	254.69
044-101-05	8.3	A	112
044-101-06	8.3, 8.3/2.5	A	65.73
044-102-01	8.1/2.5	A	320
044-102-03	8.1/2.5	A	160
044-102-05	8.1/2.5	A	91.64
044-102-21	8.1	A	153.9
044-102-22	8.1, 8.3/2.5	A	160
044-103-01 (portion of)	8.1/2.5, 8.3/2.5	A	160
044-103-04 (portion of)	8.1/2.5, 8.3/2.5	A	163.26
044-103-06 (portion of)	8.1/2.5, 8.3/2.5	A	478.65
044-103-08	8.1, 8.1/2.5, 8.3/2.5	A	60
044-103-09 (portion of)	8.1/2.5, 8.3/2.5	A	101.35
044-110-01	8.3	A	10
044-110-03	8.3	A	20
044-110-25	8.3	A	10
044-130-16	8.3, 8.3/2.5	A	158.18
044-130-18	8.3, 8.3/2.5	A	120
044-130-21	8.3, 8.3/2.5	A	200
044-130-39	8.3/2.5	A	230
044-150-05	8.1, 8.1/2.5, 8.3/2.5	A	160
044-150-17	8.1, 8.3/2.5	A	479.77
<b>CUP Parcel Sub-Total</b>			<b>3,756.46</b>
<b>Gen-tie Parcels</b>			
044-102-23 <sup>1,3</sup>	8.1	A	6.1
044-101-16 (portion of) <sup>1,3</sup>	8.3	A	80
044-101-11 (portion of) <sup>3</sup>	8.3, 8.3/2.5	A	100
<b>Gen-tie Parcel Sub-Total</b>			<b>186.1</b>
<b>COMBINED TOTAL</b>			<b>3,942.56<sup>2,3</sup></b>
<p><b>Notes:</b> APN = Assessor’s Parcel Number; 8.1 = Intensive Agriculture; 8.1/2.5 = Intensive Agriculture/Flood Hazard; 8.3 = Extensive Agriculture; 8.3/2.5 = Extensive Agriculture/Flood Hazard; A = Exclusive Agriculture.</p> <p><sup>1</sup> A 200-foot-wide easement is included within each of these parcels to accommodate interconnection with the existing PG&amp;E 230-kV overhead transmission lines.</p> <p><sup>2</sup> Table 1-1 acreage calculations are based on GIS data from Kern County and include the full parcel totals (Kern County 2022a). As noted in the table above development would only take place on portions of the identified parcels. At this time, the entire parcel is considered to be developed to provide a conservative estimate of the project acreage. Therefore, the total area where project construction and development would take place would be less than what is identified in this table. The acreage does not include access roads.</p> <p><sup>3</sup> A 40- to 100-foot wide easement is included within each of these parcels to accommodate a 34.5-kV collection line.</p>			

Each of the project parcels are zoned as “A – Exclusive Agriculture”. The County Zoning Ordinance states “the purpose of the Exclusive Agriculture (A) District is to designate areas suitable for agricultural uses



and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A District are limited primarily to agricultural uses and other activities compatible with agricultural uses.” Permitted land uses in this type of district fall into the categories of agricultural uses, residential uses, commercial uses, utility and communications facilities, resource extraction and energy development uses, and other miscellaneous uses. Solar energy electrical generators are considered a compatible use within Exclusive Agriculture zoning with the issuance of a CUP, pursuant to Section 19.12.030.G of the Kern County Zoning Ordinance (Kern County 2021) and the Kern County Agricultural Preserve Standard Uniform Rules.

## 1.2. Environmental Setting

The project site is designated as Map Code 8.1 (Intensive Agriculture), 8.1/2.5 (Intensive Agriculture/Flood Hazard), 8.3 (Extensive Agriculture), and 8.3/2.5 (Extensive Agriculture/Flood Hazard) in the Kern County General Plan, see **Figure 1-5: Existing General Plan Land Use Designations**. Additionally, the project site is zoned A (Exclusive Agriculture), see **Figure 1-6: Existing Zoning**.

The project site contains a mix of native and non-native vegetative cover including grasses and shrubs. The project site and surrounding properties are currently vacant and have been used for limited cattle and sheep grazing over the past 10 years. No crop cultivation has occurred within the last 10 years on the project site, between the years 2012 and 2022 (Wonderful Orchards 2022). Additionally, there is no existing irrigation system that serves the project site. None of the project parcels are subject to Williamson Act Land Use contracts, as shown in **Figure 1-7: Williamson Act – Active and Nonrenewal**. Project parcels are located within Agricultural Preserve No. 5.

Approximately 54 percent of the project site is located on Grazing Land and 46 percent of the project site is located on Vacant or Disturbed Land as designated under the California Department of Conservation’s (DOC) Farmland Mapping and Monitoring Program. There is no Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, or Unique Farmland on the project site (see **Figure 1-8: Farmland Mapping and Monitoring Program Designations**).

None of the proposed project parcels are located in a Mineral Resource Zone (Conservation Biology Institute 2022) or within a Mineral and Petroleum land use category (see **Figure 1-9: Mineral Resource Zones**). There are no active or existing mines within the project site (USGS 2022). There are several mineral rights holders identified on the project site. The Applicant would coordinate with the mineral rights holders on an agreement including an area for Drilling Island District (DI) zone if requested.

The Federal Emergency Management Agency (FEMA) delineates flood hazard areas on its Flood Insurance Rate Maps. According to the Flood Insurance Rate Maps for the project area, portions of the project site are located in a 100-year flood area (Zones A, 1 percent annual chance of flooding) as shown on **Figure 1-10: FEMA Floodplain Zone Hazards**.

The Kern County Sheriff’s Office (KCSO) would serve the proposed project site for law enforcement and public safety services, as the KCSO serves unincorporated areas of Kern County (KCSO 2017). The KCSO Wasco Substation, located at 748 F Street, Wasco, California 93215, is the closest police station to the project site, located approximately 23 miles southeast of the project site. The Kern County Fire Department (KCFD) provides fire protection and emergency medical services to unincorporated areas of Kern County and thus would provide fire protection services to the proposed project site (KCFD 2022). Kern County



Fire Station 26 is the fire station located closest to the proposed project site, approximately 9 miles south, at 14670 Lost Hills Road, Lost Hills, California, 93249.

The nearest private airport is Wonderful Pistachios & Almonds Airport in Lost Hills, California, which is approximately 11 miles southwest of the project site (Airnav.com 2022a). The nearest public airport is Wasco-Kern County Airport in Wasco, California, which is approximately 23 miles southeast of the project site and serves general aviation primarily for agricultural application aircraft (Airnav.com 2022b). The project site is not located within any safety or noise contour zones for these airports, nor is the proposed project site located within any designated airport land use plan areas.

## Surrounding Land Uses

Existing land uses surrounding the project site consist of agricultural parcels with active farming located sparsely in the surrounding area. The primary zoning classification in the 5-mile radius surrounding the project site is A (Exclusive Agriculture). The Kern National Wildlife Refuge, an approximately 11,250-acre protected habitat and species management area, is located approximately 2.5 miles east of the project site (USFWS 2022) and the Tulare Basin Wildlife Management Area is located approximately 3 miles east of the project site. Rural residential buildings are located in the unincorporated community of Lost Hills, approximately 8 miles south of the proposed project site. There are no schools within 5 miles of the proposed project site. The nearest schools are Lost Hills Elementary School, A.M. Thomas Middle School, and Wonderful College Prep Academy, located approximately 8 miles south at 14821 Primary Court, Lost Hills, California 93249, 20979 Lobos Court, Lost Hills, California 93249, and 14848 Lamberson Avenue, Lost Hills, California 93249, respectively. The Kern National Wildlife Refuge, the community of Lost Hills, and the nearest schools are shown in **Table 1-2: Existing Project Sites and Surrounding Properties, Existing Land Use, General Plan Map Code Designations, and Zoning** details the surrounding land uses, including the General Plan designations and existing zoning

**TABLE 1-2: EXISTING PROJECT SITES AND SURROUNDING PROPERTIES, EXISTING LAND USE, GENERAL PLAN MAP CODE DESIGNATIONS, AND ZONING**

Location	Existing Land Use	Existing General Plan Map Code Designations	Existing Zoning
North <sup>1</sup>	Agricultural, Vacant Land	AG40 (General Agriculture)	AG-40 (General Agriculture Open Space) (minimum site area 40 acres)
East	Agricultural, Vacant Land	8.1/2.5 (Intensive Agriculture/Flood Hazard); 8.3/2.5 (Extensive Agriculture/Flood Hazard), 8.1 (Intensive Agriculture)	A (Exclusive Agriculture)
South	Agricultural, Vacant Land	6.3 (Highway Commercial); 8.1 (Intensive Agriculture); 8.3 (Extensive Agriculture); 8.3/2.5 (Extensive Agriculture/Flood Hazard)	A (Exclusive Agriculture)
West	Agricultural, Vacant Land	1.1 (State or Federal Land); 8.3 (Extensive Agriculture); 8.3/2.5 (Extensive Agriculture/Flood Hazard), 8.1 (Intensive Agriculture)	A (Exclusive Agriculture)

<sup>1</sup> Kings County is located north of the project site (Kings County 2022a; 2022b)





## 1.3. Project Description

### Project Overview

The Pelicans Jaw Hybrid Solar project is a proposed photovoltaic (PV) solar facility with associated infrastructure on approximately 3,943 acres of privately-owned land in northwestern Kern County. As stated above, the proposed project would generate up to 500 MW of renewable electrical energy, as well as 2,000 MWh of energy storage capacity. Construction of the proposed project is anticipated to occur in three phases, with the first phase consisting of the installation of 300 MW of PV solar and the installation of up to 1,000 MWh of battery energy storage beginning in the first quarter 2024 and becoming commercially operational in the fourth quarter of 2024 (up to 12 months). The second and third phases would consist of the installation of 200 MW of photovoltaic solar (phase two) and the installation of up to 1,000 MWh of battery energy storage (phase three), with construction beginning in the first quarter of 2024 and commercial operation anticipated in the fourth quarter of 2024 (up to 12 months). The operational life of the proposed project is anticipated to be 35 years.

The project would consist primarily of PV panels, a single-axis tracker system, inverters and transformers, electrical cabling and communication lines, on-site switchgear, a collector substation, a generation interconnection (gen-tie) line, a BESS, access roads, a security fence, an operations and maintenance (O&M) facility, and a supervisory control and data acquisition (SCADA) system. The project would also include a Pacific Gas and Electric (PG&E) switching station that would interconnect with the existing PG&E 230-kilovolt (kV) overhead transmission lines that traverse the project site. The PG&E switching station would be located on-site, within the project boundaries. The project's BESS, substation, preliminary gen-tie line alignment, and the PG&E switching station are shown in **Figure 1-11: Project Interconnection**.

Implementation of the project as proposed include the following requests:

- a) Conditional Use Permit (CUP No. 3, Map No. 5) to allow for the construction and operation of solar facilities with a total generating capacity of approximately 500 MW, and up to 2,000 MWh of energy storage on approximately 3,763 acres with the energy storage located on an area encompassing no more than 100 acres, within the A (Exclusive Agriculture) Zone District pursuant to Section 19.12.030.G of the Kern County Zoning Ordinance.
- b) General Plan Amendment to the Circulation Element of the Kern County General Plan (GPA No. 2, Map No. 5) to remove future road reservations on the section and mid-section lines within the project boundaries (refer to **Figure 1-12: Proposed Circulation Element Amendments**):

Power generated by the project would assist the state in achieving the Renewables Portfolio Standard (RPS) under Senate Bill (SB) 350, which requires 50 percent of all electricity sold in the state to be generated from renewable energy sources by December 31, 2030. SB 100 was approved in September 2018 and would increase the RPS to a 100-percent goal by 2045. Power generated by the project would be sold to California investor-owned utilities, municipalities, community choice aggregations, or other purchasers in furtherance of the California Renewable Energy Portfolio Standard (California State Senate, 2015).

The Applicant's proposed project construction schedule includes three distinct phases, including:

- **Phase I** – Gen-tie line, telecommunication line, fences, gates, on-site substation, PG&E switching station, and installation and operation of approximately 300 MW of PV solar and a BESS with a capacity up to 1,000 MWh.



- **Phase II** – Installation and operation of approximately 200 MW of PV solar.
- **Phase III** – Installation and operation of a BESS with a capacity up to 1,000 MWh.

The project has an anticipated operational life of up to 35 years. At the end of the project’s operational term, the project proponent would determine whether the project site should be decommissioned and deconstructed or if it would seek an extension of its CUP. If any portion of the project site is decommissioned, it would be converted to other uses in accordance with the applicable land use regulations in effect at that time.

## 1.4. Project Facilities, Construction, and Operations

### Project Facilities

The combined project facilities would include the following components, which are described in greater detail thereafter:

- Solar electricity generating system with a capacity of up to 500 MW, including an underground or above ground (or a combination of both) 34.5-kV collection system.
- One project electrical substation.
- A PG&E switching station constructed (or caused to be constructed) and operated by PG&E on-site to interconnect the project with the existing PG&E overhead transmission lines.
- A gen-tie line extending from the project substation to the proposed PG&E switching station within an approximately 200-foot-wide right-of-way.
- An integrated BESS with a capacity up to 2,000 MWh.
- An on-site operations and maintenance facility, including an integrated SCADA system.
- Staging areas for construction trailers and construction parking.
- A roadway system consisting of internal and perimeter roadways.
- Fiber optic lines to support on-site telecommunication equipment.

### *Solar System and Collection System*

The project would include up to 500 MW of PV solar energy generation. The approximately 3,273-acre development area would house structures associated with solar energy generation and collection, including solar panels, tracking/support structures, and inverters. Solar energy would be captured by an array of PV panels mounted to a single axis tracking system. The proposed project would utilize photovoltaic (PV) panels or modules (including but not limited to concentrated photovoltaic technology (CPV) or bi-facial technology which have similar rectangular shapes, sizes and thickness) on mounting frameworks to convert incoming sunlight to direct current (DC) electrical energy. Pelicans Jaw Solar, LLC may use various PV technologies, including, but not limited to crystalline silicon panels, copper indium gallium selenide panels, or Cadmium Telluride (CdTe) panels, any of which could be bifacial panels. The intent of the PV solar panels is to increase efficiency by absorbing as much light as possible, which will reduce reflection and glare.



The panels would be arranged in series to effectively increase voltage. These chains of panels are called “strings” and provide the basic building block of power conversion in the solar array. The strings are combined in the solar field through an above- or belowground DC collection system. Then, they are collected together at the inverter stations, where the energy is converted to alternating current (AC) and then stepped up to an intermediate voltage, typically 34.5-kV.

Individual panels would be installed on tracker mount systems, using galvanized steel or aluminum. The panels would rotate to follow the sun over the course of the day. The single-axis tracking system would be supported, when practical, by driven piers (piles) directly embedded into the ground and would be parallel to the ground. The foundations for the mounting structures may extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or utilize small concrete footings. The tracking system would rotate slowly throughout the day at a range of +/- 60 degrees facing east to west to stay perpendicular to the incoming solar irradiance so production can be optimized. During midday conditions, when the sun is high in the sky, the rays of the sun are reflected directly upwards. When the sun is low on the horizon (near dawn or dusk), the sun’s angle in the sky is low; however, reflected rays would still be directed away from ground level receptors such as I-5. Due to their limited amount of rotation and their low reflectivity, the PV solar panels are not expected to cause visual impairment for motorists on area roadways including I-5.

Each tracker would hold approximately 60 to 90 panels (depending on final configuration) and, at its highest rotated edge, would have a maximum height of approximately 12 feet above grade, depending on the dimensions of the chosen panel. The minimum clearance from the lower edge of the panel to ground level is approximately 18 to 24 inches, pending final design. Final solar panel layout and spacing would be optimized for project area characteristics and the desired energy production profile.

### *Collection, Inverter, and Transformer Systems*

Photovoltaic energy generated by the panels would be delivered via cable to inverter stations generally located within the solar array field. The inverter stations would be approximately 12 to 16 feet in height and perform the following three critical functions for the solar plant: (1) collect DC power in a central location, (2) convert the DC power into AC power, and (3) convert low-voltage AC power to medium-voltage AC power. The inverter stations are self-contained and designed for environments similar to those found at the project site. The stations consist of DC collection equipment, utility-scale inverters, and a low-to medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system through an above- or belowground collection system. This AC collection system would deliver the electricity to the on-site project electrical substation, where the voltage would be stepped up to the interconnection voltage.

### *On-Site Substation*

The project substation would be the termination point of the collection system of 34.5-kV AC electricity. The output of the entire solar field would be passed through a final interconnection step-up transformer to convert it to the grid tie voltage at 230 kV. Additionally, the project substation would host the grid interconnection safety equipment and switches required to interconnect to the high-voltage transmission system. The footprint of the on-site substation would be no more than 10 acres in size. The project substation would consist of components up to 55 feet in height, and feeders would be overhead lines or underground line, with the overhead lines constructed with 45-foot- and 60-foot-tall poles for the single and double



circuits, respectively. The substation would be located internal to the project site. The proposed substation could include an emergency generator for use if the regional transmission system fails; this emergency generator would provide emergency power until the regional transmission system restores operations. The substation must have access to communication systems in the area to comply with Federal Energy Regulatory Commission/California Independent System Operator/Utility monitoring and control requirements. Compliance may be accomplished by underground lines, aboveground lines, or wireless communication. The exact location of the substation is not known at this time but is anticipated to be located in one of two locations including the northwest corner of the project site within APNs 044-110-030, 044-110-250, 044-110-010, and/or 044-101-050 or along the west side of the project site within APN 044-102-210. The conceptual locations of the project substation are shown in **Figure 1-11**. The final location of the PG&E switching station is subject to change pending ongoing environmental surveys and consultation with PG&E.

### *PG&E Switching Station*

To deliver electricity from the project to the existing 230-kV overhead transmission lines that traverse the project site, a PG&E switching station with a footprint of up to 15 acres would be constructed within the project boundaries in the northwest corner of the project site. The PG&E switching station is required by the California Independent System Operator (CAISO) to maintain grid stability with interconnection of solar and BESS facilities to the transmission grid. The unmanned, automated, low-profile PG&E switching station would be engineered, constructed (or caused to be constructed), operated and maintained by PG&E. The PG&E switching station would provide a single location for interconnection of the project to existing PG&E facilities. The PG&E switching station would also have expansion bays to allow for future projects to interconnect with the switching station.

The PG&E switching station would be comprised of a graded dirt lot with electrical equipment surrounded by a chain link security fence. More specifically, the PG&E switching station would consist of the following components:

- Circuit breakers and mounting hardware.
- Transformers, capacitors, reactors, disconnect switches, dead end structures, and electrical buses.
- A single-story control house structure.
- Access driveway(s), with each driveway at least 16 feet wide.
  - The internal access road would be all-weather Class II aggregate base.
  - Within the PG&E switching station all access roads would be asphalt.
- An approximately 8-foot-high perimeter chain-link fence topped with approximately 1 foot of barbed wire.
- Security lighting controlled by motion detectors.
- Drive aisles within the PG&E switching station fence line.
- Above and/or below ground distribution line to provide back-up service to the PG&E switching station.
- Distribution line poles would be approximately 40 feet tall and constructed of wood, steel, or concrete.
- Telecommunication facilities that include fiber-optic telecommunication lines and a



telecommunication structure that is approximately 110 feet tall.

- Metering, security, and communication equipment.

The PG&E switching station would generally be located in one of two locations including the northwest corner of the project site within APNs 044-110-030, 044-110-250, 044-110-010, and/or 044-101-050 or along the west side of the project site within APN 044-102-210. The conceptual location of the PG&E switching station is shown in **Figure 1-11**.

### *Generation Tie Line*

The energy generated by the project would be transported from the on-site project collector substation to PG&E's proposed switching station through a gen-tie transmission line. The gen-tie line would extend from the project's on-site substation to PG&E's proposed on-site switching station. The 230-kV gen-tie transmission line would consist of up to 150-foot-tall concrete or steel poles spaced approximately every 500 feet. The number and height of the poles, as well as the type of conductor, would be finalized during detailed design. The preliminary gen-tie alignment would be on-site and is shown in **Figure 1-11**. The gen-tie alignment is subject to change depending on whether the project substation and PG&E switching station are located in the northwest corner of the project site within APNs 044-110-030, 044-110-250, 044-110-010, and/or 044-101-050 or along the west side of the project site within APN 044-102-210. The gen-tie alignment length is estimated to be up to approximately 1,500 feet for both potential locations.

### *Battery Energy Storage System*

A centralized or distributed, integrated BESS would be constructed within the project site to store up to 2,000 MWh of energy produced from the project or other resources during low demand times and release the energy during high demand times. For example, to store solar energy during the daytime and to release it during the evening when the demand for energy goes up but the ability to generate solar energy goes down because the sun has set.

The batteries would be installed in racks that are housed in outdoor BESS enclosures that would be accessed from the outside via cabinet doors for maintenance needs. Because the size of each battery enclosure varies widely by manufacturer, the total number of enclosures to be installed would not be known until a manufacturer has been selected. In all cases, however, the project area containing the battery enclosures would encompass no more than 100 acres. This 100-acre area may be in a single centralized location near the on-site substation or distributed throughout the project site in proximity to project inverters and transformers used to support the photovoltaic solar array. The batteries would be charged directly from the photovoltaic solar energy generated by the project or via the project's interconnection to the proposed PG&E switching station. Energy stored in the BESS would then be discharged into the grid when the energy is needed, providing important electrical reliability services to the local and regional area.

**Batteries Housed within BESS Enclosures (Centralized or Distributed Configuration):** The BESS, whether installed in a centralized or distributed configuration, would include lithium-ion battery modules or another commercially available battery technology available at the time of construction. Batteries would be housed within outdoor BESS enclosures, which are typically made of metal.

Under normal operations, BESS facilities do not contain, store, or generate hazardous materials in quantities that would represent a risk to off-site receptors. In addition, the project's preventative measures and fire and safety systems, as described below, make an accident condition very rare. Nevertheless, because BESS



facilities do store energy, a battery thermal runaway can occur if a cell, or area within a cell, reaches elevated temperatures due to thermal failure, mechanical failure, or internal/external short circuiting.

All stationary battery storage facilities in California are required to comply with Chapter 12 (Energy Systems) and particularly Section 1206 (Electrical Energy Storage Systems) of the California Fire Code, which has adopted internationally and federally accepted National Fire Protection Association (NFPA) 855 standards for the design, construction, installation, commissioning, operation and maintenance of stationary energy storage systems. In addition to compliance with the 2019 California Fire Code, the project's integrated BESS would also comply with all other local, state, and federal safety standards and regulations, including those of the KCFD.

During operations, the BESS modules would be accessed for maintenance from the outside via cabinet doors. Typical BESS enclosures are approximately 70 feet long by 13 feet wide by 15 feet high; however, these dimensions can vary widely by manufacturer. The size, number, and configuration of each enclosure would vary depending on the battery, enclosure, and BESS system manufacturers selected for the project.

**Batteries and Racks (Centralized or Distributed Configuration):** The batteries would be housed in racks similar to common computer server racks. The racks are typically made of aluminum, but sometimes may be composed of steel. The battery racks would be designed and installed in accordance with the local seismic design requirements.

**BESS Interconnection – Collector Feeder Line(s) (Centralized Configuration):** If the BESS is installed in a centralized configuration, collector feeder line(s) will be constructed that would transfer power to and from the on-site substation. The collector feeder line(s) are anticipated to consist of up to 75 feet tall concrete, steel, or wood poles, spaced approximately every 250 feet. The collector feeder line(s) are anticipated to be up to one mile long.

**BESS Interconnection (Distributed Configuration):** If the BESS is installed in a distributed configuration, each BESS unit would interconnect with the above- or below-ground collection system that is described above under “Solar System and Collection System of this Project Description”.

**Outdoor Electrical Equipment (Centralized or Distributed Configuration):** Medium voltage transformers and additional electrical equipment would be installed including inverters, which may be installed interior to the BESS enclosures, combined with the medium voltage transformers, or as standalone units, depending on the manufacturer. The medium voltage transformers would be installed whether the BESS is installed in a centralized or distributed configuration. Underground wires and cabling would run from the battery cable collection box (inside the enclosure) to the inverter and transformer. From the medium voltage transformer, cabling would be run to the collector substation. All outside electrical equipment would be housed in the appropriate National Electrical Manufacturers Association rated enclosures and screened from view to the extent possible, on all sides. All outside electrical cabling on the site would be run underground or in ducting.

### *Operations and Maintenance Building*

The project would include the construction of an Operations and Maintenance (O&M) building with associated on-site parking (unpaved) within the project site. The O&M building would be approximately 3,600 square feet and is expected to be collocated with the on-site substation or BESS if a centralized configuration is selected. The O&M facility would be up to 24 feet in height and would include up to two levels. It is anticipated that up to five permanent staff employees would use the O&M building for ongoing



facility monitoring, equipment storage, and repairs. The O&M building is expected to be a prefabricated commercial structure. Permanent restroom facilities with septic tanks and/or portable toilets would be used for sanitary purposes at the O&M building, and a permanent water source in the form of trucked water, well water, or bottled water would be provided for the staff. The proposed building would include the requisite number of parking spaces for staff members' vehicles and O&M equipment.

The project operations would also be monitored remotely through the SCADA system, and periodic inspections and maintenance activities would occur.

### *Temporary Construction Workspace, Yards, and Staging Areas*

Project construction would be supported by up to 30 acres of staging areas, which would be located within the project footprint. The project's primary staging area would include temporary construction trailers for the management of construction, a parking area, and site security facilities. This area would accommodate delivery of materials, vehicles, etc. Material delivery for the solar field would be ongoing, panels and framing structures would be delivered throughout the solar field. Portable restroom facilities would also be located in this area.

Temporary staging areas for material laydown including boxes of solar panels, steel, aluminum framing, conduit for underground electrical, transformers, and other project materials would be located throughout the project area. The laydown and staging areas would be subsumed by the build-out of the panel array with some exceptions. Laydown areas would not be required within the solar field as such. Materials such as boxes of panels, steel and aluminum framing, etc. would be laid out between rows of panels and along the access roads.

### *Access Roads*

Existing roads would be used to the extent possible. The main project access roads would be I-5 and Twisselman Road. Twisselman Road is an existing east/west paved two lane County Road. Two points of access are being proposed from Twisselman Road to provide ingress/egress to the project site:

- An approximately one-mile-long access road extending north from Twisselman Road to the southwest corner of APN 044-150-170.
- An access road extending from the intersection of Twisselman Road and the southeast corner of APN 044-130-160.

Each access road would include a 24-foot-wide unpaved driveway with up to 5-foot shoulders on either side, for a total width of 34-feet (**Figure 1-11**). There is the potential that one or both of the proposed access routes will be developed pending detailed engineering design; therefore, for the purposes of this analysis, both access routes were assumed to be constructed, operated, and maintained.

Internal roads would be constructed to allow fire and maintenance vehicle access. All internal access roads within the project site would be up to 24 feet wide and cleared, graded, and compacted. Up to a 30-foot-wide perimeter road separating the solar arrays from the perimeter fence would be constructed within the entire perimeter of the project. The roads would be constructed to allow fire and maintenance vehicle access.

Preliminary layout and road design would be based on detailed topographic maps and an on-site walk-through by civil engineers.



### *Fiber Optic Lines*

All fiber optic communication lines necessary to support the on-site telecommunication equipment would be located on the same poles used to support the gen-tie line and/or buried in the maintenance road(s). Spur roads, approximately 20 feet wide, would be constructed to provide access to each transmission pole. The spur roads would be unpaved dirt roads. The proposed project would not otherwise generate the demand for or require the relocation or construction of new or expanded off-site telecommunications facilities.

## **Construction Activities**

### *Construction Phasing*

Construction would consist of three primary stages, detailed below. The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The on-site workforce is expected to reach its peak of approximately 800 individuals with an average construction-related on-site workforce of 400 individuals during the three stages. Employees would have the option to drive their own automobiles to the project site however, employees would be encouraged to carpool. Employees would park within the project site. The proposed project requires the temporary construction of approximately 30 acres within the project site for all-weather parking spaces, temporary office facilities, and equipment staging area. This area could be expanded to accommodate increased worker needs.

Generally, construction work schedules are expected to be 10 hours per day Monday through Friday, excluding federal holidays. Typically, the workday would consist of one shift beginning as early as 6:00 a.m. and ending as late as 7:00 p.m. The work schedule may be modified throughout the year to account for the changing weather conditions. For instance, during hot weather, it may be necessary to start work earlier to protect the health safety of workers and/or avoid pouring concrete during high ambient temperatures. Additional hours and/or weekend work (Saturdays and Sundays) may be necessary to make up schedule deficiencies, or to complete critical construction activities (e.g., PV block construction, foundation pouring, or working around time-critical shutdowns and constraints). During the startup phase of the project, some activities might be performed over the weekend.

Night work may occur during the installation of solar modules as well as work on inverters, transformers, and the substation, which may be required on a limited basis during the night to support commissioning and operations/maintenance. Solar module installation is a labor-intensive activity that requires a large workforce, working in an open-air environment. Allowing crews to work during the cooler nighttime hours would reduce crew exposure to peak daytime summer temperatures and the associated risk of heat illness. Nighttime work may not be limited to summer months.

Any night work conducted would be limited to solar module installation, wire management, inverter, and BESS commissioning. Solar module installation consists of unpackaging the solar modules from boxes and installing the modules onto the racking system with fasteners. Wire management involves connecting the solar modules of each power block together with wires that extend to each power block's inverter. Night work may occur 5 days per week (Monday through Friday), 10 hours per day from 7:00 P.M. to 5:00 A.M. Each crew would work within a specified lighted work area. These work areas would progress through each power block as work is completed across the project site.





### *Stage 1: Site Preparation*

The first phase of construction would include roadway improvements from the existing paved segment extending northerly from Twissleman Road. A roadway 1 mile in length approximately one-half mile east of Interstate 5 from Twissleman Road to the proposed solar facility would be constructed to enable access. This segment of roadway would be paved.

The majority of the project site is flat and would require minimal to no grading. A low-impact mow and roll technique would be used to remove surface vegetation, while keeping root systems in place. This practice minimizes dust generation and the associated water requirements related to dust suppression. In addition, this practice allows for faster regeneration of vegetation cover than re-seeding alone. In some areas, grubbing and grading would be required to level particularly rough areas of the site and to prepare soils for concrete foundations. Access roads would also be grubbed, graded, and compacted. The fence-line would be shallowly excavated and graded to create a level surface for proper fence installation. Trackers and roads proposed across existing trenches may require engineered fill to match the surrounding existing grade of the project site. The engineered fill would be generated on-site or imported. Soil generated on-site would be excavated and elevations designed to match the existing drainage patterns. The engineered fill would be placed in the trenches and compacted to provide adequate structural support for roads and foundations. If filling the trenches is not deemed necessary due to engineering requirements, the layout would be modified within the existing bounds to avoid the trenches. The site cut and fill would be balanced, and all topsoil would be retained and preserved on-site to the extent feasible. The project would also consist of on-site stormwater retention basins in accordance with County drainage requirements. The existing trenches may be used for storage in addition to newly constructed basins.

A design-level drainage plan would be completed for the project, which would include runoff calculations and design features developed in accordance with Kern County Development Standards, the Kern County Grading Ordinance, the Kern County Floodplain Ordinance, and the Kern County Code of Building Regulations. The drainage plan would ensure appropriate drainage for the project site and that any proposed development within the flood area (Zone A) would be designed to limit obstructions and impacts related to the floodplain. Specifically, the drainage plan would ensure that design of the solar arrays include 1 foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Solar panel sites located within a 100-year floodplain would also be graded to direct potential flood waters without increasing water surface elevations more than 1 foot or as required by Kern County's Floodplain Ordinance.

### *Stage 2: Photovoltaic Panel System Installation*

Construction materials and supplies would be delivered to the project site by truck. It is anticipated that all such materials and supplies would be stored in a staging area on-site within the project boundaries for each phase of. When possible, equipment and materials would be stored in proximity to the area where work would be undertaken. Truck deliveries would normally occur during daylight hours. However, there would be offloading and/or transporting to the project site on weekends and during evening hours.

The second phase of construction would include installation of steel piles, a single-axis tracker system, and the PV modules. Steel piles are expected to be driven into the ground using hydraulic techniques and would be approximately four feet above grade. After piles have been driven, tracker drive motors and torque tubes



for the single-axis tracker system would be installed, followed by the PV modules being securely attached to the tracker system. Stage 2 is anticipated to have highest number of employees working at the site.

### *Stage 3: Inverters, Transformers, Collector Substation, Collector System, Interconnection*

Low voltage cables between PV solar arrays and inverters, and medium voltage collector cables would be installed above ground or underground. Underground cables would be installed by using suitable trenching techniques, which typically include a backhoe excavator or trencher. Underground cable installation depths would be in accordance with local, state, and federal requirements.

All electrical inverters and transformers would be placed on concrete foundation structures, steel skids, or driven piles. In lieu of steel skids or pre-cast concrete foundations, driven pile foundations for the transformer and inverter locations would be formed with plywood and reinforced with structural rebar. Commissioning of equipment would include testing, calibration of equipment, and troubleshooting. The collector substation equipment, inverters, collector system, and PV array systems would be tested prior to commencement of commercial operations. Upon completion of successful testing, the equipment would be energized. The collector substation area would be excavated for the transformer equipment. The site area for the collector substation would be graded and compacted to level grade. The foundation for the step-up transformer at the project substation would be formed with plywood and reinforced with structural rebar. Concrete piers would be constructed as a foundation for the project substation above ground electrical equipment, and the remaining area would be graveled. A grounding system would be installed at the collector substation.

### *PG&E Switching Station – Construction*

Construction of the PG&E switching station would be primarily composed of the following activities:

- **Site Preparation:** Rough grading may be performed where required to accommodate the support structures and access roads. Retention basin(s) would be created for hydrologic control. A temporary staging area would be constructed to hold materials and construction equipment internal to the approximately 15-acre PG&E switching station development footprint.
- **Fencing:** An approximately 8-foot-high perimeter security fence topped with approximately 1 foot of barbed wire would be installed.
- **Foundation, Construction and Above-ground Equipment Installation:** Following site preparation, construction of the switching station equipment foundations and the ground grid would commence. Foundation construction would commence with excavation activities that would be accomplished primarily by backhoes and drill rigs. Forms, reinforcing steel, and concrete would then be installed, as appropriate, to build the foundations. Once the foundation work has been finished, placement of major equipment on their respective foundations or structures, inclusive of anchoring in their final position and wiring of the equipment controls and protection devices, would be completed. This work would be accomplished by delivering equipment to the site on flatbed trucks and lifting it into place using cranes.
- **Cleanup:** All areas that are temporarily disturbed by construction activities would be restored to pre-construction conditions, to the extent practical, following the completion of construction.

The PG&E switching station is anticipated to be built over an approximately 12-month period from the onset of site preparation activities through testing and commissioning. It is anticipated that construction



crews would work 8 or 10 hours per day, with work occurring Monday through Friday. Overtime and weekend work would be used only as necessary to meet schedule and adhere to electrical clearance and safety requirements and would comply with applicable California labor laws.

### *PG&E Switching Station – 230-kV Interconnection Line Work*

Construction of new transmission structures to interconnect the PG&E switching station to the existing 230-kV transmission line and to the project collector substation would involve temporary ground disturbance around each new structure location amounting to an area of approximately 8,000 square feet, along with temporary ground disturbance associated with access to each pole location. Installation of the new conductors would require establishing pull and tension sites along the transmission line alignments. Pull and tension sites would typically occupy an approximately 100-foot by 300-foot area situated within the alignment or an extension of the transmission line alignment. Temporary staging and lay down areas may also be needed for the construction of the new transmission lines.

New transmission structures are anticipated to interconnect the PG&E switching station to the existing 230-kV transmission line and to the project collector substation. The number of transmission structures are pending engineering design. The transmission structures are anticipated to be up to 150 feet high and placed within a right-of-way extending a distance of up to approximately 0.25 mile. The location of the new transmission structures to interconnect the PG&E switching station to the existing 230-kV transmission line will be dependent on whether the PG&E switching station is located in the northwest corner of the Project site within APNs 044-110-030, 044-110-250, 044-110-010, and/or 044-101-050 or along the west side of the project site within APN 044-102-210. The final location of the PG&E switching station is subject to change pending ongoing environmental surveys and consultation with PG&E. The gen-tie alignment length is estimated to be up to 0.25-mile for both potential PG&E switching station locations.

The equipment listed above is anticipated to be used to construct the transmission line facilities needed to interconnect the PG&E switching station to the existing 230-kV transmission line and the PG&E switching station to the new project collector substation. Construction is anticipated to occur within the same 12-month period as construction of the PG&E switching station.

### *Water Use*

A project-level Water Supply Assessment (WSA) has been completed to consider potential water sources, locations, and estimated water usage for the duration of construction and operations and maintenance.

Water may be sourced from on-site wells, off-site sources, or a combination of the two in support of construction activities. On-site wells would be placed strategically within the project site to facilitate construction watering and operational water needs. Exact locations of these wells would be determined upon the final engineering of the project and would include the installation of well meters. Temporary storage tanks may be used for water storage throughout the site during construction.

During the approximate 12-month construction period for Phases I, II, and III, water would be needed for such uses as soil compaction, dust control, and sanitary needs for construction workers.

The use of temporary storage tanks has the potential to reduce the amount of vehicle travel around the site by water trucks (and associated exhaust and dust) because water will be readily available in several areas of the site, reduce the rate of groundwater extraction during construction if imported water is used, and also improve capability to respond quickly and effectively to mitigate fugitive dust emissions caused by unexpected high wind events.



Temporary construction wells, if any, would be decommissioned upon the completion of construction unless required for the O&M facility, and capped per applicable regulations.

Bottled water would be provided to the construction workers for consumption. Additionally, on-site restroom facilities for the construction workers would be provided by portable units to be serviced by licensed providers. No connection to a public sewer system is proposed or required for project construction or operation.

### *Safety and Security*

At the onset of construction, site access would be controlled for personnel and vehicles. The project would include a permanent security fence. The security fence would be approximately 8 feet high and have an overall height of no more than approximately 12 feet from the bottom of the fence to the top barbed wire. The fence would have top rail, bottom tension wire, and three strands of barbed wire mounted on 45-degree extension and posts would be set in concrete. The security fence would be installed near the start of construction but may be preceded by mowing and or vegetation clearance as required. All required laydown areas are expected to be contained within the defined project boundaries. Security fencing may be raised approximately 6 inches off the ground surface to allow wildlife to traverse the project site.

During construction, security would be maintained as required by the project contractor or a suitable subcontractor to maintain public safety and the security of the facility. Prior to panel installation, the security fencing would be erected around the entire perimeter of the project site. Access gates would be installed pending site design and fire requirements.

Controlled access gates would be located at the entrances to the facility along Twisselman Road. Site gates would be swing or rolling type access gates. During construction, security personnel would be located on-site during working hours.

### *Solid and Non-Hazardous Waste and Recycling*

Inert solid wastes would be generated during the construction phase of the proposed project. Potential inert solid wastes that would result from the construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, types 1–4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. Recycling and disposal of these inert solid wastes would comply with all local, state, and federal regulations.

The Engineering, Procurement, and Construction (EPC) contractor that would be responsible for construction of the project would carefully disassemble and recycle shipping containers and solar panel packaging to minimize solid waste impacts. The EPC contractor would contract with a waste and recycling service provider to ensure all waste generated from construction of the project is disposed of in accordance with federal and state regulations. The EPC contractor would store, collect, and dispose of solid waste in such a manner as to prevent fire and health hazards, rodent harborage, insect breeding, accidents, and odor. The EPC contractor would ensure that no littering on the project site or neighboring properties would occur during construction.



### *Hazardous Waste*

The project would be designed, constructed, operated and maintained to ensure the safe use and storage of hazardous materials. Storage, handling, and use of all chemicals would be conducted in accordance with applicable laws, ordinances, regulations and standards. Chemicals (if required) would be stored in appropriate chemical storage facilities. Bulk chemicals (if required) would be stored in storage tanks, and other chemicals would be stored in returnable delivery containers. Chemical storage and chemical feed areas would be designed to contain leaks and spills. On-site workers would be trained to handle hazardous wastes generated at the site.

State approved personal protective equipment would be used by site personnel during chemical spill containment and cleanup activities. Personnel would be properly trained in the handling of these chemicals and instructed in the procedures to follow in case of a chemical spill or accidental release. Adequate supplies of absorbent material would be stored on-site for spill cleanup. At this time, the project does not anticipate the need for the use of any hazardous chemicals beyond those found in typical vehicles.

### *Wastewater and Septic System*

A septic tank potentially would be installed near the proposed project site to collect wastewater flows from the O&M building. Disposal of wastewater would meet requirements implemented by Kern County ordinances, regulations, and standards. If an O&M building is not constructed on site, no septic system would be installed.

## **Operations and Maintenance**

Upon commissioning, the project would enter the operational phase. For the duration of the operational phase, the project would be maintained by up to five permanent staff employees and monitored remotely via a SCADA system. On-site maintenance staff would be responsible for security, vegetation management, permit compliance, panel washing, and project repairs. The project includes an O&M facility, please see description above.

Any required planned maintenance would be scheduled to avoid peak load periods, and unplanned maintenance would be typically responded to as needed depending on the event. An inventory of spare components would be readily available either on-site or from a remote warehouse facility.

Project maintenance performed on the site would consist of vegetation management, maintaining compliance with project permits, washing dust from panels, and inspection and replacement of project equipment. Maintenance would occur during daylight hours, when possible. Maintenance program elements include:

- Managing a group of prequalified maintenance and repair firms who can meet the O&M needs of the facility throughout its life;
- Implementing a responsive, optimized cleaning schedule;
- Responding to facility emergencies and failures in a timely manner;
- Maintaining an inventory of spare parts to ensure timely repairs and consistent plant output;
- Maintaining a log to effectively record and track all maintenance problems; and
- Performing maintenance on the project site as required to clear obstructive ground cover.



### *PG&E Switching Station – Operations and Maintenance*

Following completion, testing, and energizing, the PG&E switching station would operate continuously. Routine maintenance would occur as needed in accordance with PG&E standard O&M procedures. PG&E personnel or approved contractors would visit the facilities on a regular basis for inspections and to replace or service equipment. Unauthorized entry would be prevented with the installation of fencing and locked gates. Warning signs would be posted.

Access to the facilities would typically be by crew truck using existing access routes and all-weather access routes anticipated to be constructed as part of the project; a minimal amount of overland travel may be required. Routine operations would require a single pickup truck visiting the PG&E switching station as well as the potential for several larger construction and maintenance trucks visiting the PG&E switching station for equipment maintenance. Maintenance activities would include equipment testing, equipment monitoring and repair, and emergency and routine procedures for service continuity and preventative maintenance.

Safety lighting at the PG&E switching station would be provided inside the switching station fence for the purpose of emergency repair work. Because night activities are anticipated to be limited, the safety lighting inside the PG&E switching station fence would normally be turned off. Lights would be mounted near the entry gate to safely illuminate the switching station entry gate and would be left on during nighttime hours. The light would be directed downward to minimize glare into surrounding properties and habitat.

Routine maintenance of the PG&E transmission lines would continue in accordance with current company requirements. Typically, the lines are inspected once per year, rotating between aerial and ground inspections, with climbing as needed when issues are identified. Vegetation clearing would continue to occur on an as-needed basis for purposes of safety and access. These activities would typically involve the presence of one or two maintenance vehicles and one or more employees to inspect the lines and clear or trim vegetation in order to achieve the minimum necessary working space around switching station and transmission line facilities.

### *BESS Operations and Maintenance Activities (Centralized or Distributed Configuration)*

Typical operations and maintenance activities include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security would be automated and monitored remotely. It is anticipated that between two to four staff members would visit the BESS weekly and as needed for maintenance monitoring. BESS enclosures would be accessed from the outside via cabinet doors for maintenance needs. Periodically, batteries and various components would be replaced or renewed to ensure optimal performance. The project site plan will include provisions for battery enclosures that would not be installed at the time of initial construction, referred to as augmentation equipment. However, the initial design and permitting will account for this equipment that would be installed as part of the ongoing maintenance activity over time as the battery capacity degrades.

### *Water Use*

During operations, water required for annual panel washing may be drawn from the on-site construction wells. Permanent above-ground water storage tanks may be used for O&M tasks and facilities. In



accordance with KCFD Standard No. 503-507, one 10,000-gallon water tank with a 4-inch National Standard Male connection would be provided for fire department use. The location of the water tank would be accessible to emergency vehicles. The capacity and location of the water tank will be approved by the KCFD.

Annual operations of the project would require routine panel washing(s). The frequency of panel washings would be based upon the monitored output of the project, weather events, and the amount of airborne dust particulates in the area over an amount of time. Based on this variability, it is projected that panel washing may occur once annually during operations. Estimated operational water usage for panel washing and general maintenance activities has been addressed in the WSA.

### *Security and Safety*

To ensure the safety of the public and the facility, the project would comply with the North American Electric Reliability Corporation's (NERC) security and safety standards including the installation of security fencing around the project with signs posted. Security measures would be installed as necessary to mitigate and/or deter unauthorized access. Access to the site would be controlled and access gates would be installed at the roads entering the project site from Twisselman Road.

According to the NERC Physical Security Guidelines, electrical generating plants and substations are identified as "critical" facilities. Per the NERC definition, a "critical" facility may be defined as any facility or combination of facilities, that, if severely damaged or destroyed, would have a significant impact on the ability to serve large quantities of customers for an extended period of time, would have a detrimental impact on the reliability or operability of the electric grid, or would cause significant risk to public health and safety. In line with the NERC guidelines, robust perimeter security fencing is the first line of defense necessary to the safety of personnel, the public and maintaining the integrity of the electrical grid. The NERC guidelines generally address security fencing standards and recommendations, with an emphasis that security fencing design be appropriate to the unique location characteristics and level of "critical" importance of the electrical facility. In addition, security may be enhanced with facility lighting and cameras in key locations. Coordination with the California Department of Transportation would be initiated to ensure compliance with exterior lighting regulations of lighting along and adjacent to I-5. Care would be taken to prevent undue light pollution from the nighttime security lighting. Nighttime lighting would be limited to areas required for operation, safety, or security, and would be directed or shielded from major roadways or possible outside observers. Lighting at high illumination areas not required on a continuous basis would be controlled by switches, motion detectors, etc. to light the areas only when required. Exterior lights would be hooded, and lights would be directed on site so that light or glare would be minimized.

To reduce off-site lighting impacts, lighting at the facility would be restricted to areas required for safety, security, and operation such as the on-site substation and O&M facility. The project would use portable lighting for any emergency work that must occur on panels at night. Security lights would use motion sensor technology that would be triggered by movement at a human's height. The level and intensity of lighting during operations would be the minimum needed. Portable lighting may be used occasionally and temporarily for maintenance activities during operations.

Safety precautions and emergency systems would be implemented as part of the proposed project to ensure safe and reliable operation. Administrative controls would include classroom and hands-on training in O&M procedures, general safety items, and a planned maintenance program. These would work with the system design and monitoring features to enhance safety and reliability. The Health and Safety Plan



prepared during the construction phase of the project will be updated annually, as needed during O&M to address changes in health and safety regulations and changes in O&M activities and procedures.

### *Fire Protection and Control*

Fire protection and control would be provided to limit risk of personnel injury, property loss, and possible disruption of the electricity generated by the project. Fire protection and control starts with a lack of flammable materials in the solar field, including vegetation. This is one of the primary reasons that vegetation would be removed from the site where required prior to construction of the solar field. Fire protection also includes appropriate access to all areas of the solar field by fire truck, with turn-around areas. Thus, final plans of the solar facilities would be inspected by the KCFD for sign-off.

The BESS equipment would be enclosed in individual containers installed with fire and safety equipment to segregate and fully mitigate fire and hazardous material risks. The BESS would utilize pre-engineered battery storage systems listed under UL 9540 pursuant to the 2019 California Fire Code, or current fire code at the time of implementation. UL 9540 contains safety standards for the system's construction (e.g., frame and enclosure, including mounting, supporting materials, barriers and more); the insulation, wiring, switches, transformers, spacing and grounding; safety standards for performance of over twenty different elements, such as tests for temperature, volatility, impact, overload of switches, and an impact drop test; and standards for manufacturing, ratings, markings, and instruction manuals. In addition, UL 9540 compliance requires a Failure Mode and Effects Analysis be performed and requires a test to ensure safe compatibility of the system's parts. This includes the UL 1973 standard, in which a battery manufacturer must prove that a failed cell inside would not cause a fire outside the system. The project would meet the UL 9540 and industry standards for adequate separations, cascading protections, and suppression systems to limit failure to a single cell.

The 2019 California Fire Code also requires that all BESS use an Energy Management System for monitoring and balancing cell voltages, currents and temperatures. The system must transmit an alarm signal if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage, are detected. The fire code also requires the use of appropriate fire-extinguishing and smoke detection systems, which would be incorporated into each of the project's BESS enclosures.

Fire extinguishers and other portable fire-fighting equipment would be available on site, as well as additional water for use at the O&M building in accordance with KCFD requirements. These fire extinguishers would be maintained for the full construction duration in accordance with local and federal Occupational Safety and Health Administration requirements.

Locations of portable fire extinguishers would include, but not necessarily be limited to office spaces, hot work area, flammable storage areas, and mobile equipment such as work trucks and other vehicles. Fire-fighting equipment would be marked conspicuously and be accessible at all times. Portable equipment would be routinely inspected, as required by local and federal laws, ordinances, regulations, and standards, and replaced immediately if defective or needing charge.

The Fire Prevention/Safety Plan prepared during the construction phase of the project will be updated annually, as needed during O&M to address changes in fire and safety regulations and changes in O&M activities and procedures.





### *Solid and Non-Hazardous Waste*

The project would produce a small amount of solid waste associated with maintenance activities. PV plant wastes may include broken and rusted metal, defective or malfunctioning modules, electrical hardware, empty containers, and other miscellaneous solid wastes, including the typical refuse generated by workers. These materials would be collected and separated for recycling where available. Any defective or broken solar modules would be returned to the manufacturer for recycling.

### *Hazardous Waste*

Once construction is complete, the project would have minimal hazardous waste at the site. Some hazardous materials may be used for project construction; these could include paints, thinners, solvents, sealants, fuels, oils and lubricants, and drilling mud. The quantities and concentrations of these hazardous substances are not expected to reach regulated levels. Fuel tanks and hazardous materials would be stored at staging areas, and wastes, such as empty hazardous materials containers and used oil, spent solvents, and oily rags, would also be accumulated in appropriate containers prior to disposal. The exact manufacturer of PV solar panels has not been selected at this stage of the project to allow for the procurement of the most efficient technology solution at the time purchase. If a panel is broken for whatever reason, the pieces would be cleaned up completely and properly disposed of.

Under normal operations, BESS facilities do not store or generate hazardous materials in quantities that would represent a risk to off-site receptors. In addition, the BESS facilities' preventative measures and integrated operational management systems, fire, and safety systems, heating, ventilation, and air conditioning systems, ventilation, gas, heat and smoke detection and alarms, and fire suppression systems, reduce the potential for accident conditions.

Project O&M may require the routine transport, use, and disposal of hazardous materials and hazardous wastes such as diesel fuel, hydraulic fluid, water treatment chemicals, oily rags, and spent batteries. Other hazardous chemicals that may be employed on site may include cleaning agents and other such chemicals that would be standard at a commercial site.

State approved personal protective equipment would be used by site personnel during chemical spill containment and cleanup activities. Personnel would be properly trained in the handling of these chemicals and instructed in the procedures to follow in case of a chemical spill or accidental release. Adequate supplies of absorbent material would be stored on-site for spill cleanup. At this time, the project does not anticipate the need for the use of any hazardous chemicals beyond those found in typical vehicles.

Other wastes generated on site would include those typical of a commercial building, such as computer and electronic equipment, paper, food scraps, etc. All wastes would be disposed of according to applicable laws, ordinances, regulations, and standards. In addition, no food wastes would be available for wildlife to scavenge.

All hazardous materials and waste will be managed in accordance with the Hazardous Materials Business Plan, prepared during construction, and updated annually to address changes in regulations or in operations.

### **Decommissioning**

Solar equipment has a typical lifespan of over 30 years. The proposed project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion,



choose to enter into a subsequent PPA or decommission and remove the system and its components. The Applicant would decommission and remove the system and its components at the end of the life of the project. The project site could then be converted to other uses in accordance with applicable land use regulations in effect at that time. All decommissioning and restoration activities would adhere to the requirements of the appropriate governing authorities and would be in accordance with all applicable federal, state and County regulations. The Applicant would work collaboratively with the County to restore the project to meet the County's next use (i.e., restore the project site to pre-construction conditions). The site would revert to undeveloped land that supports agricultural production and wildlife habitat.

In general, the Solar PV system and BESS would be recycled at the expiration of the project's life. Most parts of the proposed system are recyclable. Solar PV panels typically consist of silicon, glass, and a metal frame and tracking systems (not including the motors and control systems) typically consist of aluminum and steel. The most prevalent commercially available battery technologies include lithium-ion, which degrades but can be recycled or repurposed. Site structures would include steel or wood and concrete, of which all three materials can be recycled. It is anticipated that, during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. The decommissioning and restoration process involves removing aboveground and belowground structures, restoring topsoil, revegetation, and seeding. Temporary erosion and sedimentation control BMPs would be used during the decommissioning phase. Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the inverters, transformers and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction condition unless they may be used for subsequent land use. The area would be thoroughly cleaned and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

## 1.5. Project Objectives

The project proponent had defined the following objectives for the project:

- Construct, operate, maintain, and eventually decommission, a large-scale solar PV and energy storage facility that maximizes the production and delivery of reliable electricity in an economically feasible, financeable manner.
- Use a project site that is proximate to existing transmission infrastructure to minimize transmission costs and environmental impacts.
- Assist California in meeting the objectives outlined in SB 100 (2018, de León) for eligible renewable energy resources and zero-carbon resources to supply 100 percent of retail sales of electricity to California end-use customers by December 31, 2045.
- Assist California in meeting its greenhouse gas (GHG) emissions reduction goals by 2030 as required by the California Global Warming Solutions Act (AB 32), as amended by SB 32 in 2016.
- Provide long-term property tax revenues that help support public services within Kern County.



- Create “green jobs” within both Kern County and the broader State of California.
- Meet all of the above-listed objectives while designing, constructing, and operating project facilities in an environmentally responsible manner consistent with County, state, and federal requirements.

## 1.6. Proposed Discretionary Actions/Required Approvals

The Kern County Planning and Natural Resources Department as the Lead Agency (per CEQA Guidelines Section 15052) for the project has discretionary responsibility for the project. To implement this project, the project proponent may need to obtain discretionary and ministerial permits/approvals including, but not limited to, the following:

### Federal

- U.S. Fish and Wildlife Service (USFWS) Section 10 Habitat Conservation Plan (if required)
- United States Army Corps of Engineers Section 404 Permit (if required)

### State

- California Public Utilities Commission (CPUC)
  - Section 851 Permit
- California Department of Fish and Wildlife (CDFW)
  - Section 1600 et seq. permits (Streambed Alteration Agreements) (if required)
  - Section 2081 Incidental Take Permit (State-listed endangered species) (if required)
- Central Valley Water Quality Control Board (RWQCB)
  - Waste Discharge Requirements
  - Regional Water Quality Certification (401 Permit) (if required)
  - National Pollution Discharge Elimination System (NPDES) Construction General Permit
  - General Construction Stormwater Permit (Preparation of a SWPPP)
- California Department of Transportation (Caltrans)
  - Right-of-Way Encroachment Permit (if required)
  - Permit for Transport of Oversized Loads

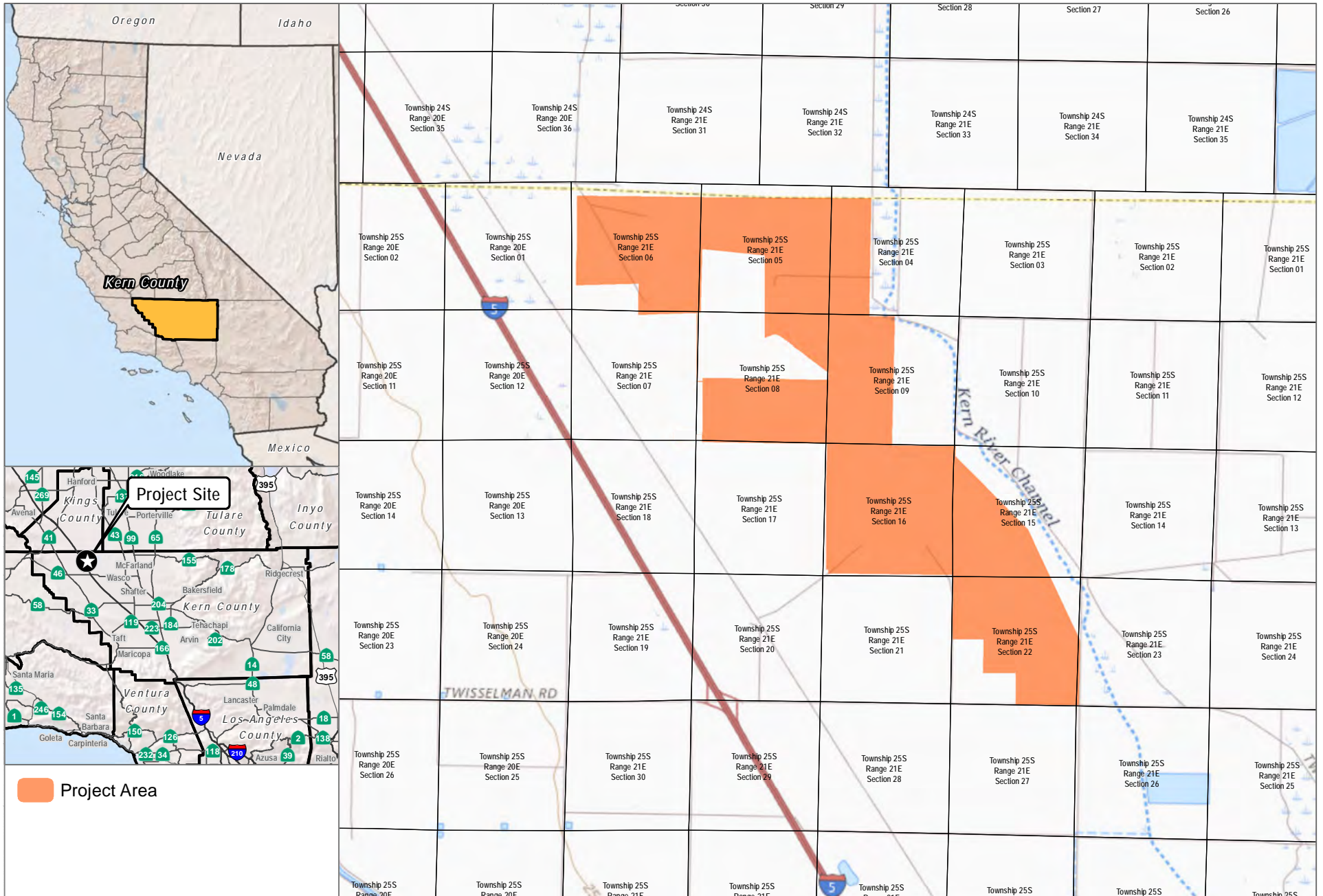
### Local

- Kern County
  - Certification of Final Environmental Impact Report
  - Adoption of Mitigation Monitoring and Reporting Program
  - Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations



- Approval of Conditional Use Permit
- Approval of Kern County General Plan Circulation Element Amendment
- Approval of Kern County Grading and Building Permits
- Approval of Kern County Access Road Design and Encroachment Permit
- Approval of Fire Safety Plan
- San Joaquin Valley Air Pollution Control District
  - Approval of Fugitive Dust Control Plan
  - Authority to Construct (ATC)
  - Permit to Operate (PTO)

The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the project.



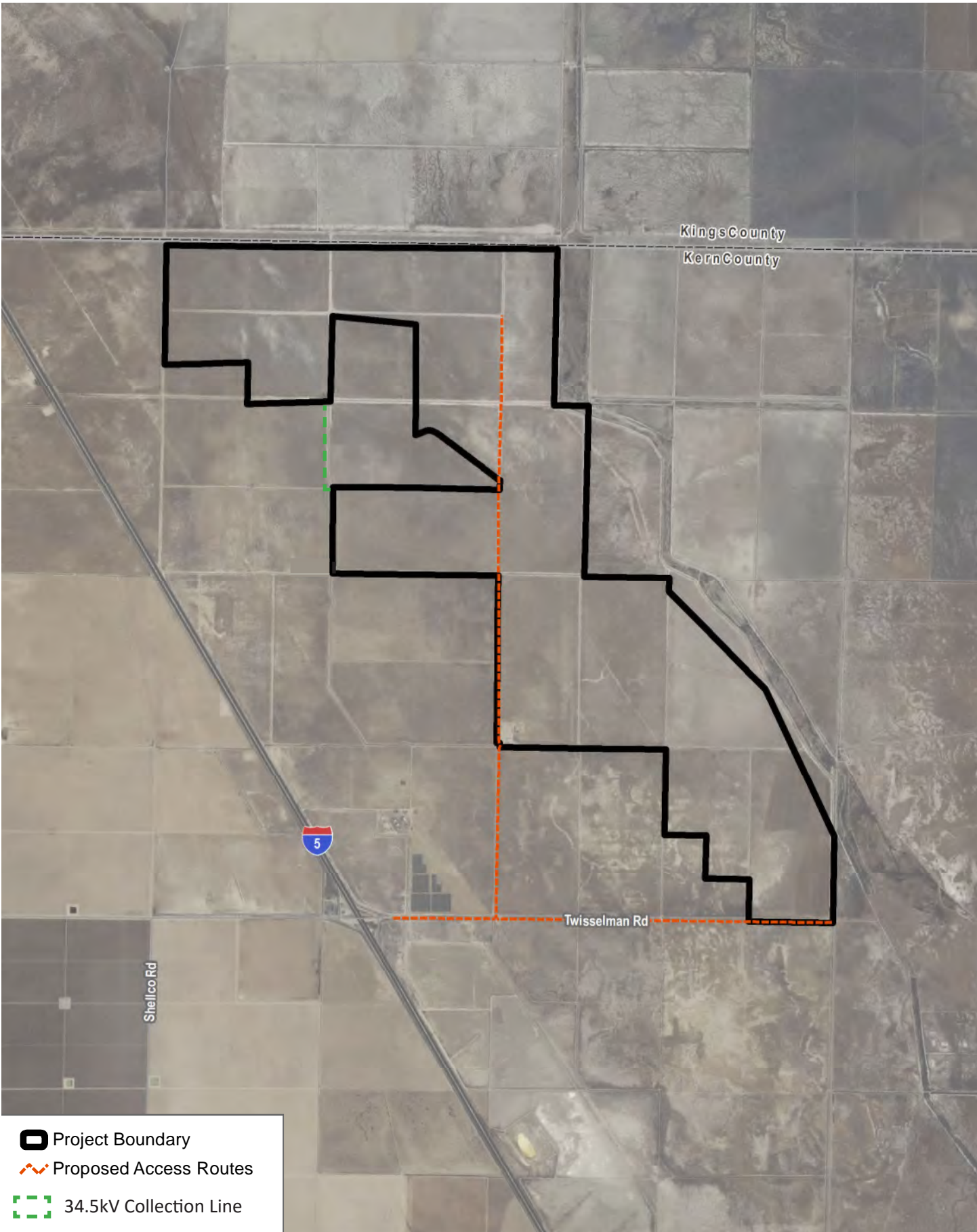
Source: ESRI, 2022




**Figure 1-1: Regional Vicinity Map**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist



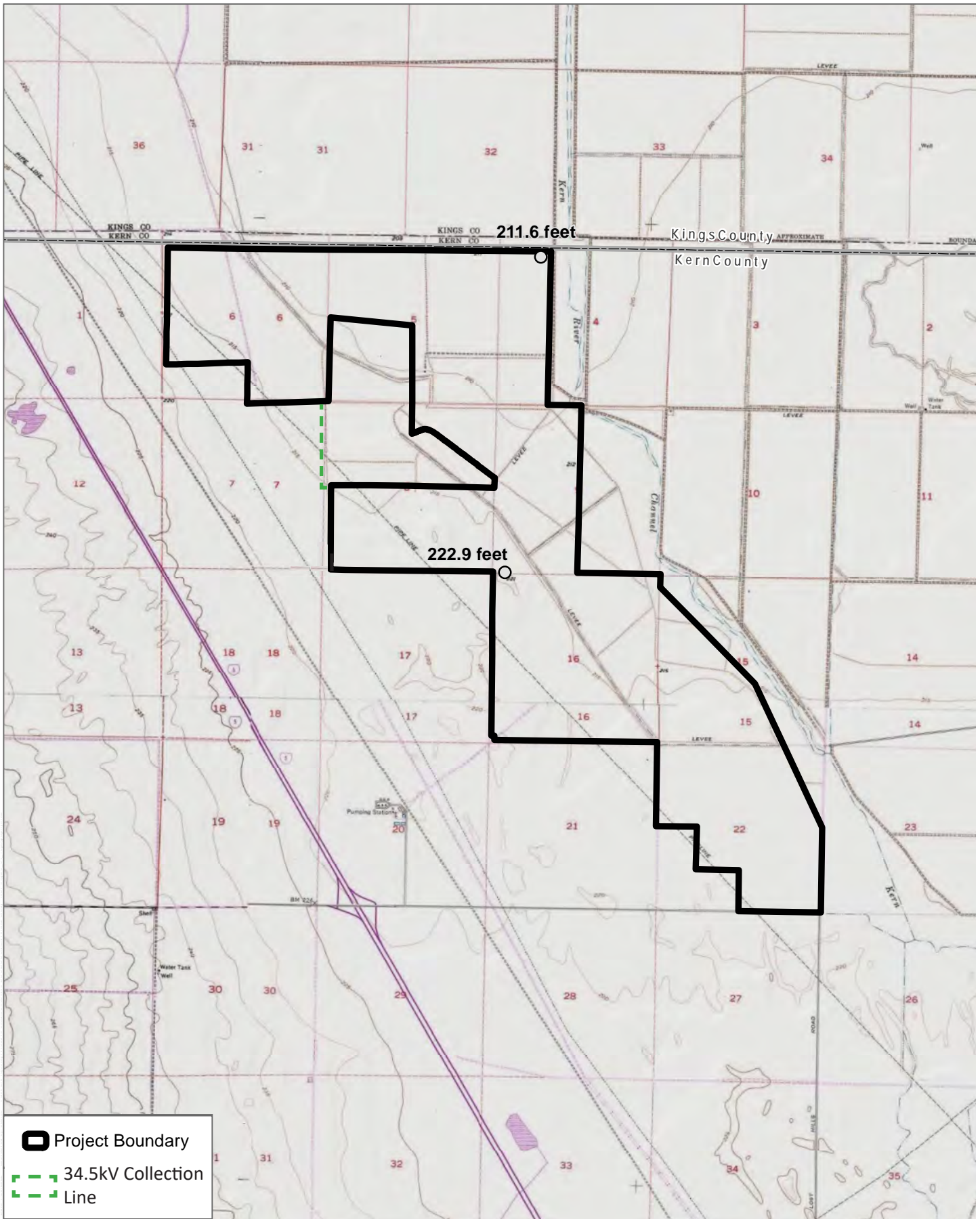




-  Project Boundary
-  Proposed Access Routes
-  34.5kV Collection Line

Source: Kern County, 2020, Open Street Map, 2019, Dudek, 2022

**Figure 1-2: Local Vicinity Map**  
 Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist



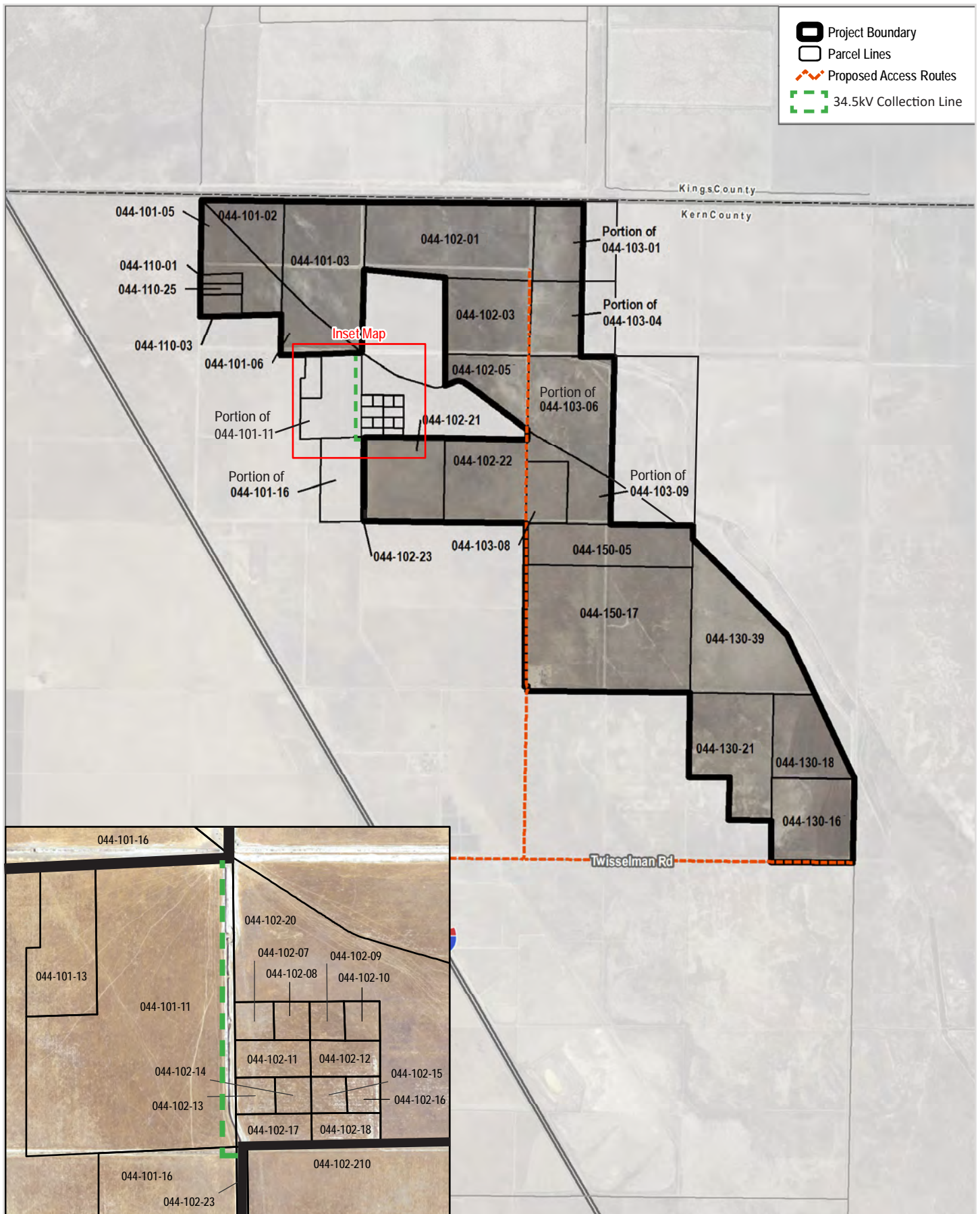
Source: USGS, 2020

**Figure 1-3: USGS Topographic Map**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist



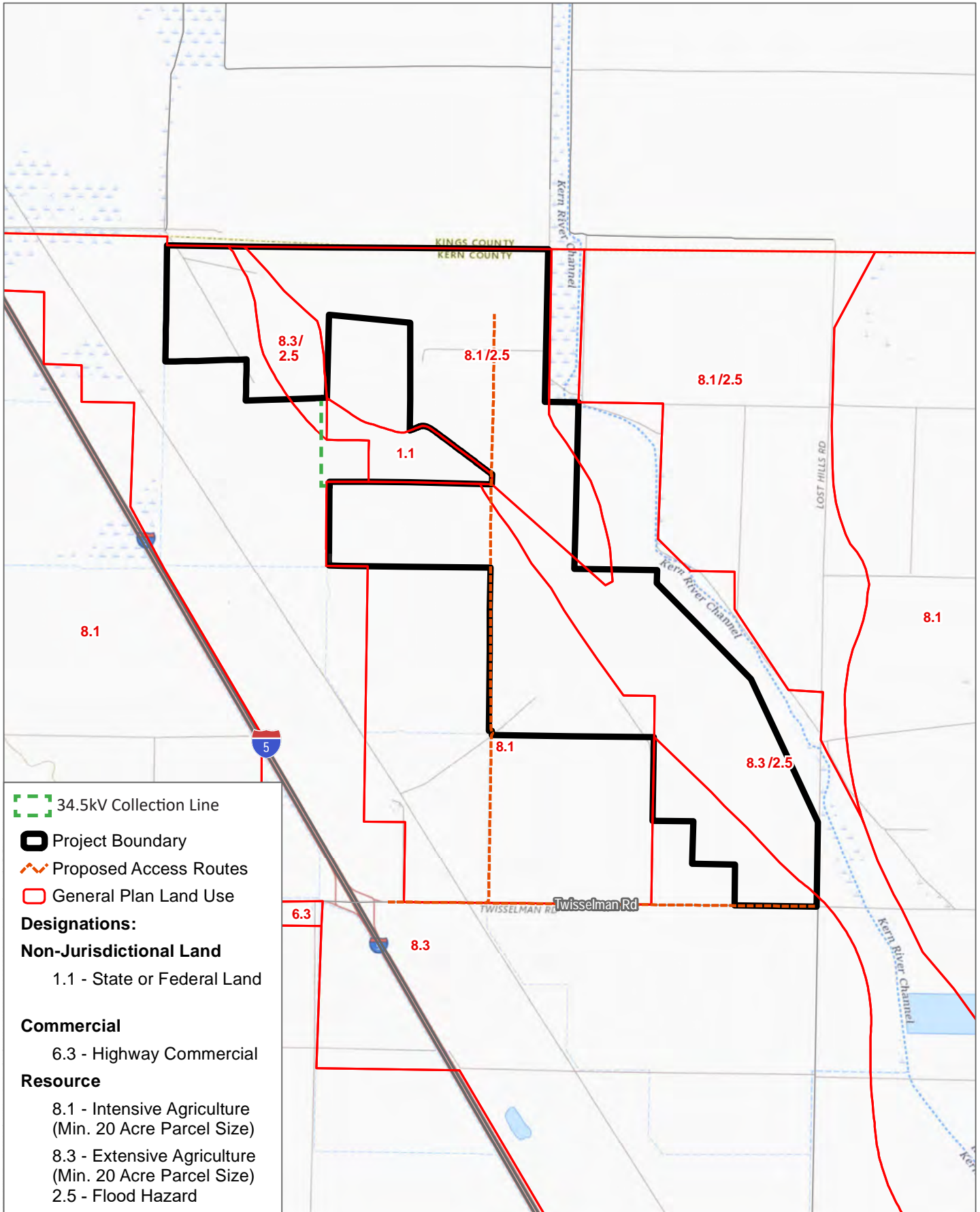




Source: Kern County, 2020, Open Street Map, 2019, Dudek, 2022

**Figure 1-4: Existing Parcel Map**  
 Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist

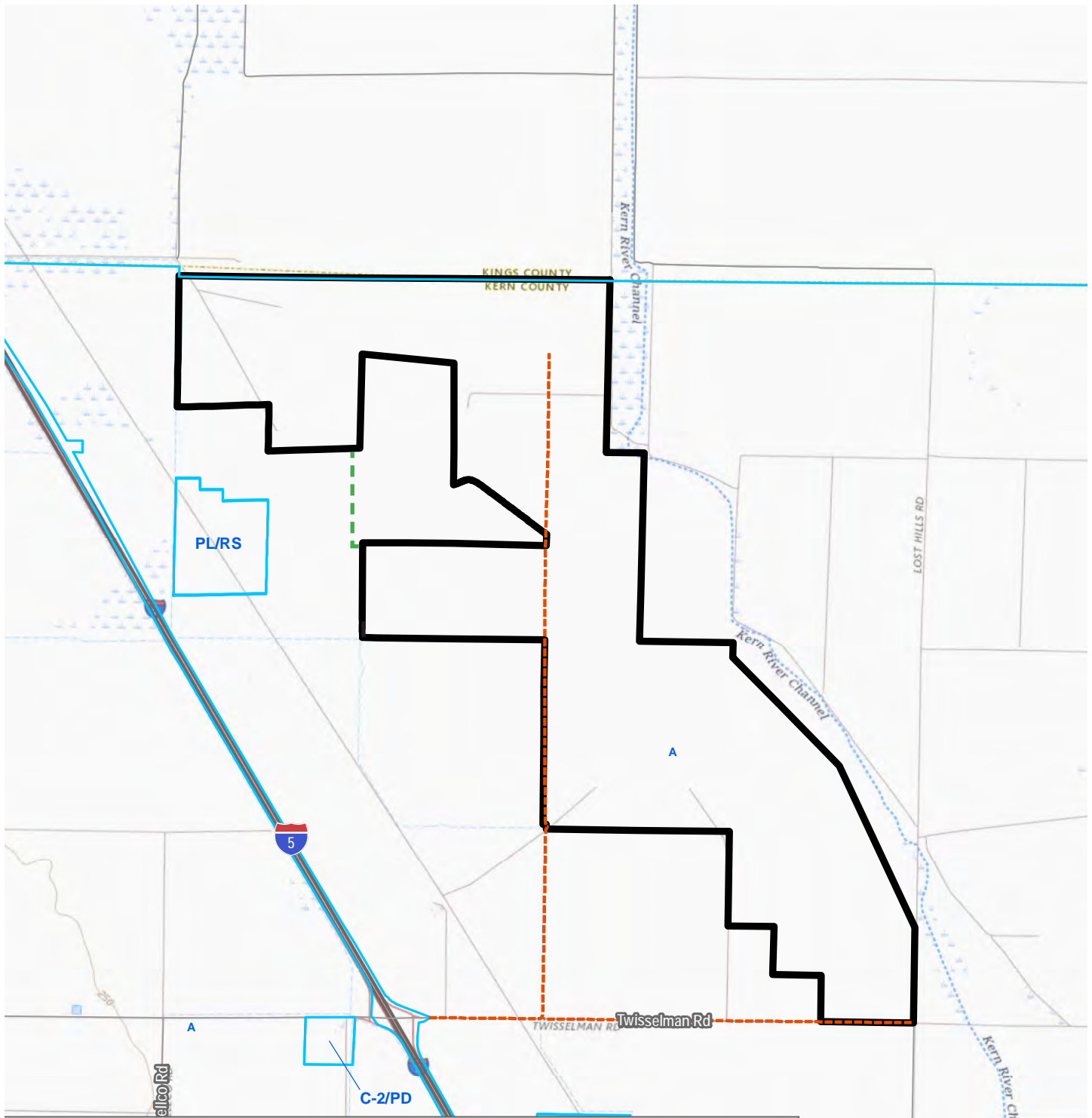




Source: Kern County, 2020, Open Street Map, 2019, Dudek, 2022

**Figure 1-5: Existing General Plan Land Use Designations**

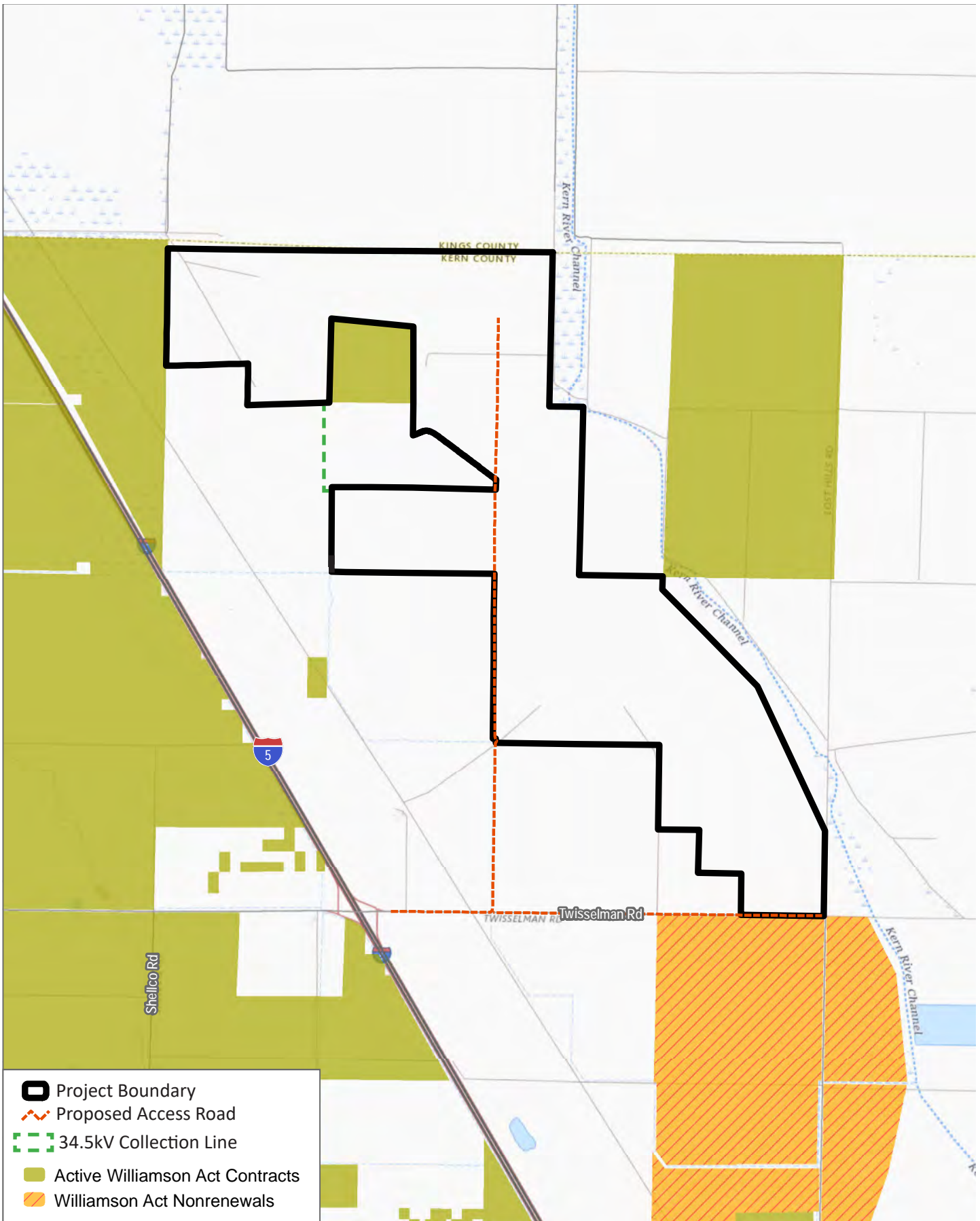




- Project Boundary
  - Proposed Access Routes
  - 34.5kV Collection Line
  - Zoning
- Zoning Designations:**
- A - Exclusive Agriculture
  - C-2/PD - General Commercial, Precise Development Combining
  - PL - RS - Platted Lands, Residential Suburban Combining, Mobilehome Combining

Source: Kern County, 2020, Open Street Map, 2019, Dudek, 2022

**Figure 1-6: Existing Zoning**  
 Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist

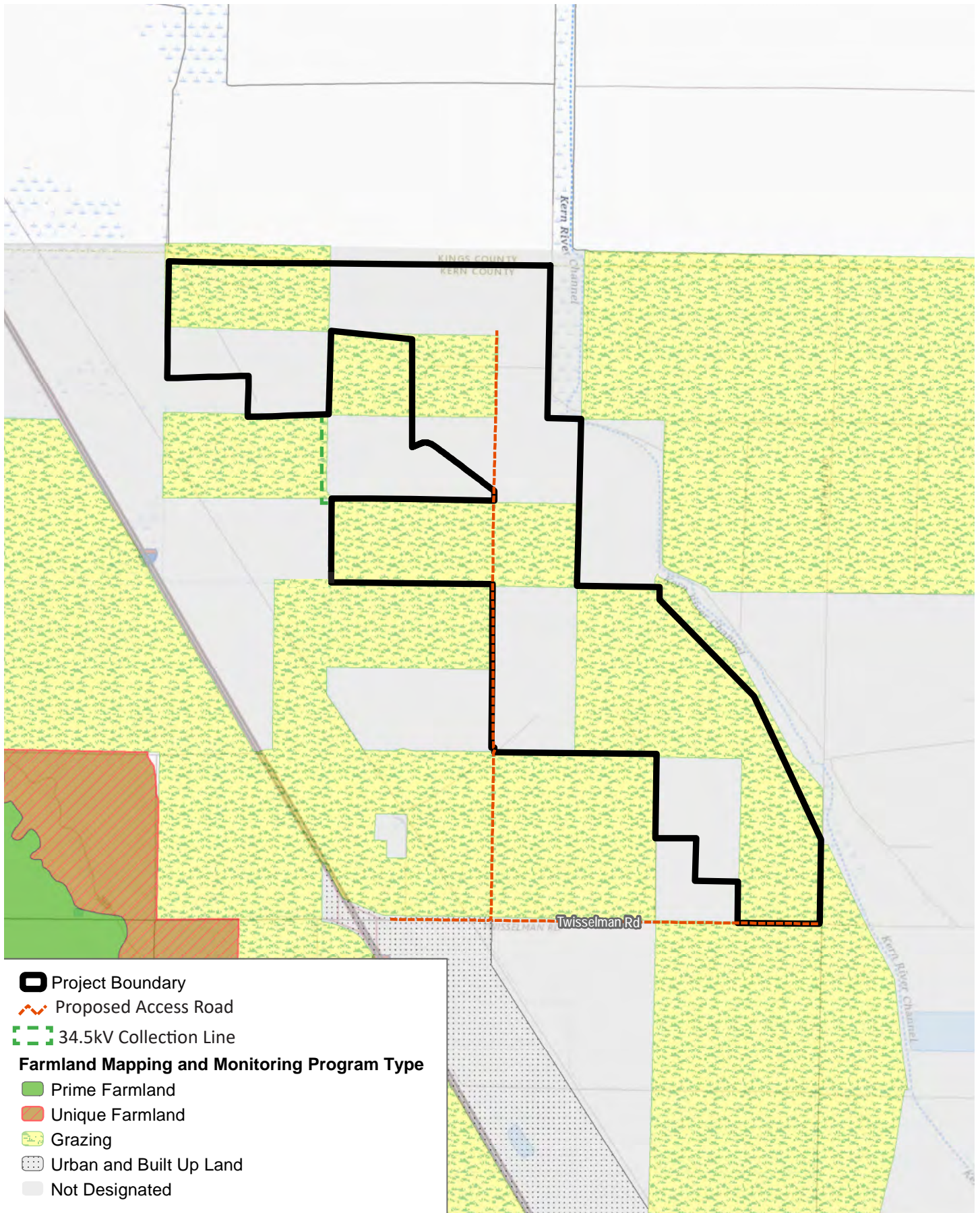


Source: CA Dept. of Conservation 2009, Open Street Map, 2019, Dudek, 2022

**Figure 1-7: Williamson Act - Active and Nonrenewal**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist





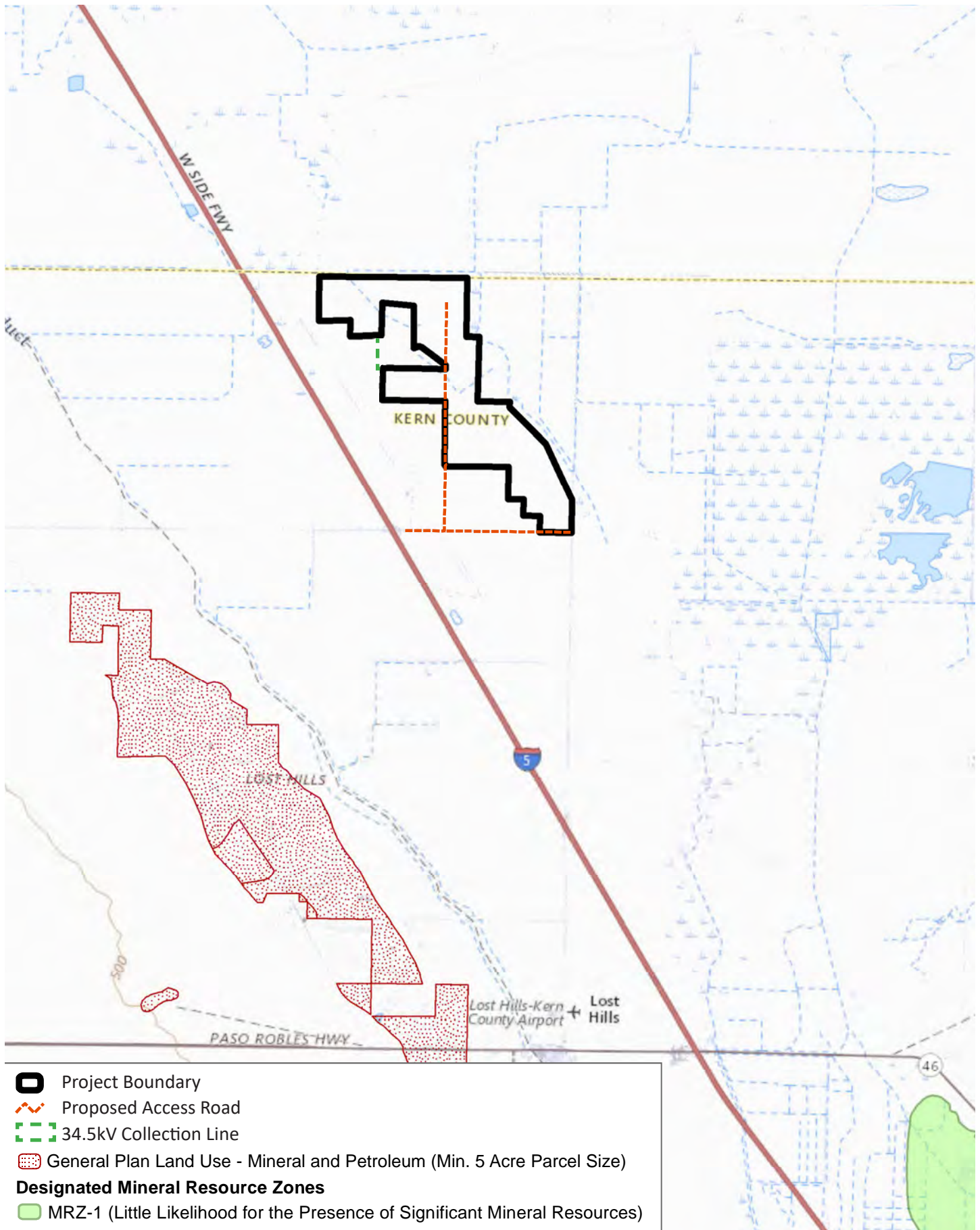
Source: CA Dept of Conservation 2018, Open Street Map, 2019, Dudek, 2022

**Figure 1-8: Farmland Mapping and Monitoring Program Designations**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist







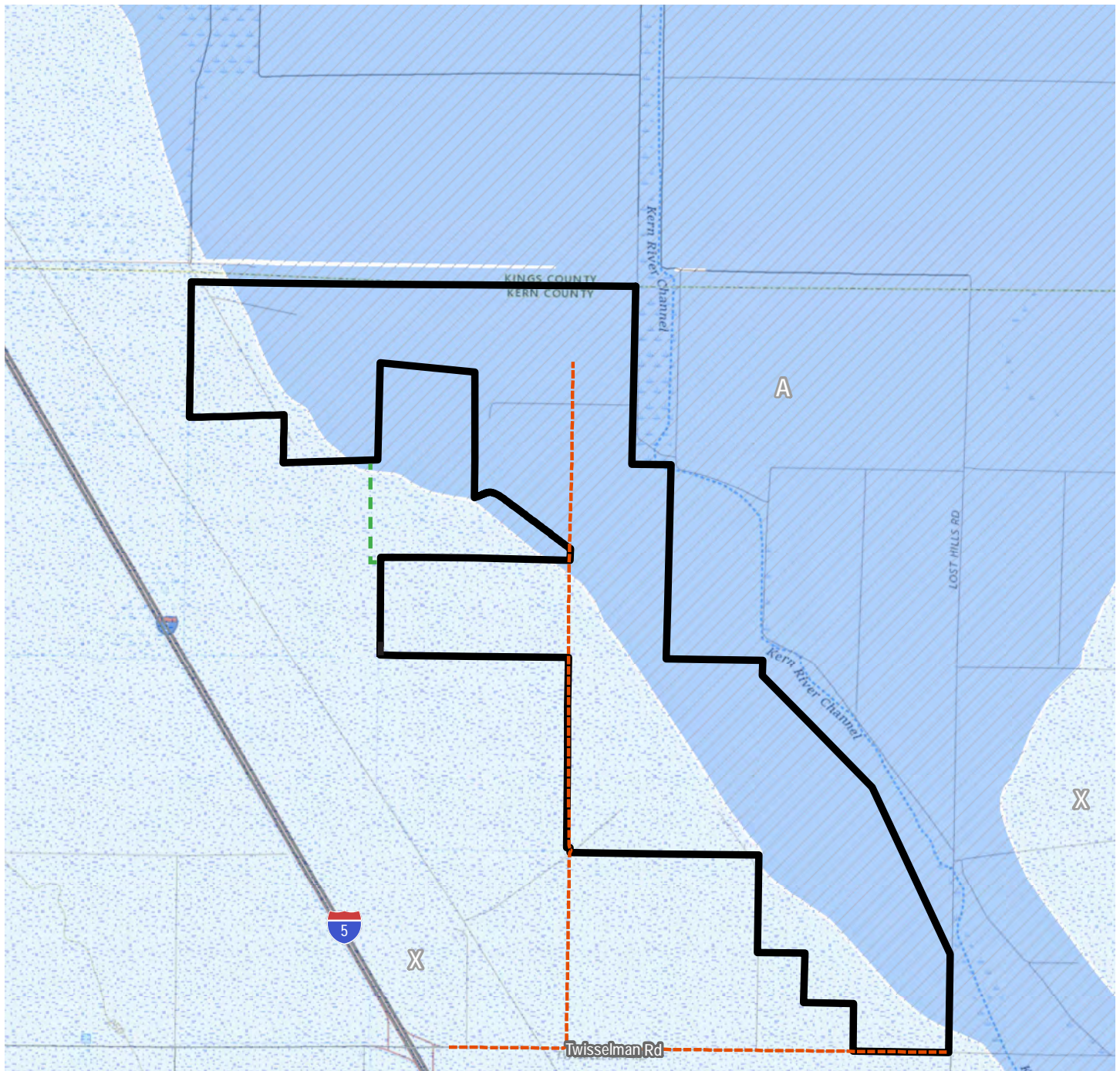
Source: CA Dept. of Conservation 2009, Open Street Map, 2019, Dudek, 2022

**Figure 1-9: Mineral Resource Zones**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist







- Project Boundary
- Proposed Access Road
- 34.5kV Collection Line
- ZONE A:** No Base Flood Elevations determined.
- ZONE X:** Areas of Minimal Flood Hazard; Areas determined to be outside the 0.2% floodplan.
- Outside 500 year flood zone (determined to be outside the 1% and 0.2% flood zones) - AREA OF MINIMAL FLOOD HAZARD
- 100 year flood zone

The 1% annual chance flood (100-year flood), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard Area include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

100-Year Flood Hazard Area - Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood.

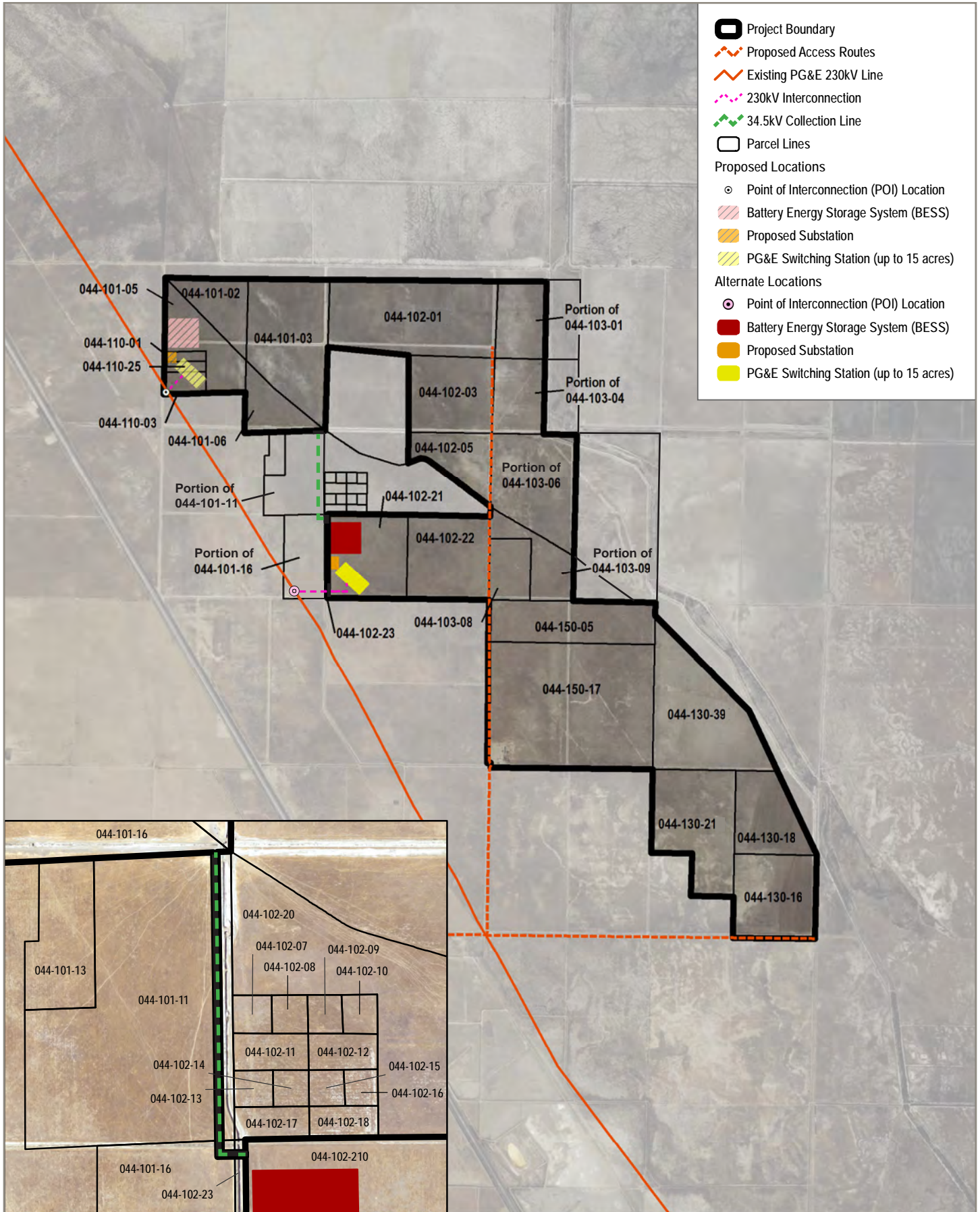
Source: FEMA, 2020, Open Street Map, 2019, Dudek, 2022

### Figure 1-10: FEMA Floodplain Zone Hazards

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist



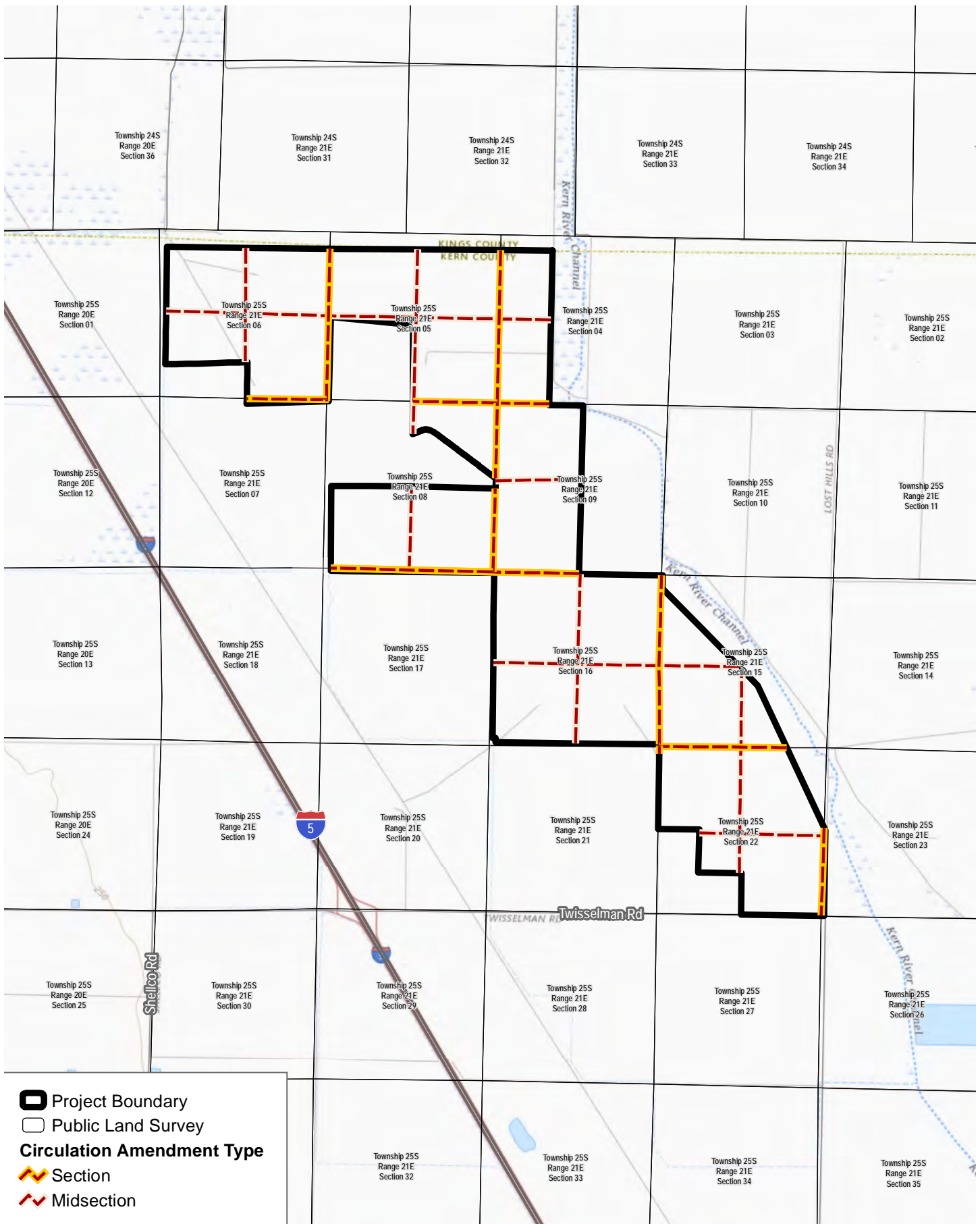




Source: Samaung 2022, County of Kern, 2020, Dudek, 2022

### Figure 1-11: Project Interconnection

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist



- Project Boundary
- Public Land Survey
- Circulation Amendment Type**
- Section
- Midsection

Source: Open Street Map, 2019, Dudek, 2022

**Figure 1-12: Proposed Circulation Element Amendments**

Pelicans Jaw Hybrid Solar Project  
 Notice of Preparation/Initial Study Checklist







## 2. Kern County Environmental Checklist Form

### 2.1. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “potentially significant impact” as indicated by the Kern County Environmental Checklist on the following pages.

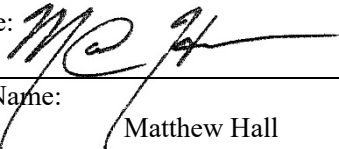
- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Aesthetics                  | <input checked="" type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources        | <input checked="" type="checkbox"/> Cultural Resources                  | <input checked="" type="checkbox"/> Energy                             |
| <input checked="" type="checkbox"/> Geology and Soils           | <input checked="" type="checkbox"/> Greenhouse Gas Emissions            | <input checked="" type="checkbox"/> Hazards and Hazardous Materials    |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input checked="" type="checkbox"/> Land Use and Planning               | <input checked="" type="checkbox"/> Mineral Resources                  |
| <input checked="" type="checkbox"/> Noise                       | <input type="checkbox"/> Population and Housing                         | <input checked="" type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                             | <input checked="" type="checkbox"/> Transportation and Traffic          | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input checked="" type="checkbox"/> Utilities/Service Systems   | <input checked="" type="checkbox"/> Wildfire                            | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

### 2.2. Determination

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:   
 Printed Name: \_\_\_\_\_  
 Matthew Hall

Date: \_\_\_\_\_  
 November 23, 2022  
 Title: \_\_\_\_\_  
 Supervising Planner



### 3. Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. Negative Declaration: “Less than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less-than-Significant Impact.” The lead agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.



8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to a less than significant level.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>I. Aesthetics</b>				
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from public accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

(a, c, d) The aesthetic features of the existing visual environment in the project area are relatively uniform, with broad, dry, flat landscapes. The project site is generally surrounded by undeveloped nonurbanized land and agricultural land and facilities. Scenic vistas may be designated by a federal, state, or local agency and may also include an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. The Kern County General Plan includes the land use designation 8.5 – Resource Management, which includes primarily open space lands containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas; none of the project parcels nor surrounding parcels are designated 8.5 – Resource Management (Kern County 2009). The Kern National Wildlife Refuge is located approximately two miles to the east, and the rural community of Lost Hills is located approximately 8 miles southwest of the project site and consists predominantly of rural residential uses. The project would alter the landscape on the project site and portions of the project would be visible from public roads such as Twisselman Road which bounds the project on the south would likely be visible from Interstate (I-5) to the west of the project site. The solar arrays are designed to absorb sunlight to maximize electrical output. All lighting at the proposed project site would be designed to meet Kern County Zoning Ordinance Chapter 19.81 - Outdoor Lighting - Dark Skies requirements. Nonetheless, the panels could result in additional reflection from the surfaces resulting in a greater potential for glint/glare during the day. The above project impacts will be further evaluated in the EIR.

(b) According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the closest eligible state scenic highway is State Route (SR) 41 between SR 46 and



SR 33 located approximately 18 miles northwest of the project site. Given the distance from the project site and intervening elevated topographic features including low lying hills, the project would not substantially change existing views from SR 41. There are no officially designated highways in proximity to the project site. There are no known trees, rock outcroppings, or historic buildings designated as scenic resources within or immediately surrounding the project site. Implementation of the proposed project would not erect structures that would substantially damage scenic resources. No impacts would occur and no additional discussion in the EIR will be required.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>II. Agriculture and Forest Resources</b>				
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15205(b)(3) Public Resources Code)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**RESPONSES:**

- (a) According to the California Department of Conservation (CCDOC), California Important Farmland Finder Map, there are no agricultural lands designated as Prime Farmland, Unique Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project site, see **Figure 1-8**. All of the site and including the areas that would be developed as part of the project and the generation tie line (“gen-tie”) are classified as Vacant or Disturbed Land, and Grazing Land. Construction and/or operation of the project would not result in the direct conversion of designated Farmland to a nonagricultural use and there would be no impact.



An agricultural conversion technical study has been prepared to analyze potential impacts (Dudek 2022a). As detailed in the agricultural conversion technical study, in accordance with the County's Pathway for Processing: Conversion of Agricultural Land to Solar PV Use (Kern County 2012), the project parcels have not been actively farmed 4 years or fewer out of the last 10 years (in fact, the project site has not been farmed in the last 10 years). Irrigated agricultural production is not feasible on site and there is no existing irrigation system that serves the project site. Lack of irrigation renders these parcels not viable for long-term future use as farmland. Lack of recent agricultural activity on the parcels comprising the project site indicates that the site is not currently productive farmland. Additionally, the proposed project would have a lifespan of 35 years. Should the solar generating operations be removed in the future, the Applicant would decommission and remove the system and its components at the end of the life of the project and work with the County to restore the project site to meet the County's next use (i.e., restore the project site to preconstruction conditions or to a condition that best meets future land use). Therefore, the development of the site for solar generating operations does not preclude future agricultural use at the site. No further analysis in the EIR is required.

- (b) The project site and surrounding area includes land that is currently zoned as A (Exclusive Agriculture), see **Figure 1-6**. According to the Kern County Zoning Ordinance, a commercial solar facility is a compatible use within the A zone district. The construction and operation of a solar energy generating facility on the site would require the approval of a CUP. Solar energy electrical generators are considered a compatible use within Exclusive Agriculture zoning with the issuance of a CUP, pursuant to Section 19.12.030.G of the Kern County Zoning Ordinance and the Kern County Agricultural Preserve Standard Uniform Rules. With approval of a CUP, implementation of the proposed project would not conflict with existing zoning for agricultural use. Although there is land zoned Exclusive Agriculture, according to Kern County GIS, there are no areas in the project site under a Williamson Act Contract. This includes parcels under either an active or non-renewal status, see **Figure 1-7**. As such, there would be no impacts to Williamson Act lands and further discussion in the EIR is not required.
- (c) No lands affected by the project are zoned as forest land or timberland, or for timberland production. Therefore, the project would not conflict with existing zoning for, or cause the rezoning of, forest land, timberland, or timberland zoned for timberland production. Therefore, there would be no impact and further analysis in the EIR is not required.
- (d) The project site is neither situated on forest or timberland nor is located near any such areas that are currently under production. There is no land in the vicinity of the project site that is zoned as forest land, timberland, or lands zoned for timberland production. Therefore, there would be no impact related to the loss of forest land or conversion of forest land to non-forest use. No further analysis is warranted in the EIR.
- (e) As mentioned in responses (c) and (d), the project site is not designated as forest land and forest land or timberlands do not occur in the project vicinity. As mentioned in response (a) above, the project site is not classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance however, there are active farmlands located adjacent to the project site that are classified as Prime Farmland or Unique Farmland. The project could have indirect impacts on the existing environment that would affect off-site existing agricultural uses. Nearby and adjacent parcels including APN 044-102-02 (160 acres), 044-090-20 (82.05 acres), and 044-090-21 (163.44 acres), are designated as



prime farmland and are under Williamson Act contracts, and therefore, further evaluation will be provided in the EIR.

- (f) The project site is not subject to an open space contract made pursuant to the California Land Conservation Act of 1965 or the Farmland Security Zone Contract. The project would therefore not result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15205(b)(3) Public Resources Code). No impact would occur, and no further evaluation is required in the EIR.





	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>III. Air Quality</b>				
Where available, the significance criteria established by the applicable air quality management or air pollution control district shall be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard? Specifically, would implementation of the project exceed any of the following adopted thresholds:				
i. San Joaquin Valley Unified Air Pollution Control District:				
<u>Operational and Area Sources</u>				
Reactive organic gases (ROG): 10 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxides of nitrogen (NO <sub>x</sub> ): 10 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Particulate matter (PM <sub>10</sub> ): 15 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stationary Sources - as Determined by District Rules</u>				
Severe nonattainment: 25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme nonattainment: 10 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Eastern Kern Air Pollution Control District.				
<u>Operational and Area Sources</u>				
Reactive organic gases (ROG): 25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oxides of nitrogen (NO <sub>x</sub> ): 25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Particulate matter (PM <sub>10</sub> ): 15 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Stationary Sources – as Determined by District Rules</u>				
25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



RESPONSES:

- (a-d) The project site is located entirely within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD), in the San Joaquin Valley Air Basin (SJVAB). The SJVAB is designated as a nonattainment area for both the State and federal ozone standards and the State particulate matter (PM<sub>2.5</sub>) standard. The basin is in nonattainment for the particulate matter (PM<sub>10</sub>) for state standards but as of September 25, 2008, the Environmental Protection Agency redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) and approved the PM<sub>10</sub> Maintenance Plan (SJVAPCD, 2012). Project construction would generate emissions of reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>), both of which are known as ozone precursors, and PM<sub>10</sub> that could result in significant impacts to air quality in the area.

SJVAPCD's most recently adopted air quality management plans are its 2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard (SJVAPCD, 2020) and the 2016 Ozone Plan for 2008 8-Hour Ozone Standard (SJVAPCD, 2016) and its 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards (SJVAPCD, 2018). Further analysis of the project's air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of SJVAPCD's applicable air quality plan for attainment and, if so, to determine the reasonable and feasible mitigation measures that could be imposed.

The project is not located within the Eastern Kern Air Pollution Control District (EKAPCD) and, therefore, its adopted thresholds do not apply. However, as noted above, the project is located within the SJVAPCD, which is designated as a nonattainment area for the State and federal ozone standards and the State PM<sub>2.5</sub> standard and the state standard for PM<sub>10</sub>. As such, the emissions of ozone precursors (ROG and NO<sub>x</sub>) and PM<sub>2.5</sub> during construction and operation of the project could result in a cumulatively considerable net increase of these criteria pollutants in the SJVAPCD. Thus, the project's contribution to cumulative air quality impacts in the SJVAPCD could be potentially significant.

Adjacent and nearby rural residences and communities would be considered sensitive receptors that could be potentially impacted by construction and operation of the proposed project. The nearest sensitive receptors are located approximately 3.8 miles southwest of the project site and consist of four single-family residences on Twisselman Road. Nearby sensitive receptors could be exposed to pollutant emissions during construction of the proposed project. The proposed project's construction-related activities would result in diesel exhaust emissions and dust (also known as PM<sub>10</sub>) that could adversely affect air quality for the nearest sensitive receptors.

Additionally, exposure to Valley Fever, a disease caused by a fungus that grows in the soil and dirt in some areas of California, could be caused by exposure to fugitive dust generated during construction is a potentially significant impact. There is the potential that (*coccidioidomycosis*) cocci spores could be stirred up during excavation, grading, and earth-moving activities, exposing construction workers and the sensitive receptor to these spores and thereby to the possibility of contracting Valley Fever.

The project would not have any permanent stationary sources or equipment located on-site that would generate objectionable odors. During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. These odors would be temporary and would be dispersed rapidly. The project impacts listed above will be further evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>IV. Biological Resources</b>				
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**RESPONSES:**

(a-d) The project site contains undeveloped land that is vacant and has been used for cattle and sheep grazing over the past 10 years. The site has history of agricultural uses, but no crop cultivation has occurred within the last 10 years on project site. The project site is flat and does not contain any significant landform features that create a complex terrain or variable landscape. The project site contains a mix of native and non-native vegetative cover including grasses and shrubs. There is the potential for sensitive habitats to be present and that the project site or immediately surrounding areas may provide habitat for candidate, sensitive, or special-status plants and wildlife. Field surveys for riparian and other sensitive natural communities also will be completed for the project, and the results



will be incorporated into the EIR. The field surveys also will be used to determine the presence of candidate, sensitive, or special-status plant and animal species on-site and in the surrounding area and the findings will be included in the EIR.

In addition to sensitive plant and animal species, Federal or State-protected water-based resources such as streams and washes could be present on the project site and might be impacted by project construction activities. A determination as to whether the project site contains features under federal or State jurisdiction will be conducted as part of the EIR. Impacts to protected wetlands would be considered potentially significant. The project site and surrounding area may be used for migration or dispersal by some wildlife species. Project construction and operation also could also remove foraging habitat and reduce the area usable to wildlife. These project impacts will be further evaluated in the EIR.

In the San Joaquin Valley, a regional wildlife movement corridor is defined as major rivers that provide connection between the mountains and the San Joaquin and Kern Rivers (Tulare Basin Wildlife Partners 2022). The project site is not considered a wildlife movement corridor because it does not contain major rivers that connect the mountains and the San Joaquin and Kern Rivers. Therefore, project impacts are expected to be less than significant; however, this issue will be further evaluated in the EIR.

- (e-f) There are no oak woodlands located within the project site and the project does not conflict with General Provision 1.10.10 of the Kern County General Plan regarding oak tree conservation. As currently designed, the project is considered to be consistent with the Land Use, Open Space, and Conservation Element of the Kern County General Plan. There are no other adopted conservation plans for protection of biological resources governing the project area. No impact would occur as the project would not conflict with the provisions of an adopted habitat conservation plan. No further analysis in the EIR is warranted.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## V. Cultural Resources

Would the project:

- |  |                                     |                          |                          |                          |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Disturb any human remains, including those interred outside of formal cemeteries?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### RESPONSES:

(a-c) The project site consists of disturbed and undeveloped land that has history of agricultural use and that is currently used for grazing. Development of the project would require additional ground disturbance for grading, installation of the solar arrays, gen-tie line, other electrical improvements such as the BESS and placement of underground electrical and communications lines. The project could potentially impact historical or cultural resources, including resources that are undiscovered or that may be buried underground. A cultural resources survey will be conducted for the project as part of the EIR. The cultural resources survey will evaluate the project site and document if there are known resources present as well as the potential for the site to contain archaeological and historical resources. The report will identify potential impacts to historical and/or archaeological cultural resources and will include avoidance or mitigation measures, if applicable.

There is no evidence that the project site is located within an area likely to contain human remains, and discovery of human remains during project earthmoving activities is not anticipated. Although, impacts to human remains are anticipated to be less than significant, inadvertent discovery of such remains is possible and this issue will be further evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>VI. Energy</b>				
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

- (a) During the construction phase of the proposed project, on-site energy demand and consumption would be related to gasoline and diesel fuel for construction worker vehicle trips and hauling and material delivery trips. Diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electrical grid. Permanent solar and energy-related equipment is constructed off-site to specifications and delivered in sub-assemblies to the project site, where they are assembled into their final configuration with little to no alterations that would result in waste material. However, using energy resources to build a renewable energy project does not constitute wasteful, inefficient, or unnecessary consumption of energy resources, during project construction, or operation. O&M facilities associated with the project would require electricity for interior and exterior building lighting; heating, ventilation, and air conditioning; electronic equipment; machinery; appliances; security systems; and other operations through the life of the project. Maintenance activities during operations, such as landscape maintenance, could involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in minimal transportation energy use associated with limited employee vehicle trips generated by the proposed project. Nevertheless, this issue will be further evaluated in the EIR.
- (b) Following implementation of the proposed project, energy would switch from consumption to production. Operation of the proposed project would lead to an overall increase in the County’s Renewable Portfolio and would align with the General Plan Energy Element’s goals and policies to encourage the development of renewable energy within Kern County. The project would also assist California in meeting the objectives outlined in SB 100 for eligible renewable energy resources and zero-carbon resources to supply 100 percent of retail sales of electricity to California end-use customers by December 31, 2045. The project would generate rather than consume electricity and therefore would not conflict with state or local energy efficiency plans. Because there would be no conflict with state or local plans for renewable energy or energy efficiency, further analysis in the EIR is not required.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## VII. Geology and Soils

Would the project:

- |  |                                     |                          |                                     |                                     |
|--|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                                     |                          |                                     |                                     |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| ii. Strong seismic ground shaking?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| iii. Seismic-related ground failure, including liquefaction?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| iv. Landslides?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

### RESPONSES:

- (a-i) The project site is located in a seismically active region of California; however, it is not located in proximity to a State of California Alquist-Priolo Earthquake Fault Zone and there are no known faults



within the project site. According to the California Department of Conservation (CDOC) Fault Activity Map of California, the nearest fault to the project site is the Pond-Poso Creek Fault, a quaternary fault (one that has moved in the last 1.6 million years), is located approximately 14 miles east of the project site. The nearest major active fault is the Great Valley 14 Fault, located approximately 20 miles east of the proposed project site (Ninyo & Moore 2022). Also, according to the CDOC Earthquake Zones of Required Investigation, the nearest Alquist Priolo Fault Zone is a portion of the San Andreas fault location approximately 30 miles to the southwest of the project site (CDOC, 2022). Due to the distance from the nearest active fault to the project sites, the potential for surface fault rupture at the project sites is considered negligible.

In addition, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the CBC 2016 Edition (CCR Title 24), which incorporates substantially the same requirements as the International Building Code (2018 Edition), with some modification and amendments. Adherence to all applicable regulations would mitigate any potential fault rupture-related impacts associated with the project. Based on the absence of any known active faults that cross or come anywhere near the project site, and the project compliance with applicable ordinances of the Kern County Building Code, impacts related to fault rupture would be less than significant and further discussion in the EIR is not warranted.

- (a-ii-iii) Due to the location of active faults in the general region, strong seismic ground shaking could occur at the project site, resulting in damage to above and below ground structures and other site improvements if not properly designed to withstand strong ground shaking. Construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the CBC which imposes substantially similar requirements for design to resist strong ground motions as the IBC. Adherence to applicable regulations are anticipated to minimize the potential impacts associated with the project, but these issues will be further evaluated in the EIR.
- (a-iv) Zones of Required Investigation referred to as "Seismic Hazard Zones" in CCR Article 10, Section 3722, are areas shown on Seismic Hazard Zone Maps where Site investigations are required to determine the need for mitigation of potential earthquake-induced landslide ground displacements. The project is located in a gently sloping area and does not contain any steep slopes and is not adjacent to an area with steep slopes that could affect the project site. The project would not include any habitable structures with the exception of the O&M building and BESS, and the potential hazard due to landslides from adjacent properties to affect the project site is considered remote as there are no steep slopes on adjoining properties. Further, there are no mapped areas that have Seismic Hazard Zones in the project area and the potential for the project to be affected by landslides or exacerbate the potential for landslides is low. No impacts from landslides are anticipated and further discussion in the EIR is not required.
- (b-d) Regarding the projects potential to secondary seismic effects as a result of ground shaking or the potential for the project to be located on an expansive soil(s), a geotechnical investigation of the project site will be conducted to determine the physical characteristics of the underlying soils and geologic formations and to identify if any of these unstable conditions exist that could be exacerbated by proposed construction activities. The results of these investigations and need for mitigation would be analyzed in the EIR.
- (e) The project O&M building would be a prefabricated commercial structure. Permanent restroom facilities with septic tanks and/or portable toilets would be used for sanitary purposes at the O&M





building. Proper siting and design of the leach field would minimize the potential for a health or environmental impact from flooding and will be discussed further in the EIR.

- (f) There are no known subsurface historical resources within the project site but there is the potential for unknown subsurface paleontological resources to exist within the project site. The potential for the project to impact will be further evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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### VIII. Greenhouse Gas Emissions

Would the project:

- |  |                                     |                          |                          |                          |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### RESPONSES:

(a-b) Greenhouse gas (GHG) emissions emitted by human activity are implicated in global climate change or global warming. The principal GHGs are CO<sub>2</sub>, methane (CH<sub>4</sub>), NO<sub>x</sub>, ozone, water vapor, and fluorinated gases. The temporary construction activities associated with the project, which would involve operation of heavy off-road equipment, on-road trucks (for deliveries and hauling), and construction worker commute trips, would generate GHGs through exhaust emissions. However, as a solar facility, the project is anticipated to displace traditional sources of electricity production that involve combustion energy sources (e.g., burning coal, fuel oil, or natural gas). As such, the provision of solar energy by the project would produce GHG-free electricity that is anticipated to offset GHGs that would otherwise be generated by traditional fuel combustion sources of electricity. The project's GHG emissions generated during construction of the project and the potential GHG offsets resulting from operation of the project, as well as any potential conflicts with any applicable plan, policy or regulation will be identified and quantified in the EIR. Additionally, the project's potential GHG impacts and the potential GHG offsets resulting from operation of the project will be examined in the EIR, with respect to the objectives of statewide programs to reduce GHGs associated with energy generation.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## IX. Hazards and Hazardous Materials

Would the project:

- |   |                                     |                          |                                     |                                     |
|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard or excessive noise for people residing or working in the project area?               | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g. Expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| h. Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste?  |                                     |                          |                                     |                                     |

Specifically, would the project exceed the following qualitative threshold:

The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Are associated with design, layout, and management of project operations; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Disseminate widely from the property; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

(a-b) Wastes that would be generated during construction of the project would be non-hazardous, and would consist of materials such as cardboard, wood pallets, copper wire, scrap steel, common trash, and wood wire spools. Although field equipment used during construction activities could contain various hazardous materials (i.e., hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, etc.), these materials are not considered to be acutely hazardous, would be used in accordance with the manufacturer’s specifications, and all applicable regulations. In addition, hazardous fuels and lubricants used on field equipment would be subject to a Construction Waste Management Plan and, if required, a Spill Prevention, Containment and Countermeasure Plan.

The operation of the project would not involve the routine transport, use, or disposal of any hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act. During construction, the project would include the transport of general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as materials necessary to construct the proposed PV arrays.

The proposed project would be subject to all applicable local, state, and federal plans related to hazardous material use on the project site. Additionally, hazardous material use would be reviewed by the Kern County Environmental Health Services Division. In accordance with the review process as set by the Kern County Environmental Health Services Division, the proposed project would be required to submit and complete a list of all materials used on site, describe how the materials would be transported and stored, and identify in what form they would be used to maintain safety and prevent possible environmental contamination or worker exposure. A Safety Data Sheet would be made readily available to on-site personnel for all applicable materials present on site during construction. Nonhazardous construction debris would be generated and disposed of in approved facilities. During construction of the facility, human waste would be managed using portable toilets located at reasonably accessible on-site locations.

The solar PV panels may include materials that considered to be hazardous (i.e., cadmium, telluride, etc.). The proposed project would follow the manufacturer’s collection and recycling program to ensure the proper collection and recycling of PV panels. Broken PV panels would be replaced to avoid a potential source of pollution to stormwater.



Construction and operation of the project may include the accidental release of storage materials, such as cleaning fluids and petroleum products including lubricants, fuels, and solvents. Potential hazards associated with BESS include increased potential for electrical shock and chemical release associated with the batteries used. Impacts resulting from the transport, use, or disposal of hazardous materials during construction and operation of the project will be evaluated further in the EIR.

- (c) There are no schools within 5 miles of the proposed project site. The closest schools to the project site is the Lost Hills Elementary School, A.M. Thomas Middle School, and Wonderful College Prep Academy, each located approximately 8 miles south at 14821 Primary Court, Lost Hills, California 93249, 20979 Lobos Court, Lost Hills, California 93249, and 14848 Lamberson Avenue, Lost Hills, California 93249, respectively. Therefore, the proposed project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school. There would be no impact, and no further analysis is required in the EIR.
- (d) Based on a review of the Department of Toxic Substances Control (DTSC) Cortese List Data Resources, there are no hazardous materials sites located on the project site. The nearest hazardous materials sites listed on the State Water Resources Control Board's GeoTracker database and DTSC Envirostor is an open-inactive case (04/28/2016) related to a Shell pipeline and contaminated soil from crude oil (DTSC, 2022) located approximately 0.5 miles west of the project site. It does not appear that this or any other hazardous materials conditions would affect the project site, however, additional detail will be provided in the EIR.
- (e) The nearest public airport to the project site is the Wasco-Kern County Airport located approximately 20 miles southeast of the project site. The project site is not located within any safety or noise zones for the Wasco-Kern County Airport. Due to the nature of the proposed land use, impacts from air traffic hazards or excessive aircraft noise are not anticipated to occur for people residing or working in the project area with respect to the project's proximity to an airport. Therefore, there would be no impact and no further analysis is warranted in the EIR.
- (f) As required by routine and standard construction specifications administered by Kern County, road access would be maintained throughout construction, and appropriate detours would be provided in the event of potential road closures. Therefore, no impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan would occur during construction.

The five full-time operational work force would not generate significant traffic volumes during an emergency evacuation scenario that could complicate area-wide emergency evacuation efforts. The access road that would be constructed as part of the proposed project would not affect designated emergency evacuation routes as Twisselman Road is not designated evacuation routes in the Kern County Emergency Operations Plan (EOP) (EOP, 2022). No impacts are anticipated, further analysis of this issue in the EIR is not warranted.

- (g) According to the California Department of Forestry and Fire Protection (CalFire), Kern County Fire Hazards Severity Zone Maps, the project site is located within a Local Responsibility Area and is not defined by Calfire as having a specific fire hazard designation (Calfire, 2007a). According to the Calfire Local Responsibility Area (LRA) the project site is within an area that is unzoned in regard to wildfire hazard.(CalFire, 2007b). The proposed project would comply with all applicable wildland fire management plans and policies established by CalFire and the Kern County Fire Department.



Accordingly, the proposed project is not anticipated to expose people or structures to a significant risk of loss, injury, or death involving wildland fires, but this will be further discussed in the EIR.

- (h) Project-related facilities would not result in features or conditions that could potentially provide habitat for vectors such as mosquitoes, flies, cockroaches, or rodents. During construction and operation, workers would generate small quantities of solid waste (i.e., trash, food containers, etc.) that would be stored in enclosed containers, then transported to and disposed of at approved disposal facilities. Construction and operation of the proposed solar arrays and associated facilities would not produce uncontrolled wastes that could support vectors and would not generate any standing water or other features that would attract nuisance pests or vectors. Although impacts are anticipated to be less than significant, further analysis of this issue will be discussed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>X. Hydrology and Water Quality</b>				
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, seiche zones, risk release of pollutants due to project inundation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

(a-b) Construction of the project would be subject to County, State, and federal water quality regulations. The project site is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). Construction associated with the proposed project would comply with all local, state, and federal water quality regulations. Project construction activities have the potential to result in erosion, sedimentation, and discharge of construction debris, and could result in the



discharge of wastewater and runoff at the project site. During construction, potable water would be brought to the site for drinking and domestic needs. Non-potable water would be used during construction for soil compaction and dust-suppression purposes. Water may be sourced from on-site wells, off-site sources, or a combination of the two in support of construction activities. On-site wells would be placed strategically within the project site to facilitate construction watering and operational water needs. Exact locations of these wells would be determined upon the final engineering of the project and would include the installation of well meters. Temporary storage tanks may be used for water storage throughout the site during construction. Off-site water would be sourced via truck or pipeline. A comprehensive hydrology and water quality impact analysis as well as a water supply assessment will be prepared, and the findings will be further analyzed in the EIR.

- (c) Construction and operational activities associated with the project would alter existing drainage conditions and create impervious surfaces that would have the potential to result in an increase in the rate or amount of surface runoff during storm events. A hydrologic study will be prepared for the project in accordance with Kern County requirements. Potentially significant impacts will be analyzed in the EIR.

During construction and following installation of the solar arrays, the majority of the project site would remain as a pervious surface. Although the solar arrays are impervious, most rainfall would runoff the panels and fall to the ground surface such that storm water infiltration would be similar post construction compared to the existing conditions. No discharges to or alterations of any municipal stormwater drainage systems are proposed. Similarly, no component of the project would generate a substantial source of polluted runoff. The construction period SWPPP and the operational period Water Quality Management Plan (WQMP) would ensure the proper control and treatment, if necessary, of any storm water prior to discharge. While impacts are anticipated to be less than significant, this impact will be further discussed in the EIR.

FEMA delineates flood hazard areas on FIRMs. Portions of the project site are located in a 100 year flood area (Zones A, 1 percent annual chance of flooding) as shown on Figure 7, FEMA Floodplain Zone Hazards. A hydrology flood report/hydrology technical study will be prepared for the proposed project, and further analysis of the project site to view location of floodplains as delineated by FEMA will be provided. A design-level drainage plan would be completed for the project, which would include runoff calculations and design features developed in accordance with Kern County Development Standards, the Kern County Grading Ordinance, the Kern County Floodplain Ordinance, and the Kern County Code of Building Regulations. The drainage plan would ensure appropriate drainage for the project site and that any proposed development within the flood area (Zone A) would be designed to limit obstructions and impacts related to the floodplain. Specifically, the drainage plan would ensure that design of the solar arrays include 1 foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Solar panel sites located within a 100-year floodplain would also be graded to direct potential flood waters without increasing water surface elevations more than 1 foot or as required by Kern County's Floodplain Ordinance. Compliance with the Kern County Development Standards, the Kern County Grading Ordinance, the Kern County Floodplain Ordinance, and the Kern County Code of Building Regulations would reduce impacts however, further assessment will be provided in the EIR.

- (d) The project is not located near an ocean or enclosed body of water, and therefore would not be subject to inundation by seiche or tsunami. Mudflows are a type of mass wasting or landslide, where earth





and surface materials are rapidly transported downhill under the force of gravity and are often triggered by heavy rainfall and soil that is not able to sufficiently drain or absorb water and the super-saturation results in soil and rock materials to become unstable and slide away. Due to the relatively flat topography of the project site and surrounding area, the potential to be inundated by mudflow is considered remote.

Portions of the project site are within a Zone A, which is an area as mapped by the Federal Emergency Management Agency (FEMA) its Flood Insurance Rate Maps (FIRMs). According to the FIRMs (06029CC0650E – eff. 09/26/2008) and (06029C0125E eff 09/26/2008), some of the project site to the west of the drainage that bounds much of the eastern project boundary is designated as a Special Flood Hazard Area (Zone A, without base flood elevations determined). The balance of the project site is not within a flood area (Zone X, areas determined to be outside the 0.2% annual chance floodplain). It is unknown if or how many acres of solar panels or other project elements would be located in these areas. The project would be reviewed by the Kern County Public Works Department for adherence to all applicable floodplain management standards. Because of the potential for flood hazards to occur, and related risk of release of pollutants due to project inundation, further analysis will be provided in the EIR.

- (e) The project site is located within the San Joaquin Valley Groundwater Basin (SJVGB) within the Kern Groundwater Authority (KGA) boundaries. The SJVGB is designated in accordance with the Sustainable Groundwater Management Act (SGMA) as a high priority basin and has developed a groundwater sustainability plans (GSP) to become sustainable (KGA, 2022). The GSP was prepared with five other groundwater sustainability agencies (GSA's) including the City of McFarland (GA), Cawelo Water District GSA, Semitropic Water Storage District, Pioneer GSA, and West Kern Water District GSA. The GSP was reviewed by the California Department of Water Resources but was found to be deficient. The deficiencies were to be addressed by July 27, 2022 (CDWR, 2022). In regard to water quality, the project would conform to all of the applicable plans including preparation of a stormwater pollution prevention plan (SWPPP) and best management practices (BMPs) to help ensure water quality is not substantially affected. A water supply assessment will be completed for the project to analyze potential impacts to groundwater resources, including any potential conflicts with the finalized GSP. The potential for the project to result in conflicts with applicable water quality plans will be further analyzed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XI. Land Use and Planning

Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Physically divide an established community?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### RESPONSES:

- (a) The project site is located on undeveloped land. The rural community of Lost Hills is located approximately 7 miles south of the project site and consists predominantly of rural residential uses. Rural residential uses in Kettleman City and Alpaugh in Kings County, that are located approximately 20 miles to the north and 14 miles to the northeast of the project site, respectively. The project would neither physically encroach into nor divide or restrict access to either of these or other cities or town within the region. In addition, no new roadways or other linear elements that would have the potential to restrict existing access or movement within the local community are proposed. Because the project is not located between any established communities or residential areas, the project would not physically divide an established community and there would be no impact. Therefore, no further analysis in the EIR is warranted.
- (b) The project site is located within the Kern County General Plan area but is located on the southern border of Kings County. The project site consists of 26 parcels designated by the Kern County General Plan as map codes include the following or mix of the following: 8.1 Intensive Agriculture; 8.3 Extensive Agriculture; 8.1/2.5 (Intensive Agriculture/Flood Hazard); and 8.3/2.5 Extensive Agriculture/Flood Hazard. See **Figure 1-5**. No change to the existing land use designations is required or proposed with project implementation. However, a General Plan Amendment to the Circulation Element of the Kern County General Plan to remove future road reservations on the section and mid-section lines within the project boundaries is proposed.

As shown on **Figure 1-6**, the project site has a zone classification of A (Exclusive Agriculture) within Zone Map 5. No changes in zone classification are proposed. According to Kern County Zoning Ordinance Chapters 19.12.030G, solar energy electrical facilities are permitted within the A Zone District with the approval of a CUP. The project proponent is requesting a CUP to allow for the construction and operation of a solar facility and battery energy storage system. With approval of the CUP, the proposed solar project would be an allowable use within the A Zone District.

The project proponent is requesting a CUP to allow for the construction and operation of a solar facility and BESS. Use of the A zone district for a solar project is listed as an allowable use. At the end of the project's operational term, the project proponent would determine whether the project site should be decommissioned and deconstructed or if it would seek an extension of its CUP.



With approval of the requested CUP the proposed project is not anticipated to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. However, further assessment will be provided in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XII. Mineral Resources

Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### RESPONSES:

- (a) The project site is neither designated as a mineral recovery area nor within a designated mineral and petroleum resource site by the Kern County General Plan. Additionally, the site is not identified as a mineral resource zone by the California Department of Conservation - CGS Information Warehouse: Mineral Land Classification Map, see **Figure 1-9**. However, research has found that there are mineral rights holders within the project area. While it is not anticipated that construction and operation of the proposed project would interfere with mineral extraction and processing, research is ongoing to determine the depth of the mineral rights and therefore impacts are unknown at this time. If determined to be of no impact to mineral rights holders through continued research, the topic may be scoped out from further analysis in the EIR.
- (b) As mentioned previously, the project site is not located within a designated mineral and petroleum resource site within the Kern County General Plan. The project site is not located within the County's NR (Natural Resources) or PE (Petroleum Extraction) zoned districts. Therefore, the installation of the solar facilities would not preclude future mineral resource development nor would it result in the loss of a locally important mineral resource recover site. There would be no impact and no further analysis is warranted in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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**XIII. Noise**

Would the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. For a project located within the vicinity of a private airstrip or Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**RESPONSES:**

(a-b) Land uses determined to be “sensitive” to noise as defined by the Kern County General Plan include residential areas, schools, convalescent and acute care hospitals, parks, and recreational areas, and churches. The Kern County General Plan Noise Element sets a 65 A-weighted decibels day–night noise level limit on exterior noise levels for stationary sources (i.e., non-transportation) at sensitive receptors. The nearest sensitive receptors, which include four single-family residences on Twisselman Road, are approximately 3.8 miles southwest of the project site.

Noise generated by the proposed project would occur primarily during the construction phase whereas as the long-term operation of the solar facility would generate minimal noise. Groundborne vibration and groundborne noise could originate from the operation of heavy off-road equipment and heavy-duty trucks delivering materials and machinery during the construction phase of the project. Operation of the proposed project would not generate a substantial amount of noise because no substantial noise-generating equipment would be located at the project site during operations, and there would be minor traffic generating by on-site employees, who would work mainly indoors, within the potential O&M building(s). The proposed project would adhere to local noise ordinances set forth in the Kern County Ordinance Code Section 8.36.020 with respect to permitted days and hours of construction. Operation of the proposed project would emit a minimal amount of groundborne noise and vibrations. Thus, noise impacts during project construction will be further analyzed in the EIR.



- (c) Maintenance and operational activities including intermittent deliveries, worker vehicle trips, routing site maintenance, and the associated noise would be minimal. Operation of the proposed project is anticipated to require limited staffing resulting in low levels of vehicular traffic on the project access road, primarily consisting of personal vehicles, which is consistent with existing uses in the vicinity of the project site. However, the analysis of potential impacts in relation to generation of substantial permanent increase in ambient noise as a result of the proposed project will be further evaluated in the EIR to determine if the proposed project elements are consistent with applicable regulations in the Kern County General Plan Noise Element and Kern County Zoning Ordinance. Impacts would be less than significant. In addition, the project site is not located near any sensitive receptors such as residences, schools, medical facilities, etc. that would be affected by operational noise sources. Thus, noise impacts during project operations will be less than significant and additional discussion in the EIR is not required.
  
- (d) The nearest private airport is Wonderful Pistachios & Almonds Airport in Lost Hills, California, which is approximately 11 miles southwest of the project site. The nearest public airport is Wasco Kern County Airport in Wasco, California, which is approximately 23 miles southeast of the project site. The project site is not located within any safety or noise zones for these airports; nor is the proposed project site located within any airport land use plan areas. Therefore, there would be no impacts, and no further analysis of this issue is warranted in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XIV. Population and Housing

Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### RESPONSES:

- (a) Although the proposed project would provide new employment consistent with the adopted Kern County General Plan goals, plans, and policies, long-term employment opportunities would be minimal. The proposed project would require an operational staff of up to five full-time employees.

It is estimated that the on-site workforce at its peak would be approximately 800 individuals with an average construction-related on-site workforce of 400 individuals. The entire construction process is anticipated to take 12 month. Therefore, the majority of project-generated jobs would be from the local and regional area and would occur on a temporary and short-term basis. Construction workers are expected to travel to the site from various local communities and locations throughout Southern California. Few, if any workers are expected to relocate to the surrounding area because of these temporary jobs and there would not be a substantial increase in the local population. If temporary housing should be necessary, it is expected that accommodations (i.e., extended stay hotels, apartments, RV parks, homes for rent or sale) would be available in the nearby communities of Lost Hills, Kettleman City, and Alpaugh. Therefore, the project is not anticipated to directly or indirectly induce the development of any new housing or businesses within the local communities.

During the operational phase, the project would require up to five full-time equivalent (FTE) personnel (or personnel hours totaling 5 FTE positions), who would commute to the site. Due to the small number of full-time employees, it is anticipated that the local housing stock would be adequate to accommodate operations personnel should they relocate to the area, without requiring the need for the construction of new housing. The project would not directly or indirectly induce substantial unplanned population growth and further analysis in the EIR is not warranted.

- (b) The project site is currently undeveloped and does not contain any existing housing units. The proposed project would therefore not displace any existing people or housing, necessitating the construction of replacement housing elsewhere. No further evaluation of this issue is required in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XV. Public Services

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i.	Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii.	Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii.	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv.	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v.	Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### RESPONSES:

(a)(i) **Fire Protection.** The Kern County Fire Department provides fire suppression and emergency medical services to the project area. The project site would be served by Fire Station #26, located at 14670 Lost Hills Rd, in the community of Lost Hills, approximately 9 miles south of the project site. Adherence to all applicable regulations would reduce wildfire ignitions and prevent the spread of wildfires. However, construction and operation activities may result in increased demand for firefighting services in the area. Therefore, the potential impact on fire services from construction and operation of the project is considered potentially significant and will be further evaluated in the EIR.

(a)(ii) **Police Protection.** KCSO would serve the proposed project site for law enforcement and public safety services, as KCSO serves unincorporated areas of Kern County (KCSO 2017). The KCSO Wasco Substation, located at 748 F Street, Wasco, California 93215, is the closest police station to the project site, located approximately 23 miles southeast of the project site. Although the potential is low, the proposed project may attract vandals or thieves that would require response from the Sheriff's Department. On-site security measures (i.e., on-site monitoring equipment, gated access) would be provided and access to the project site during construction and operation would be restricted, thereby minimizing the need for local Sheriff surveillance. Nonetheless, project impacts on local sheriff services could potentially result in an increased demand for law enforcement services, or require the construction of new facilities that could result in an environmental impact. This issue will be evaluated in the EIR.





- (a)(iii) **Schools.** There are no schools within five (5) miles of the proposed project site. The nearest schools are Lost Hills Elementary School, A.M. Thomas Middle School, and Wonderful College Prep Academy, located approximately 8 miles south at 14821 Primary Court, Lost Hills, California 93249, 20979 Lobos Court, Lost Hills, California 93249, and 14848 Lamberson Avenue, Lost Hills, California 93249. During project construction, a relatively large number, a maximum of approximately 500 temporary construction workers would be required. It is expected that most of these workers would live in the local area as well as broader regional area and commute to the project site from the surrounding communities where their children would already be enrolled in school. In addition, employee such as these would already be making contribution through local taxes that would be used to fund schools. The proposed project would not require employees or their children to relocate to the project area. Therefore, substantial temporary increases in population that would adversely affect local school populations are not anticipated. Likewise, the operational workforce would be small (approximately 5 full-time positions). Thus, these jobs would not generate a substantial permanent increase in population that would impact school populations or require construction of new school facilities. Therefore, no significant impacts to schools are anticipated to occur and further analysis is not warranted in the EIR.
- (a)(iv) **Parks.** The population increase that would be experienced during the construction phase of the proposed project would be temporary and limited to a maximum of approximately 800 construction workers at the project site. Such conditions would not result in a substantial new demand for parks or recreational facilities. The number of employees required for project operations would be minimal, up to 5 full-time, and they would not likely frequent any public parks during, before, or after their work shifts. The up to 5 full-time equivalent employees would not require construction of a substantial number of new housing units that would significantly increase the local population and result in the demand for public parkland or construction of new park facilities to provide services to new residences. Therefore, no significant impacts to parks are anticipated to occur, and further analysis of this issue is not warranted in the EIR.
- (a)(v) **Other Public Facilities.** Implementation of the project may have impacts on the ability of the county to provide adequate county-wide comprehensive public facility services. Public policies in the Kern County General Plan require development to address economic deficiencies in public services and facilities costs. Therefore, the proposed project's impacts on public facilities are potentially significant and will be evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XVI. Recreation

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### RESPONSES:

- (a) The on-site workforce at its peak is estimated to be approximately 800 individuals with an average construction-related on-site workforce of 400 individuals. These workers would not have time to visit any local parks or recreation facilities during the workday. Further, few workers are expected to relocate to this area temporarily while the construction is underway, and there would be little or no impact on local recreational resources after work hours. Operation of the project would require approximately five employees for maintenance and monitoring activities, but they would likely be drawn from the local labor force and would commute from their existing permanent residences to the project site during those times. However, even if the maintenance/monitoring employees were hired from out of the area and relocated to northwestern Kern County, the addition of any such families to the project area would not result in a substantial increase in the number of users at local parks or recreational facilities. As a result, there would not be a detectable increase in the use of existing neighborhood or regional parks or other recreational facilities. Therefore, no deterioration of any such facilities would occur with project implementation. No impact would occur, and no further analysis in the EIR is warranted.
- (b) As discussed in impacts to Population and Housing, the proposed project would not result in a substantial increase in population and thus would not require the construction or expansion of recreational facilities. The proposed project does not include or require the construction of new or expansion of existing recreational facilities, and there are no recreational facilities on the project site that would be affected. No impact would result, and no further analysis in the EIR is warranted.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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## XVII. Transportation and Traffic

Would the project:

- |  |                                     |                          |                                     |                          |
|--|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Result in inadequate emergency access?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### RESPONSES:

- (a) The project would require an amendment to the Kern County General Plan Circulation Element to remove road reservations including sections and mid-section lines in and around the project site (see **Figure 1-12**). This amendment to the General Plan Circulation Element will be evaluated in detail in the EIR.

Regarding construction traffic, an undetermined volume of large truck trips would be generated, with numbers varying depending on the phase of construction. Further analysis in the EIR is required to determine whether construction traffic could disrupt normal traffic flows or otherwise conflict with the County’s roadway performance policies and programs. During operation of the project, the project would only have five full-time employees, who would access the site with personal vehicles using local roadways and state highways that can readily accommodate such minor volumes of vehicle traffic. Ongoing maintenance and periodic repair are also anticipated to produce negligible traffic impacts and would not conflict with any County plans or programs pertaining to roadway performance. These potential impacts on the local roadway system from construction-related vehicle trips and the project’s operational traffic on the area roadway system will be further evaluated in the EIR. Impacts would be potentially significant. Additionally, temporary access roads may be constructed during the construction phase of the project but would not impact the performance of the existing roadway network.

There are no dedicated pedestrian or bicycle facilities in the immediate vicinity of the project site or along the surrounding roadways. Due to the rural nature of the project area, pedestrian and bicycle traffic is extremely limited. The project site is not located along an existing bus route, and no bus stops exist on the roadways likely to be used during construction and operation. The project would not house residents or employees, and therefore, would not have characteristics that would influence alternative means of transportation.



- (b) CEQA Guidelines Section 15064.3, subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts are primarily focused on projects within transit priority areas and shifts the focus from driver delay to reduction of vehicular GHG emissions through creation of multimodal networks, and creation of a mix of land uses that can facilitate fewer and shorter vehicle trips. Vehicle miles traveled (VMT) is a measure of the total number of miles driven for various purposes and is sometimes expressed as an average per trip or per person. Construction traffic would be temporary and would not permanently affect VMT characteristics in this part of Kern County or elsewhere. Long-term, operational traffic would be limited, with a small work force of approximately five full-time equivalent employees. It is not known where the employees would live or how long their commuting trips would be. According to technical guidance issued by the Office of Planning and Research, projects generating 110 or fewer daily vehicle trips may be presumed to have a less-than-significant impact involving VMT. Since the project is expected to require five full time employees during project operations, the project would result in a less than significant impact involving VMT. Regardless, a traffic generation assessment would be completed to further analyze the operational VMT characteristics of the project is required to determine whether the project is considered a “low VMT” project due to small daily traffic volumes alone, or whether more extensive analysis is warranted. Impacts are expected to be less than significant, however an assessment of the project’s VMT characteristics will be provided in the EIR to ensure consistency with state and local guidance.
- (c) The proposed project site and surrounding areas would be accessible through highways such as I 5 and local roads such as Twisselman Road and Lost Hills Road. There is the potential for construction traffic to occur on these access roads, and further analysis would be required in the EIR and in a traffic generation assessment.

No new roadway design or features (i.e., sharp curves, dangerous intersections, or other hazardous features) would be required that could result in transportation-related hazards or safety concerns. The new access road and internal site access roads must be designed in accordance with the County’s street standards that assure safe ingress/egress. The project buildings and other structures would be set back from roadways as required by the Kern County Zoning Ordinance. Given these considerations, significant impacts related to increased hazards are not anticipated to occur; however, additional analysis will be included in the EIR.

- (d) The project site and surrounding areas would be accessible through highways such as I-5 and local roads such as Twisselman Road and Lost Hills Road. Emergency vehicle access would be maintained at all times during construction activities, and appropriate detours would be provided should there be partial road closures. Operation of the proposed project would not adversely impact emergency access routes. There would be a total of five full-time employees working at the project site during operation activities. The number of daily trips from the five full-time employees would have a minimal effect on traffic volumes at the project site and surrounding areas. However, a traffic generation assessment will be conducted as part of the proposed project. Although impacts would likely be less than significant, this issue will be further evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
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### XVIII. Tribal Cultural Resources

Would the project:

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register or historical resources as defined in Public Resources Code section 5020.1(k), or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii.	A resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### RESPONSES:

(ai-ii) Since the project site is undeveloped, there is a potential for tribal cultural resources to exist either on-site or on surrounding lands. Therefore, the proposed project has the potential to impact tribal cultural resources during site clearance and earthmoving activities. All tribes with possible cultural affiliation and interest within the project area have been notified pursuant to the requirements of Assembly Bill 52 and Senate Bill 18, and consultation with the potentially affected tribes will occur, as appropriate, between the County and the tribes. Further evaluation in the EIR is warranted to identify potential impacts to tribal cultural resources and to formulate avoidance or mitigation measures, if applicable.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>XIX. Utilities and Service Systems</b>				
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

(a) **Wastewater Facilities.** The proposed project would generate a minimal amount of water during construction and operation activities. Workers on site during construction activities would have access to a portable toilet facility and wastewater would be disposed of at an off-site approved facility. During operation, wastewater generated would potentially be disposed of to an on-site septic tank. Soils on site are suitable for septic tanks (Ninyo & Moore 2022). The proposed project operations would have five full-time employees; thus, the proposed project operation would not generate a substantial amount of wastewater that would require or result in the relocation or construction of new or expanded municipal wastewater facilities. Therefore, impacts would be less than significant. However, this issue will be further evaluated in the EIR.

**Stormwater Facilities.** The proposed project would not expand or require new storm drainage facilities. The proposed project is unlikely to generate a significant increase in storm runoff because implementation of the proposed project would not introduce a substantial amount of impervious surfaces. A SWPPP would be prepared as part of the proposed project. Any storm drainage/detention



facilities that may be required would be minor in scale and located within the project site. Potential impacts from such facilities will be addressed in the response to the topic of Hydrology and Water Quality, Threshold (c). Impacts would be considered less than significant; however, this issue will be further evaluated in the EIR.

**Water Facilities.** During construction, a minimal amount of water would be used for drinking and cleaning for on-site construction workers. During project operation, water would be used to wash solar panels and dust suppression activities. Water would be obtained from on-site wells or delivered to the site. Potential impacts to groundwater resources resulting from on-site well production will be addressed in the response to the topic of Hydrology and Water Quality, Threshold (b). Additionally, a WSA will be prepared to determine if the proposed project would substantially decrease groundwater supplies or interfere with groundwater recharge. Impacts would be further evaluated in the EIR.

**Power, Natural Gas, and Telecommunication Facilities.** The proposed project would install a PV solar facility that would generate electrical energy to be transmitted, either via overhead or underground transmission lines, to a regional electrical facility. On-site telecommunication facilities may be installed to facilitate collection and transmission of meteorological data and data regarding solar arrays. Potential impacts of the installation of these telecommunication facilities is not anticipated to result in a significant impact. There would be no use of natural gas on site. Therefore, the proposed project would not otherwise generate the demand for or require or result in the relocation or construction of new or expanded off-site electric power, natural gas, or telecommunications facilities that would, in turn, result in a significant impact to the environment. Impacts would be less than significant; however, this issue will be further evaluated in the EIR.

- (b) The proposed project would require PV solar panel washing during operation. Water use for PV solar panel washing is not anticipated to exceed 20 acre-feet per year, and water usage during soil compaction and dust suppression activities is not anticipated to exceed 500 acre-feet per year during construction (2024). Water is anticipated to be obtained from on-site wells or delivered via truck from an off-site source(s). A water supply assessment will be completed for the project to analyze potential water sources and potential impacts to water supplies. This potentially significant impact will be addressed further in the EIR.
- (c) As stated above, portable toilets would provide for wastewater disposal during project construction, and no connection to a public system for wastewater treatment would be required. The proposed project's operations would only have five full-time employees, which would not generate a substantial amount of wastewater. Wastewater disposal would be done through septic tanks and/or portable toilets. The proposed project would not adversely impact existing wastewater treatment facilities, and impacts would be less than significant; however, this issue will be further evaluated in the EIR.
- (d) The proposed project would not generate a significant amount of solid waste from construction or operation activities. Nonhazardous construction refuse and solid waste would be either collected and recycled per the construction waste management plan or disposed of at a local Class III landfill, while any hazardous waste generated during construction would be disposed of at an approved off-site location. The closest Class III municipal landfill is the Shafter-Wasco Recycling & Sanitary Landfill, which is located 22 miles southeast of the project site. The Shafter-Wasco Recycling & Sanitary Landfill has a remaining capacity of 7,901,339 cubic yards, with an anticipated closure date of December 31, 2053 (CalRecycle 2022). Therefore, solid waste from the site would be transported to



this landfill for disposal. It is not anticipated that the amount of solid waste generated by the proposed project would exceed the capacity of local landfills needed to accommodate the waste. Therefore, impacts would be less than significant; however, this issue will be further evaluated in the EIR.

- (e) The proposed project's construction, operation, and decommissioning phases would generate solid waste. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. The proposed project would comply with the aforementioned regulations to reduce solid waste. Impacts are anticipated to be less than significant, but further analysis of how the proposed project would reduce solid waste would be discussed in the EIR.





	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>XX. Wildfire</b>				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

(a-d) The project site is not located within a state responsibility area (CAL FIRE 2007). According to CAL FIRE GIS data, the proposed project site is also not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2007). The nearest state responsibility area Very High Fire Hazard Severity Zone is located approximately 21 miles southwest of the project site. In addition, the proposed project would not impair emergency response or evacuation plans (see Hazards and Hazardous Materials section (f) and (g)), exacerbate wildfire risk and expose occupants to pollutants, require installation or maintenance of infrastructure that may exacerbate fire risk, or expose people or structures to slope instability or drainage changes as a result of the proposed project (see Geology and Soils and Hydrology and Water Quality section). In compliance with applicable fire code and building code requirements, construction and maintenance/operations managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on the project site. Project construction and maintenance/operations would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Further, a Fire Prevention/Safety Plan would be prepared prior to construction and implemented during construction and operation to safeguard human life, prevent personnel injury, preserve property, and minimize downtime due to fire or explosion. Fire protection measures would include fire prevention methods to prevent the inception of fires. The Fire Prevention/Safety Plan would also contain



notification procedures and emergency fire precautions consistent with the 2019 California Fire Code and Kern County Fire Code. Nonetheless, the proposed project involves the development of a solar energy generation and storage facility. The proposed project would include the construction of power transmission lines, inverters, roads, and an energy storage facility. Further analysis of how the proposed project would pose a risk for wildfires will be discussed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than Significant Impact	No Impact
<b>XXI. Mandatory Findings of Significance</b>				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESPONSES:**

- (a) The EIR’s biological, cultural, and tribal cultural resources sections will discuss specific project impacts on plants and wildlife including avian species and impacts to cultural and tribal cultural resources. The document will also evaluate the project’s contribution to cumulative biological, cultural and tribal cultural resources impacts and propose mitigation that will reduce the impacts to less than significant levels, where feasible. Impacts would be potentially significant.
- (b) The project has the potential to contribute to cumulatively significant aesthetics, air quality, biological resources, cultural resources, tribal cultural resources, greenhouse gas emissions, traffic, and wildfire impacts. Such impacts could occur during the construction phases and/or as a result of the fully built and operational project. The EIR will evaluate the project’s contribution to cumulative impacts in these and other areas. Impacts would be potentially significant.
- (c) The proposed project would not result in the long-term air pollutant emissions or noise sources that would adversely affect nearby sensitive receptors. The solar farm would not include any kinds of industrial processes or equipment that would generate hazardous substances or wastes that would threaten the well-being of people on- or off-site. However, short-term construction activities could result in temporary increases in pollutant concentrations and potentially significant off-site noise impacts. Pollutants of primary concern commonly associated with construction-related activities



include toxic air contaminants gaseous emissions of criteria pollutants, and fugitive dust. Within the project area, the potential for increased occurrences of Valley Fever is also of concern. Human health impacts from the short-term cumulative contribution to air quality impacts from project construction will be further evaluated in the EIR. Impacts would be potentially significant.



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