

Los Angeles County High Desert Project

Public Draft Initial Study / Mitigated Negative Declaration

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Acronyms and Abbreviations

AB	Assembly Bill
AC	alternating current
AIN	Accessor Identification Number
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
AVAQMD	Antelope Valley Air Quality Management District
AVUHSD	Antelope Valley Union High School District
BERD	Built Environment Directory
bgs	below ground surface
BMPs	best management practices
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CdTe	cadmium telluride
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CIS	copper indium diselenide
CMYC	Los Angeles County Challenger Memorial Youth Camp
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSI	California Solar Initiative
DC	direct current
DTSC	California Department of Toxics and Substances Control

EIR	Environmental Impact Report
EOP	Emergency Operations Plan
ESA	Environmental Site Assessment
ESA	Endangered Species Act
EVA	ethyl vinyl acetate
FEMA	Federal Emergency Management Agency
FIRM	Federal Insurance Rate Map
GaAs	gallium arsenide
GHG	greenhouse gas
GPS	global positioning system
GWP	global warming potential
HSC	Health and Safety Code
HUC	Hydrologic Unit Code
I-	Interstate
ICE	U.S. Immigration and Customs Enforcement
IS	Initial Study
LAC	California State Prison, Los Angeles County
LACEP	Los Angeles County Energy Program
LACFD	Los Angeles County Fire Department
LACNHM	Los Angeles County Natural History Museum
LEED	Leadership in Energy & Environmental Design
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MW	megawatt
MWh	megawatt-hour
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NHD	National Hydrography Dataset
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OHP	Office of Historic Preservation
OPR	California Governor's Office of Planning and Research
ppb	parts per billion

PPV	peak particle velocity
PRC	Public Resources Code
PV	Photovoltaic
QSD	California-Qualified Stormwater Pollution Prevention Plan Developer
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SGIP	Self Generation Incentive Program
Si	Silicon
SIP	State Implementation Plan
SMARA	Surface Mining and Recovery Act
SoCalGas	Southern California Gas Company
SR-	State Route
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
TACs	toxic air contaminants
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program

1 INTRODUCTION

1.1 Project Overview

The County is proposing to develop two 4-megawatt (MW) alternating current (AC) solar photovoltaic (PV) facilities on County-owned property located at 5300 West Avenue I, Lancaster, CA 93536 (Project site). The solar electricity generated by the proposed solar PV facilities would be fed to the electrical grid through two separate interconnections provided by Southern California Edison (SCE). This Initial Study (IS) addresses the potential physical environmental impacts of the proposed Project pursuant to the requirements of the California Environmental Quality Act (CEQA).

1.2 California Environmental Quality Act

CEQA applies to proposed projects initiated by, funded by, or requiring discretionary approvals from State or local government agencies. The proposed solar PV facilities constitute a “project” as defined by CEQA (Public Resources Code [PRC] Section 21065). The County of Los Angeles Department of Public Works is proposing to permit the facility designed by TotalEnergies and will therefore act as the “lead agency,” pursuant to CEQA Guidelines 15051.

In accordance with the CEQA Guidelines, the County of Los Angeles Department of Public Works has prepared this IS to evaluate potential physical environmental impacts of the proposed Project and to determine whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) should be prepared for the proposed Project. A MND is prepared for a project when an IS has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the Applicant before the proposed IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

The IS determined that implementation of the proposed Project could result in potentially significant impacts on the environment. However, as shown in the environmental analysis contained in this IS, all of the potentially significant impacts associated with the proposed Project could be reduced to less than significant levels with implementation of mitigation measures. As a result, the analysis in the IS concludes that an MND is the appropriate level of CEQA analysis for the proposed Project.

The IS includes five primary sections:

- **Section 1, *Introduction*:** Provides an introduction to the proposed Project, information about the contents of the IS, details about the lead agency, and a general description of the Project site and the environmental setting.
- **Section 2, *Project Background*:** Provides a description of the proposed Project including a description of short-term, temporary construction activities and long-term operational activities.
- **Section 3, *Initial Study Checklist*:** Consists of summary level information about the lead

agency, Project site, and surrounding uses. This section also summarizes the proposed Project and provides a checklist of resources areas that could be potentially affected.

- **Section 4, *Environmental Checklist*:** Includes a discussion of existing conditions, an analysis of the potential environmental impacts, and a description of mitigation measures to reduce potentially significant impacts to a less than significant level.
- **Section 5, *References*:** This section provides a complete list of references supporting and/or incorporated into the environmental analysis. This document also includes appendices that contain the air quality and greenhouse gas (GHG) emissions calculations (see Appendix A); the habitat assessment (see Appendix B); the cultural resources desktop analysis and records search (see Appendix C); the geotechnical investigation (see Appendix D); and a Phase I Environmental Site Assessment (ESA) (see Appendix E).

The focus of this analysis is the potential for physically environmental impacts to occur in association with construction of the proposed solar PV facility. Once constructed, the operation of the facility would generally be passive with limited maintenance visits and associated activities (see Section 2.4, *Operations and Maintenance*).

1.3 Project Location

The Project site includes an approximately 52-acre County-owned property located at 5300 West Avenue I, Lancaster, CA 93536-8312 (see **Figure 1**). The Project site is undeveloped and is generally located south of West Avenue I between 50th Street West and 60th Street West, on Assessor Identification Number (AIN) 3203-014-901 (see **Figure 2**). The Los Angeles County Challenger Memorial Youth Camp (CMYC) is located immediately to the north and the California State Prison, Los Angeles County (LAC) is located immediately to the south. The Project site is also located in close proximity to the Mira Loma Detention Center to the northwest. An existing solar PV facility that was constructed in 2011 is located between the Project site and the Mira Loma Detention Center.

1.4 Environmental Setting

1.4.1 Project Site

The Project site is undeveloped and generally dominated by non-native Mediterranean grass (*Schismus arabicus*) and other non-native herbaceous species, which appear to be mown regularly for fire control (see Section 4.4, *Biological Resources*). Some scattered, low-growing shrubs occur within the Project site as well as non-native deciduous trees are present along the northern boundary of the Project site. Dirt roads traverse the site, which may be used to patrol the perimeter of the adjacent correctional facilities.

Aside from these occasional patrols, the Project site is not used by for operations on the adjacent properties. The topography within the Project site is relatively flat (see Section 4.7, *Geology and Soils*). One man-made drainage (Drainage C) borders the Project site to the north. As with the other drainages in the area, this drainage appears to be regularly maintained to create a V-ditch shape and to clear out vegetation and debris (see Section 4.10, *Hydrology and Water Quality*).



Photograph 1. The Project site is undeveloped and generally dominated by non-native Mediterranean grass. Additionally, dirt maintenance roads traverse the site.

The Project site and adjacent properties are located on the former War Eagle Field, a training airfield for British, Canadian, and U.S. army cadets that operated between 1941 and 1945 (see Section 4.5 *Cultural Resources and Tribal Cultural Resources*).

1.4.2 Adjacent Properties

As previously described, the Project site is located immediately adjacent to the south of the CMYC, immediately adjacent to the north of LAC, and to the southeast of the Mira Loma Detention Center.

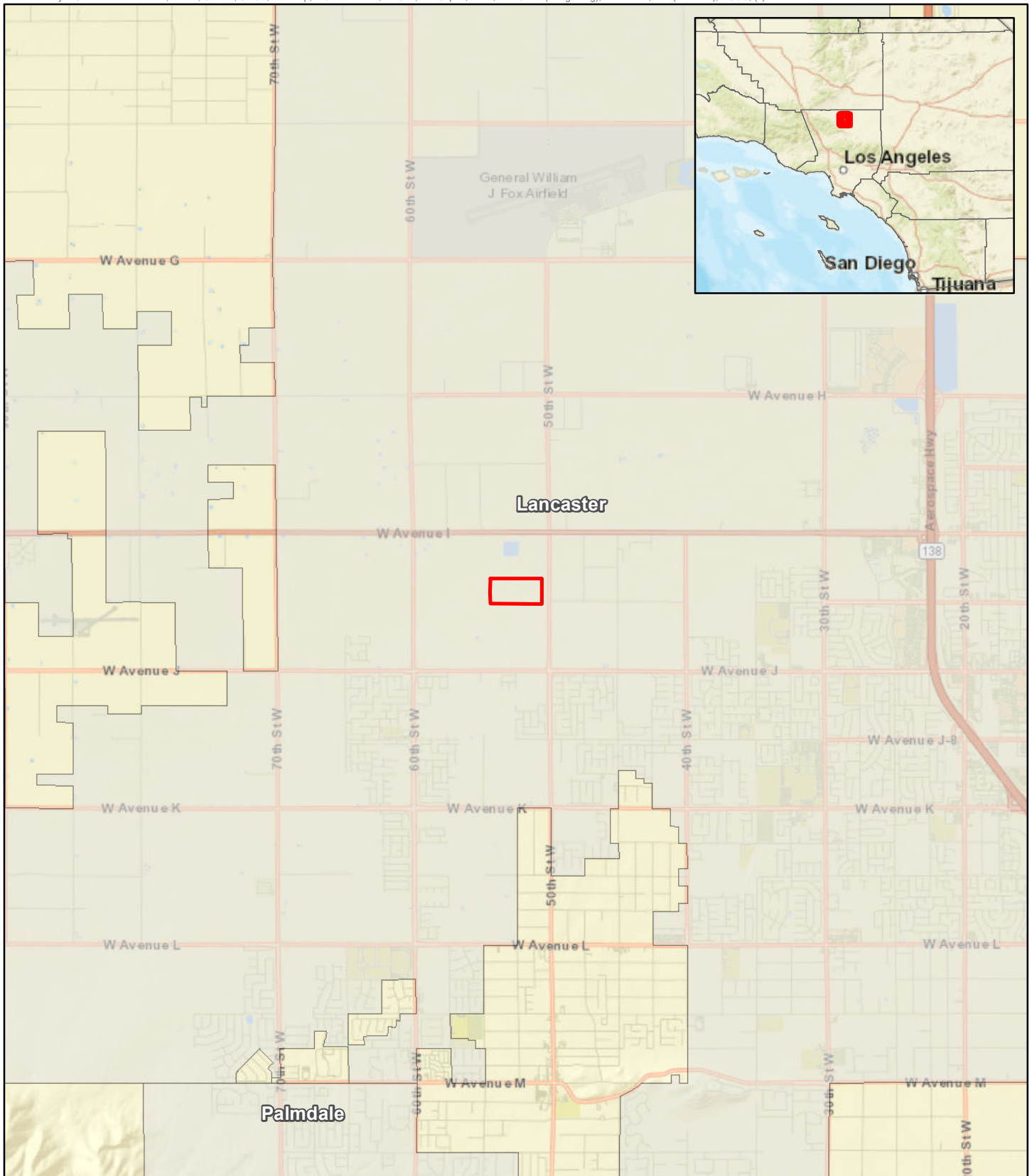
CMYC consists of an approximately 56-acre campus, with one- to two-story buildings arranged in an oval around open space in the middle. The CMYC was once the largest of several camps operated by the County Probation Department, with the goal of providing treatment, care, custody, and training for the rehabilitation of delinquent minors as wards of the Juvenile Court for an average period of 20 weeks. However, in May 2022, Los Angeles County established a multi-million dollar capital project funds to repurpose the CMYC as a voluntary job training campus with housing for young people who were former foster youth, involved with the juvenile justice system, or homeless (OurWeekly Los Angeles 2022). The Los Angeles County Animal Care and Control Facility is located immediately adjacent to the north of CMYC.

LAC is approximately 262 acres in size and provides short- and long-term housing and services for men convicted of felonies and classified as minimum, high-medium, and maximum custody inmates. Currently LAC has an inmate population of over 3,000 people (California Department of Corrections and Rehabilitation 2022).

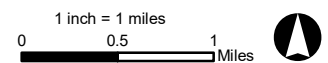
The Mira Loma Detention Center is owned by the County and run by the Los Angeles County Sheriff's Department. The U.S. Immigration and Customs Enforcement (ICE) previously housed detainees at the Mira Loma Detention Center under an Intergovernmental Service Agreement between ICE and the Los Angeles County Sheriff's Department (ICE 2012). The Mira Loma Detention Facility was operated in this capacity until 2012, but has not housed inmates since that time, and is currently vacant (County of Los Angeles Sheriff Civilian Oversight Commission 2018). The facility is now envisioned for future as a campus-style female detention facility (County of Los Angeles Sheriff Civilian Oversight Commission 2018). High Desert Recovery Services, a public rehabilitation center, is located to the south between the vacant Mira Loma Detention Center and LAC.

Two solar PV facilities were constructed to serve the needs of these facilities. A 1.130-MW direct current (DC) system, constructed in 2011, is located to the northwest of the Project site between CMYC and the Mira Loma Detention Center. The physical environmental impact associated with this facility were evaluated in the *Initial Study / Mitigated Negative Declaration for the County of Los Angeles Solar Energy Project* (2011). Additionally, another 1.130-MW DC system was constructed in 2012 along the western boundary of LAC. The physical environmental impact associated with this facility were evaluated in the *Initial Study / Mitigated Negative Declaration for the California State Prison, Los Angeles County (LAC) Solar Power Generation Facility Project* (2012).

Other development within the surrounding vicinity includes the County-owned General William J. Fox Airfield, located approximately 2.5 miles to the north. Single-family residential and other urban development associated with the City of Lancaster is located to the south of West Avenue J and to the west along State Route (SR-) 14. Additional information related to regional land use and zoning is provided in Section 4.11, *Land Use and Planning*.



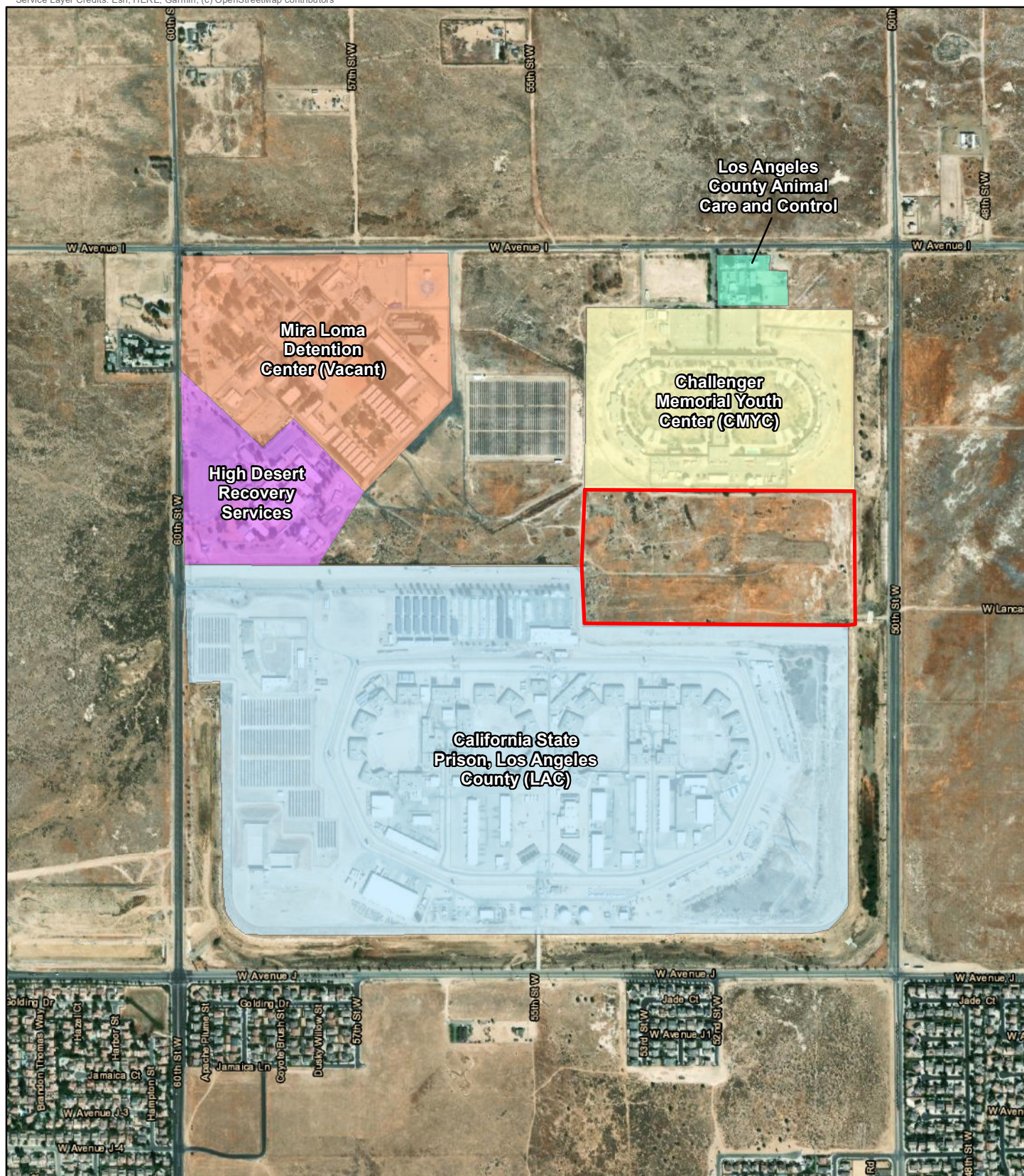
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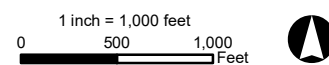
 Project Site

FIGURE 1

Regional Location
Los Angeles County High Desert Project
Lancaster, CA



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Project Site

FIGURE 2

Project Site
Los Angeles County High Desert Project
Lancaster, CA

2 PROJECT BACKGROUND

2.1 Background / Purpose and Need

2.1.1 Project Background

The Project site is located within the Antelope Valley, which comprises the western edge of the larger Mojave Desert. Utility companies, public and private electric providers, and individual users have proposed and constructed various solar energy projects in the Mojave Desert, which provides ideal conditions for the capture of solar energy. For example, as previously described, two 1.130-MW DC solar facilities were recently constructed in 2011 and 2012 to offset energy use at CMYC and the Mira Loma Detention Center as well as LAC (refer to Section 1.4.2, *Adjacent Properties*).

The County Energy and Environmental Policy, adopted by the Los Angeles County Board of Supervisors on January 16, 2007, sets forth guidelines for the development and enhancement of energy conservation and environmental programs within County departments. This policy is consistent with the California Governor's Green Building Executive Order (S-20-04) and a later Green Building Action Plan Executive Order (B-18-12), signed in April 2012 as well as the State Energy Action Plan (2003) and Energy Action Plan Update (2008). Following the completion of the proposed Project, the County would further reduce the net amount of purchased electrical energy that may otherwise be generated with non-renewable resources such as gas, oil, and/or nuclear sources. The use of solar energy would reduce air pollution and GHG emissions generated by the burning of fossil fuels and/or the use of water at central power generation plants.

2.1.2 Regulatory Background for Solar Energy Projects

California's Renewables Portfolio Standard (RPS) was established in 2002 by Senate Bill (SB) 1078 with the initial requirement that 20 percent of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50-percent RPS by 2030. SB 350 includes interim annual RPS targets with 3-year compliance periods and requires 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60 percent by 2030 and requires all the State's electricity to come from carbon-free resources by 2045.

The CPUC implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities, electric service providers, and community choice aggregators. The California Energy Commission (CEC) is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities.

The CPUC also provides a number of key incentives for the development of distributed power generation, including the California Solar Initiative (CSI; SB 1) and the Self Generation Incentive Program (SGIP). The CSI program goal was to install 1,940 MW of customer-sited solar capacity, and, along with other statewide solar programs, transition the solar industry to a point where it could be self-sustaining without subsidies. The market for solar generating equipment in California grew at a rapid pace from the beginning of the CSI program and has continued to grow since the program closed. California installed enough solar capacity to achieve the CSI program goal prior to December 2016. By the end of 2021, approximately 11,106 MW of customer-sited solar

projects had been installed at over 1.26 million locations within the service territories of the state's three major investor-owned utilities (CPUC 2022a). The CPUC's SGIP provides incentives to support existing, new, and emerging distributed energy resources. SGIP provides rebates for qualifying distributed energy systems installed on the customer's side of the utility meter (CPUC 2022b).

The Countywide Energy and Environmental Policy was the County's response for the need for energy conservation and reduction in GHG emissions. The policy provides guidelines for developing energy conservation and environmental protection programs within existing County departments. It also directs the County to track its GHG emissions with the California Climate Action Registry. Under this policy, the Los Angeles County Energy Program (LACEP) provides financing for energy efficiency or solar improvements; the County's Capital Project Program requires all new County buildings (>10,000 square feet) to be Leadership in Energy & Environmental Design (LEED) Certified at the Silver Level; and the County has pledged to be a "Cool County" by establishing a GHG emissions footprint, developing a GHG mitigation plan, working with local entities to reduce regional GHG emissions by 80 percent by 2050, and supporting Federal legislation to raise Corporate Average Fuel Economy (CAFE) standards. In addition, the County has implemented various internal programs on energy conservation, water conservation, waste reduction and recycling, green purchasing and contracting, and alternative fuel vehicle purchasing. On January 13, 2009, the Los Angeles County Board of Supervisors provided direction to create an action plan for developing a Comprehensive Renewable Energy Program to develop renewable energy projects on existing County facilities and properties. The County has since adopted a Renewable Energy Ordinance (2017) as well as Public Works Renewable Energy Master Plan (2020). The County has also adopted the Unincorporated Los Angeles County Community Climate Action Plan 2020 and is the process of preparing the 2045 Los Angeles County Climate Action Plan (County of Los Angeles 2022).

Aside from its programs to comply with the RPS, SCE promotes self-generation by customers. Self-generation is intended to provide emergency generation during utility power outages; meet on-site needs for steam or another form of thermal energy; generate power during peak demand when SCE power is more costly; utilize clean energy and reduce pollution; and improve the reliability and power quality of SCE's system. Self-generation also allows net metering that provides the customer with credit for excess electricity that is produced on-site.

2.2 Project Design

The proposed solar PV facility is divided between two separate 4-MW AC arrays, referred to as "Mira Loma" on the western half of the Project site and "Challenger" on the eastern half of the Project site. Each of the arrays would be fed to the electrical grid through two separate interconnections provided by SCE (see Figure 3). The exact configuration and design of the solar PV facility is currently unknown and would be finalized under consultation between the County and its solar engineering consultant, TotalEnergies. Project design assumptions are generally based on the existing solar PV facilities located in the immediate vicinity of the Project site, which were constructed in 2011 and 2012 (refer to Section 1.4.2, *Adjacent Properties*).

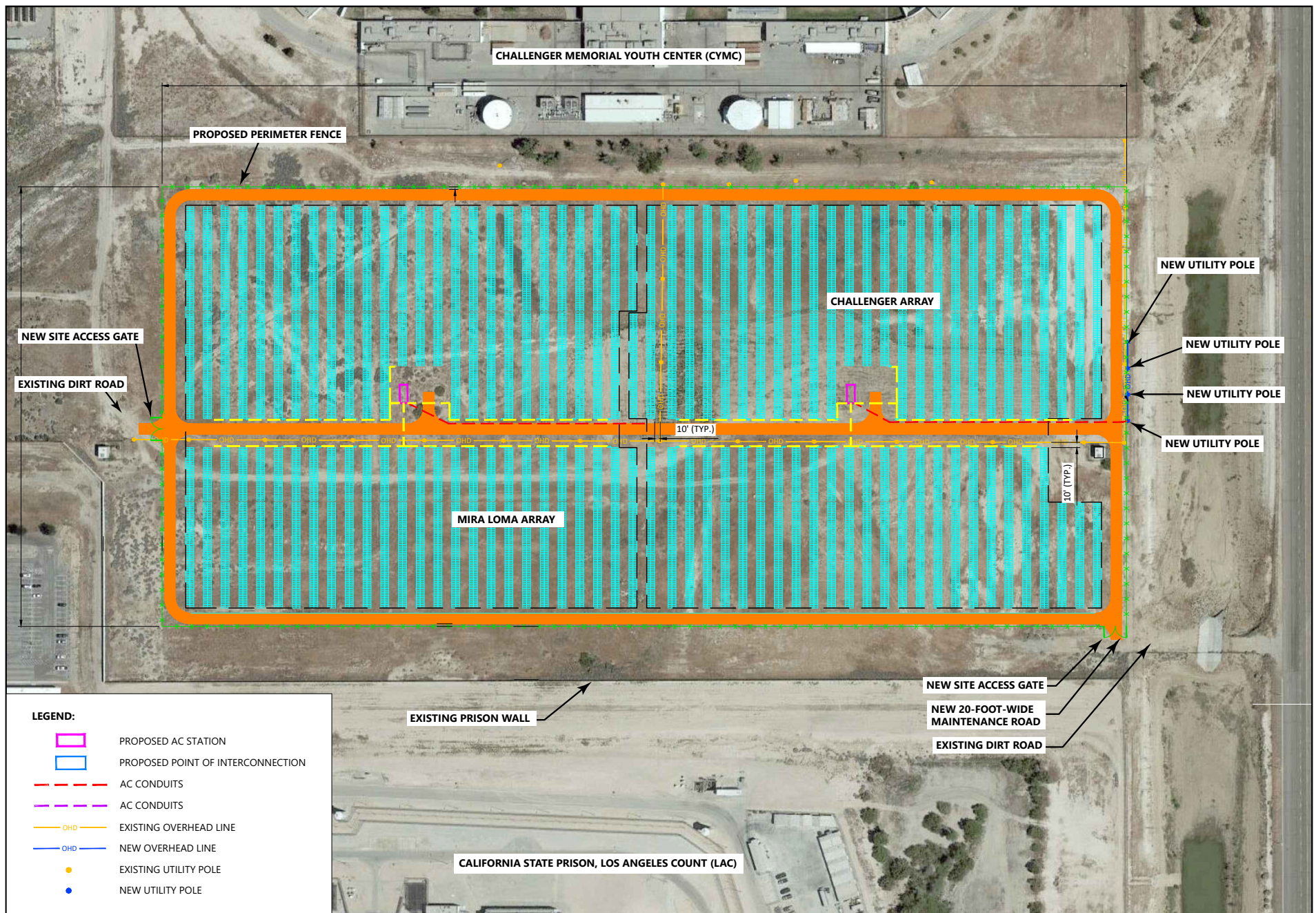


FIGURE 3

Proposed Two 4-MW AC Solar PV Facilities

The proposed Project would generally consist of the following components: (1) solar PV panels; (2) mounting structures; (3) power conditioners¹; and (4) site access and fencing. Each of these components of the proposed Project are described in further below.

2.2.1 Solar PV Panels

A solar cell is the smallest functional unit of electrical generator, which utilizes solar energy as its input energy that is capable of converting solar energy to electricity. Solar panels are a collection of solar cells that amplify, protect, and direct electricity.

The proposed Project would use one of the following types of solar cells:

- Silicon (Si), including single-crystalline Si, multicrystalline Si, and amorphous Si;
- Polycrystalline thin films, including copper indium diselenide (CIS), cadmium telluride (CdTe), and thin-film silicon; or
- Single-crystalline thin films, including high-efficiency materials such as gallium arsenide (GaAs).

These individual solar cells would be connected together to form solar PV panels. The most common solar PV panels are made of silicon and are described below:

- Monocrystalline modules use solar cells that are cut from a single crystal of silicon into wafers and have a smooth texture.
- Polycrystalline (or multicrystalline) modules use solar cells that are cut from a block of silicon and have a speckled reflective surface.
- Flexible Thin Film modules are made by placing a thin film of amorphous (non-crystalline) silicon on a variety of surfaces (glass, plastic, or metal).
- String Ribbon modules use ribbons of silicon that are formed by strings from molten silicon.
- Sheets refer to solar cells that are painted or printed on flexible plastic sheets.

Solar panels would incorporate anti-glare technologies. It is anticipated that the proposed Project would use flat-plate solar PV panels, which consist of: a transparent cover of plastic or glass; an encapsulant material to protect the solar cells; a rear layer; and a frame. The front cover would have an anti-reflection coating and/or texturing to reduce the reflection of sunlight and keep the light within the cells. The encapsulant would consist of thin sheets of ethyl vinyl acetate (EVA) that are inserted between the solar cells and the top and rear surfaces to bind the module. The rear layer is a thin polymer sheet and an aluminum frame would provide structural support.

Panel sizes may be manufactured into various shapes and sizes but are commercially available as rectangular panels with widths ranging from 1 to 4 feet and lengths ranging from 2 to 6 feet. The PV panels would be connected in series (to increase voltage) or in parallel (to increase current output). The number of panels on each of the arrays would depend on the power provided

¹ "Power conditioners" control and condition electric power and may be used to convert a direct current (DC) into an alternating current (AC), to change voltage or current magnitude, or to change the frequency of an alternating current.

by each panel and the connection between panels. However, it is anticipated that each array could include as many as approximately 10,000 or more individual solar PV panels (refer to Figure 3).

2.2.2 Mounting Structures

The solar PV panels would be placed on mounting structures, which may include fixed, passive tracking, or active trackers. The mounting structures to be used would ultimately be dependent upon the design configuration preferred by the County and its solar engineering consultant, TotalEnergies.

Fixed mounts would tilt the panels at a fixed angle for maximum sun exposure. Passive and active trackers have single- or dual-axis mounting arms that adjust the solar PV panels to face the sun directly from early morning to late afternoon and through the different seasons.

The solar PV panels may either be ground-mounted using racks or A-frames, or pole-mounted using individual or multiple poles. Ground-mounted racks are placed upon the ground surface on either gravel or graded soil. Larger solar panels may require pole-mounting, which involves the use of metal pipes that are secured into the ground and may require below-grade, concrete foundations.

The height of the solar PV panels would depend on the selected design, the need to avoid shading from structures or vegetation around the perimeter, and the need to keep wildlife away from the panels. Given the lack of shade from trees or vegetation on-site, as well as the distance between the Project site and adjacent buildings that could cast shadows, it is expected that the solar PV panels would have a low profile.

2.2.3 Power Conditioners

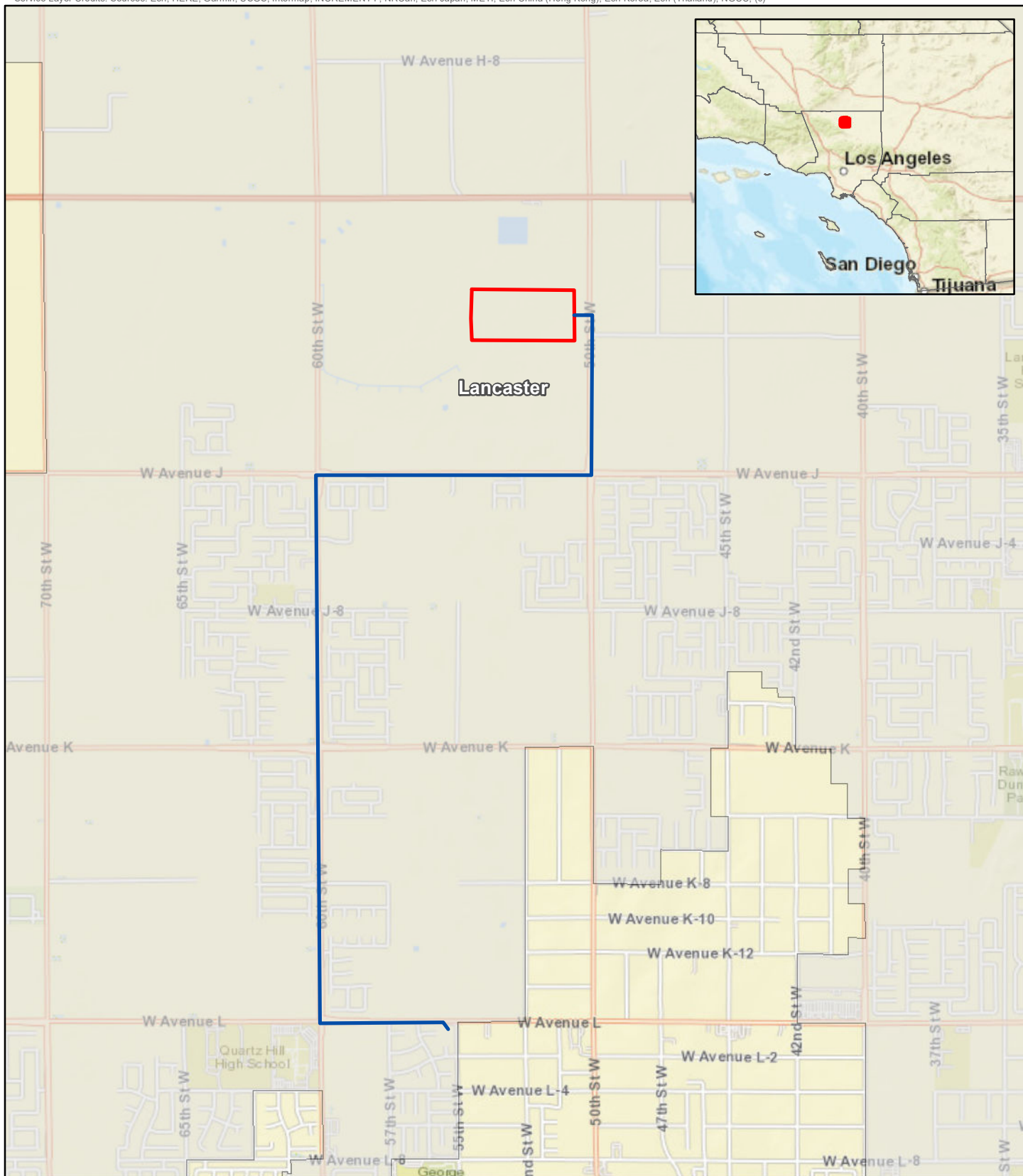
To transfer the electricity generated by the solar PV panels, power conditioners are needed, which include regulators and inverters. Regulators control the voltage and current output at a constant level to maximize output. Inverters convert the DC generated by the solar array into AC in order to match the electricity in the electrical grid. Switchgear, necessary to safely transfer the electricity to the utility network would be installed at each of the two interconnections provided by SCE.

2.2.4 Grid Connection

From the inverters, electrical conduits would run overhead toward the two interconnection points provided by SCE, located approximately 400 feet east of the Project site. Power lines strung on new utility poles would be used to connect to two interconnection points (refer to Figure 3).

2.2.5 Interconnect and Conduction

Additionally, the proposed Project would involve the reconductoring of up to 3.8 miles of existing transmission lines connecting the proposed SCE interconnection point with the Quartz Hill substation, located approximately 2.1 miles south of the Project site. Reconductoring would upgrade these transmission lines to carry more current associated with the proposed Project. Construction activities would involve the replacement of existing overhead powerlines and/or trenching of new underground powerlines along 50th Street West, West Avenue J, 60th Street West, and West Avenue L (see Figure 4).



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- Proposed Line Reconductoring
- Project Site

FIGURE 4

Proposed Line Reconductoring
Los Angeles County High Desert Project
Lancaster, CA

2.2.6 Access Roads

Direct access to the solar PV facility would be provided from 50th Street West. Existing dirt roads would provide access to the Challenger array at the southwest corner of the solar PV facility and the Mira Loma array on the western side of the solar PV facility. A 20-foot-wide dirt road would be constructed along the perimeter of the solar PV facility to facilitate access to the solar PV panels (refer to Figure 3).

2.2.7 Fencing

Although the surrounding CMYC and LAC facilities are fenced, the Project site is not fenced. In order to ensure the security of the solar PV facility, chain-link fencing would be installed around the perimeter Project site. It is anticipated that approximately 5,355 linear feet of fencing would be required.

2.3 Construction Activities

2.3.1 Construction Staging

The construction staging area would be located within the approximately 52-acre Project site and used to store construction equipment and materials throughout the duration of construction activities. Heavy construction equipment would be delivered to the Project site and stored there for the duration of construction activities. Construction materials delivery would occur throughout the duration of construction. Based on existing solar PV facilities located in the immediate vicinity of the Project site, it is anticipated that there could be up to 20 vendor truck trips to the Project site per day.

During construction, up to one construction trailer (approximately 12-foot by 60-foot) and three storage units (approximately 12-foot by 25-foot) may be placed on the site. Temporary power lines would be installed to provide power to these trailers, as necessary. Portable toilets would be also provided on the Project site.

2.3.2 Site Preparation and Grading

The terrain on the Project site is generally flat, but is not adequately level for the mounting of the solar facilities. Therefore, vegetation clearing and surface grading would be required. After the site has been grubbed and cleared of vegetation and debris, minor grading for the internal dirt road(s), building pad, and mounting structures would be conducted. Grading would include the removal of undulations in the terrain wherever required, in order to ensure the proper alignment and operation of the solar energy facilities.

Grading activities are assumed to occur over the course of 2 months each, with no more than a maximum grading disturbance of 5 acres per day. While a grading plan has not been prepared for the proposed Project it is anticipated that soils could be balanced on-site. Therefore, heavy haul truck trips associated with grading activities would be limited to miscellaneous debris removal. For example, the Geotechnical Investigation prepared for the proposed Project, identified an area of debris (e.g., asphalt debris, grout/concrete debris, tire fragments, and metal debris) in the northeast corner of the Project site. This debris, which is associated with the area's former use as an airfield, is not suitable for the proposed ground mounted solar array foundations or surface equipment pads. This debris would be excavated and removed from the Project site

and replaced with engineered fill soils (Moore Twining 2021; see Appendix D).

The proposed project would be required to comply with Antelope Valley Air Quality Management District (AVAQMD) Rule 403, Fugitive Dust, as a standard condition, which requires implementation of a Dust Control Plan. The Dust Control Plan would include strategies such as minimal grading and ground disturbance, and application of soil stabilizers. It is assumed that up to two water truck trips would be required per day during grading and site preparation activities.

2.3.3 Solar PV System Installation

The construction of the solar PV facility would include installation of the solar PV panels, mounting structures, and associated equipment. System installation would begin with teams installing the mounting structures. This would be followed by the solar PV panels, regulators and inverters, and buried electrical cables. The exact design and configuration under consultation between the County and its solar engineering consultant, TotalEnergies.

Some additional earthwork, including grading, fill, compaction, and installation of erosion control features may be required to accommodate the placement of solar PV panels, mounting structures, access roads, and fencing. Concrete may be required for the mounting structures. Concrete would be produced at an off-site location by a local provider and transported to the Project site by concrete truck.

Construction would also require trenching and installation of utility poles for electrical conduits to connect the solar PV panels to the inverters, and the inverters to the interconnections provided by SCE. The exact alignment of the trenching and the configuration of utility poles is unknown. However, it is assumed that the electrical conduits would require minor trenching in order to be placed underground and/or footings for utility poles would need to be constructed where above-ground electrical lines will be used.

Wastes that would be generated during construction may include cardboard, wood pallets, copper wire, scrap steel, common trash, and wood wire spools. Hazardous waste would not be generated during construction of the proposed Project. However, field equipment used during construction would contain various hazardous materials such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, and other petroleum-based products contained in construction vehicles.

Control of erosion during construction would be determined by a California-Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer (QSD) (see Section 4.10, *Hydrology and Water Quality*).

2.3.4 Construction Schedule

The construction schedule for the proposed Project is largely driven by the interconnection date provided by SCE. The proposed Project was originally scheduled to begin construction in 2022 with operation beginning in 2023. However, SCE recently delayed the interconnection date until 2025. Therefore, the proposed Project is planned for construction in 2026, with the facility in operation by 2027.

2.3.5 Construction Workforce

The proposed Project would generate approximately 35 jobs during the construction phase,

including on-site workforce, which would consist of laborers, various skilled trades, supervisory personnel, support personnel, and construction management personnel.

2.4 Operations and Maintenance

The proposed solar PV facility would not require full-time, on-site employees. It is expected that annual visits to the facility would be required for inspection, with additional as needed visits for maintenance and intermittent repairs. Maintenance of the solar PV facility would be limited to occasionally washing of the solar PV panels using a truck with a water tank and sprayer approximately two times per year, depending on the accumulation of dust on the panel surfaces. Therefore, no connections to the existing groundwater well that currently provides water to the adjacent County facilities would be required.

As previously discussed in Section 1.4.1, *Project Site*, vegetation on the Project site is minimal. Nevertheless, annual vegetation clearing at the site of the solar facilities may be required to ensure that weeds do not interfere with the mounting structures or other solar-associated facilities.

2.5 Permits and Approvals Required for the Project

Solar projects above 50 MW require approval from the CEC, while smaller projects are subject to approval by local authorities. Since the proposed solar PV facility would have less than 50 MW of capacity and would be located on County-owned land, CEC approval would not be required. Therefore, the County of Los Angeles is the Lead Agency for the proposed Project and no other agencies have jurisdiction or approval authority over the construction or operation of the proposed Project.

Additionally, the proposed Project would require the execution of a “Generation Facility Interconnection Agreement” between the County and SCE.

3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with CEQA Guidelines Section 15063(d)(3) to determine if the proposed Project would result in any significant impacts to the environment.

1. Project Title

Los Angeles County High Desert Project

2. Lead Agency Name and Address

County of Los Angeles
ISD-Energy and Environmental Service
Energy Management Division
1100 N. Eastern Avenue
Los Angeles, CA 90063

3. Contact Person and Phone Number

Scott Manchan
ISD-Energy and Environmental Service
Energy Management Division
Office: (562) 955-3915
E-mail: SManchan@isd.lacounty.gov

4. Project Location: The Project site is located on a County of Los Angeles-owned property within the City of Lancaster. The site encompasses approximately 52 acres of undeveloped land located south of West Avenue I between 50th Street West and 60th Street West, on AIN 3203-014-901.

5. Project Sponsor's Name and Address

Solar Star LA County High Desert, LLC
c/o TotalEnergies Distributed Generation USA, LLC
1201 Louisiana Street, Suite 1800,
Houston, TX 77002
Attn: Managing Counsel, Distributed Generation

6. Los Angeles County Supervisory District

District 5

7. General Plan Designation

P (Public Use and Semi Public)

8. Zoning

P (Public Use and Semi Public)

9. Description of Project

The County is proposing to develop two 4-MW AC solar PV facilities on County-owned property located at 5300 West Avenue I Lancaster, CA 93536. The proposed Project would consist of the following components: (1) solar PV panels; (2) mounting structures; (3) power conditioners; and (4) site access and fencing. The solar electricity generated by the proposed solar PV facility would be fed to the electrical grid through two separate interconnections provided by SCE.

10. Surrounding Land Uses and Setting

CMYC is located immediately to the north and LAC is located immediately to the south. The Project site is also located in close proximity to the Mira Loma Detention Center to the northwest. Other development within the surrounding vicinity includes the County-owned General William J. Fox Airfield, located approximately 2.5 miles to the north. Single-family residential and other urban development associated with the City of Lancaster is located to the south of West Avenue J and to the west along SR-14.

11. Other Public Agencies Whose Approval is Required

N/A

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1?

If so has consultation begun?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code Section 21083.3.2). Information may also be available from the California Native American Heritage Commission's (NAHC's) Sacred Lands File (SLF) per Public Resources Code Section 5097.96 and the California Historical Resources Information System (CHRIS) administered by the California Office of Historic Preservation (OHP). Please also note that Public Resources Code Section 21082.3 (c) contains provisions specific to confidentiality.

13. Reviewing Agencies

N/A

14. Project Approvals

Los Angeles County Board of Supervisors

Environmental Resource Areas Potentially Affected

The proposed Project could potentially result in significant environmental impacts to the following environmental resource area(s) checked below. Section 4, *Environmental Checklist* provides a more thorough discussion and analyses of each of the environmental resource areas.

- | | | |
|--|--|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources and Tribal Cultural Resources | ☐ Energy |
| ☒ Geology and Soils | ☐ Greenhouse Gas Emissions | ☒ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Utilities and Service Systems |
| ☐ Wildfire | ☐ Mandatory Findings of Significance | |

Determination

On the basis of this Initial Study:

- ☐ 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 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL 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, no further environmental documentation is required.

Signature

Date

Printed Name

For

4 ENVIRONMENTAL CHECKLIST

4.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?	☐	☐	☐	☒
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experience from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1 Environmental Setting

As previously described, the Project site is located within the western half of the City of Lancaster, to the west of SR-14 (refer to Section 1.4.1, *Project Site*). Scenic resources within the City of Lancaster are defined unique visual features that provide attractive views either into or from the area (City of Lancaster 2009b). Major visual resources identified in the City's General Plan are topographic features, including Quartz Hill and San Gabriel Mountains to the south, Fairmont and Antelope Buttes to the southwest, Piute Ponds to the northeast, and Little Rock Wash to the east (City of Lancaster 2009b). The only one of these scenic features visible from the Project site are the San Gabriel Mountains, which are visible on clear days in the distant background. There are no scenic resources or vistas within the proposed Project site itself.

There are no officially designated scenic routes or highways within the Project site. Los Angeles County's Antelope Valley Area Plan (2015) identifies local roadways, which could potentially serve as scenic routes; however, the Project site would not be visible from these roadways. The nearest potential scenic routes include SR-14, located approximately 3 miles east of the Project site, and a segment of 60th Street West from Avenue M to Avenue K, located approximately 1.5 miles southwest of the Project site. The Project site is not visible from these routes due to distance and/or intervening development. Additionally, no other scenic byways, wild and scenic rivers, national parks, or other specially designated zones are located within 1-mile of the Project site.

The Project site is undeveloped and generally dominated by non-native Mediterranean grass and other non-natives in the herbaceous species, which appear to be mown regularly for fire control (see Section 4.4, *Biological Resources*). The Project site is surrounded by existing correctional facilities, with extensive chain link and barbed wire fencing, minimal landscaping, one- and two-story utilitarian buildings, and large surface parking lots. These adjacent facilities also include

additional sources of lighting from pole-mounted security lighting and vehicle headlights. Additionally, the Project site is located in close proximity to two 1.1302-MW DC solar PV facilities installed in 2011 and 2012. Each of these sites include an array of solar PV panels as well as associated, power lines, and power poles.

4.1.2 Project Impacts

a) Have a substantial adverse effect on a scenic vista?

No Impact. As discussed in Section 4.1.1, *Environmental Setting*, there are no scenic vistas provided by or located within the immediate vicinity of the Project site. The low-profile solar PV panels would be shorter than the existing utilitarian buildings and fencing adjacent to the Project site. As such, the construction of the proposed solar PV facility would not obscure or otherwise detract from the distant views of San Gabriel Mountains, which are the only scenic feature visible from the Project site and the immediate vicinity. Similarly, replacement of existing transmission lines along existing developed roadways as a part of the proposed reconductoring would obscure or otherwise detract from these distant views. Therefore, there would be no impacts related to scenic vistas and mitigation measures would not be required.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?

No Impact. There are no designated State scenic highways or other designated scenic resources near the Project site; the nearest designated highway is the Angeles Crest Highway, located approximately 30 miles to the south in Angeles National Forest (California Department of Transportation [Caltrans] 2019). Due to the distance of the Project site from existing and eligible state scenic highways, the proposed Project would have no impacts to scenic resources within a State scenic highway. It should also be noted that the proposed Project would not remove any trees within the Project site and would not affect any rock outcroppings or historic buildings, neither of which occur within the Project site.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experience from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. As described in Section 3, *Initial Study Checklist* and Section 4.11, *Land Use and Planning*, the Project site is zoned for P (Public Use and Semi Public). Given the disturbed nature of the Project site and its location immediately adjacent to existing correctional facilities, the existing visual quality of the Project site is very low. The proposed solar PV facility would be visible from the adjacent public road and could be visible in the distance from residential areas to the east of the Project site, but would generally be consistent with the visual character created by the existing correctional facilities (e.g., existing utilitarian buildings, overhead utility lines, chain link fencing, lighting etc.). Distant background views to the west would remain unobscured due to the low-profile nature of the proposed solar PV facility. Construction activities associated with the reconductoring of existing transmission lines would be visible along roadways where work would occur. However, impacts would be short-term and temporary and given the low

visual quality of the surrounding area, construction impacts would be less than significant. The existing transmission lines may be replaced with overhead or buried line. As previously described, overhead lines would be visible from nearby roadways and properties. However, the Project site and surrounding land uses are already characterized by long segments of existing overhead lines. The replacement of existing overhead lines and the construction of new lines would generally be consistent with the existing visual character. Impacts to the existing visual character of the site and public viewshed would be less than significant and no mitigation measures would be required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. As previously described, the Project site is surrounded by existing correctional facilities that provide nighttime lighting, including the tall pole-mounted security lights on the adjacent CMYC, LAC, and the Mira Loma Detention Center. In addition, vehicle headlights can be seen along West Avenue I and 50th Street West as well as within the expansive surface parking lots associated with the adjacent correctional facilities. These headlights also contribute to the existing nighttime lighting in the vicinity of the Project site.



Photograph 2. The Project site is located in close proximity to three correctional facilities, each of which have outdoor lighting along the perimeter fence line.

A potential for reflective glare impacts on neighboring facilities and persons may occur from the solar PV panels, depending on the technology used; glare could affect persons at neighboring facilities such as guards and other personnel at the State and County facilities. However, the selected technology would incorporate anti-reflection coatings or texturing to reduce reflection of sunlight and keep sunlight captured within the cells. In order to effectively minimize or eliminate glare impacts to prison guards on the ground and in guard towers. Therefore, the proposed Project would result in a less than significant impact related to light and glare.

4.1.3 Mitigation Measures

The implementation of the proposed Project would result in less than significant impacts to aesthetics. Therefore, no mitigation measures would be required.

4.2 Agricultural and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
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])?	☐	☐	☐	☒
d. Result in the loss of forest or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.2.1 Environmental Setting

As described in Section 1.4.1, *Project Site*, the Project site is undeveloped and generally dominated by non-native Mediterranean grass and other non-native herbaceous species, which appear to be mown regularly for fire control. Some scattered low growing shrubs occur within the Project site as well as non-native deciduous trees are present along the northern boundary of the Project site. The Project site is not currently utilized for agricultural production. Additionally, the Project site does not contain forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]).

The Project site includes four soil types: tray loam, saline-alkali (Tw), tray sandy loam, saline-alkali (Tv), pond loam (Po), and pond silty clay loam. Tw and Tv are both listed in the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance (2020). However, according to the Farmland Mapping and Monitoring Program, the Project site is classified as Other Land and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide importance associated with the Project site (California Department of Conservation 2022).

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local

governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. There are no Williamson Act contracts associated with the Project site (California Department of Conservation 2022).

4.2.2 Project Impacts

- a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No Impact. Although Tw and Tv are both listed in the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance (2020), the Farmland Mapping and Monitoring Program classifies the Project site as Other Land and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide importance associated with the Project site (California Department of Conservation 2022). The Project site is zoned P (Public Use and Semi Public). Since there are no existing agricultural uses or Williamson Act contracts at the Project site, the proposed Project would be consistent with allowable uses with the P (Public and Semi Public) land use and zoning designation. There would be no impacts and no mitigation measures would be required.

- b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?**

No Impact. Refer to Agriculture and Forestry Resources (a) above.

- 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])?**

No Impact. As previously described, the Project site is zoned for P (Public Use and Semi Public). The Project site does not contain any forestland, timberland, or Timberland Production zones. Therefore, no conflicts would occur, and rezoning would not be required as a result of implementation of the proposed Project. There would be no impacts to forest or timber production and no mitigation measures would be required.

- d) Result in the loss of forest or conversion of forest land to non-forest use?**

No Impact. Refer to Agriculture and Forestry Resources (c) above.

- 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?**

No Impact. As previously described, there are no existing agricultural uses or forest land associated with the Project site. The proposed Project would not cause direct or indirect impacts related to the conversion of farmland to non-agricultural use or forest land to non-forest use. There would be no impacts and no mitigation measures would be required.

4.2.3 Mitigation Measures

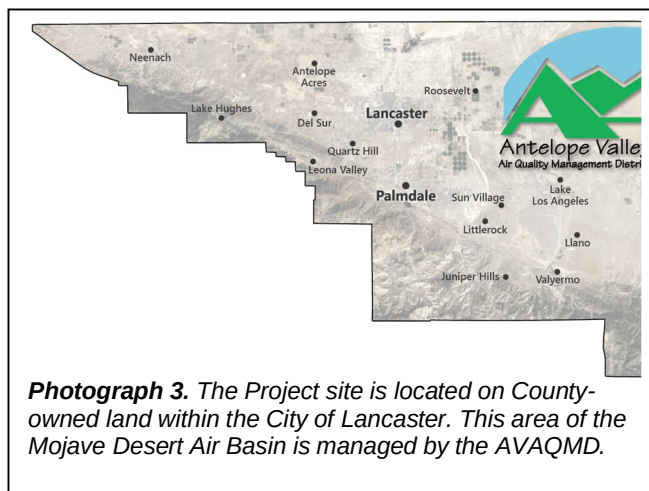
Implementation of the proposed Project would result in no impacts to Agricultural and Forestry Resources. Therefore, no mitigation measures would be required.

4.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under the applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The State of California is divided geographically into 15 air basins. The City of Lancaster, where the Project site is located, is within the boundaries of the Mojave Desert Air Basin (MDAB), which includes the desert portions of Los Angeles and San Bernardino Counties, the eastern desert portion of Kern County, and the northeastern desert portion of Riverside County. The MDAB primarily contains pollutants from other air basins, dust raised by construction, travel on unpaved roads, and paved roads with silty debris (City of Lancaster 2009b).



The Project site is located within the southwestern area of the MDAB and within the jurisdictional boundaries of the AVAQMD. The AVAQMD monitors air pollutant levels to ensure the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. The U.S. Environmental Protection Agency (USEPA) has set NAAQS for six pollutants, which are called “criteria pollutants”: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂). California regulates three additional criteria pollutants: hydrogen sulfide (H₂S), visibility reducing particles, and vinyl chloride. Further, California regulates approximately 200 other chemicals, referred to as toxic air contaminants (TACs) (California Air Resources Board [CARB] 2022).

The USEPA designates areas with criteria pollutant concentrations that do not meet the NAAQS as nonattainment areas. States are required by the CAA to prepare a State Implementation Plan (SIP) for designated nonattainment areas to demonstrate how these areas would meet attainment of the NAAQS by the prescribed deadlines. Areas that achieve the NAAQS after a nonattainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS. The California Clean Air Act (CCAA) established the CAAQS and required all air pollution control districts in the State to prepare plans to achieve the CAAQS. The districts are required to review and revise these plans every 3 years.

The USEPA has designated the AVAQMD as nonattainment for the March 2008 75 parts per billion (ppb) 8-hour O₃ standard, and the AVAQMD has until July 2027 to achieve attainment pursuant to its attainment plan (AVAQMD 2017). The 2018 Area Designations for the CAAQS designate the MDAB as nonattainment for O₃ and PM₁₀ (CARB 2020).

4.3.2 Project Impacts

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The AVAQMD is required, pursuant the NAAQS and CAAQS, to reduce emissions of criteria pollutants for which the District is in nonattainment (i.e., O₃ and PM₁₀). The most recent AVAQMD air quality attainment plan is the 2016 Federal 75 ppb Ozone Attainment Plan that was adopted in March 2017, which updates the previous 2008 AVAQMD Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area). In general, a project would not interfere with the applicable air quality plan if it is consistent with growth assumptions used to form the applicable air quality plan, and if the project implements all reasonably available and feasible air quality control measures from the applicable air quality plan or planning document referenced or used in the plan. A project would conflict with or obstruct implementation of the applicable air quality plan if the project is inconsistent with the underlying land use designation and zoning of the local applicable plan (e.g., General Plan). In this case, a conflict would occur if a project would introduce growth that is neither planned for nor mitigated by the applicable air quality plan. Air quality impacts are controlled locally through policies and provisions of AVAQMD, the Los Angeles County General Plan, the Antelope Valley Area Plan, and the 2020 County of Los Angeles Building Code (Title 26). Per AVAQMD, a project would be deemed to not exceed this threshold if it is consistent with the existing land use plan. Further, according to AVAQMD, even if a project is inconsistent with the existing land use plan, if it does not increase dwelling unit density, or vehicle trips and vehicle miles traveled, it would be considered to not conflict or obstruct implementation of the applicable air quality plan (AVAQMD 2016).

Implementation of the proposed Project would require short-term construction that would result in worker, vendor, and haul trips to the project site. Construction is expected to last 12 months or less, and the number of trips would vary throughout the construction period. These vehicle trips would cease with the completion of construction. Once the proposed Project is operational, vehicle trips would occur for the annual inspections and maintenance events, which would result in a maximum of 10 trips annually. Therefore, an additional maximum of 15 to 18 visits per year could be required. Construction and operations activities are therefore not expected to result in a significant increase in vehicle trips or vehicle miles traveled (VMT). Additionally, as a solar PV facility the proposed Project would not result in an operational increase in air pollution. The proposed Project would also comply with AVAQMD rules and air quality control measures including Rule

402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter Concentration), and Rule 1300 (New Source Review).

The proposed Project would not result in an increase in population or a permanent substantial increase in vehicle trips or VMT in the region. The proposed Project is considered to be consistent with the growth assumptions used to form the 2016 Federal 75 ppb Ozone Attainment Plan. As such, the proposed Project would not conflict with or obstruct the implementation of the applicable air quality plan. Impacts would be less than significant and no mitigation measures would be required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under the applicable federal or state ambient air quality standard?

Less Than Significant Impact. As previously discussed, the AVAQMD is currently in nonattainment for O₃ under NAAQS, and for O₃ and PM₁₀ under the CAAQS. Construction and operation of the proposed Project would result in net increases of O₃ precursors (i.e., volatile organic compounds [VOCs] and NO_x) and PM₁₀. In addition, construction and operation of the proposed Project would also generate emissions of CO, SO_x, and PM_{2.5}.

Short-Term Construction Emissions

Construction of the proposed Project would generate criteria air pollutant emissions that could result in air quality impacts. Emissions would originate from off-road equipment exhaust, employee and haul truck vehicles, fugitive dust from excavation and grading, as well as re-entrained road dust from vehicle travel. Construction-related emissions would vary substantially depending on the level of activity, the specific construction operations, and wind and precipitation conditions. All emissions would be temporary and would cease once construction of the proposed Project is complete. As previously described, the proposed Project would be required to comply with AVAQMD rules and regulations, including Rules 402, 403, 404, and 1300. Compliance with Rule 403, Fugitive Dust, would require implementation of a Dust Control Plan during construction.

Construction emissions associated with the proposed Project were estimated using a combination of emission factors and methodologies from the California Emissions Estimator Model (CalEEMod) version 2022.1. See Appendix A for a complete list of construction assumptions, including equipment, and vehicles.

Given that the construction period would be less than 12 months, emissions are assessed using AVAQMD's daily significance thresholds. As shown in Table 1, the maximum daily emissions during the proposed construction activities would not exceed the AVAQMD's significance thresholds, including those for pollutants for which the district is in nonattainment (O₃ precursors and PM₁₀). Accordingly, impacts related to emissions of criteria pollutants during construction of the proposed Project would be less than significant and no mitigation measures would be required.

Table 1. Maximum Daily Construction Criteria Pollutant Emissions in AVAQMD

Construction Phase	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Daily Emissions (lbs/day)	3.81	3.21	28.2	0.05	7.29	3.87

Construction Phase	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
AVAQMD Threshold	137	137	548	137	82	65
Exceeds Thresholds?	No	No	No	No	No	No

Source: See Appendix A.

Long-Term Operational Emissions

Once operational, emissions associated with the proposed Project would be related to an annual inspection and periodic panel washing. Operations of the proposed project would not generate annual emissions in excess of the AVAQMD's significance thresholds, including those for pollutants for which the district is in nonattainment (O₃ precursors and PM₁₀). Accordingly, impacts related to emissions of criteria air pollutants during operation of the proposed Project would be less than significant and no mitigation measures would be required.

Table 2. Operational Criteria Pollutant Emissions in AVAQMD

Construction Phase	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Operational Emissions (lbs/day)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AVAQMD Threshold	25	25	100	25	15	12
Exceeds Thresholds?	No	No	No	No	No	No

Source: See Appendix A.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as locations where uses or activities result in increased exposure of persons more sensitive to the unhealthful effects of emissions (e.g., children and elderly residences, etc.). Examples of land uses that are normally classified as sensitive receptors include residences, schools, daycare centers, parks, recreational areas, medical facilities, rest homes, and convalescent care facilities. The nearest potential sensitive receptors include the CMYC and LAC detention buildings located approximately 250 feet to the north and approximately 450 feet to the south of the Project site, respectively. The nearest single-family residential areas are located approximately 0.5 to the south of the Project site. The nearest schools, parks, and other potential sensitive receptors are located at an even greater distance. Sensitive receptors (e.g., single-family residential neighborhoods) are located at closer distances along the proposed reconductoring route. However, due to short-term, temporary nature of the proposed construction activities and the negligible long-term operational emissions, the proposed Project is not anticipated to expose sensitive receptors to substantial concentrations of criteria air pollutants or TACs. As previously described, the proposed Project would be required to comply with AVAQMD rules and regulations, including Rules 402, 403, 404, and 1300, further reducing the potential impact to sensitive receptors. Therefore, impacts would be less than significant and no mitigation measures would be required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The proposed Project would not generate trash, chemical

wastes, or sewage, or otherwise include operational activities that could generate odors. Diesel exhaust fumes would be generated by equipment during construction activities. These fumes would result in odors that may be perceptible to those in the immediate vicinity of the Project site. However, diesel odors would occur for short periods and dissipate within a short distance from the Project site. The odors would not be objectionable because of the relatively small magnitude and short duration. Operation of the Project site would not cause any objectionable odors. Therefore, impacts are expected to be less than significant and no mitigation measures would be required.

4.3.3 Mitigation Measures

The implementation of the proposed Project would result in less than significant impacts to air quality. Therefore, no mitigation measures would be required.

4.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. 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 Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.4.1 Environmental Setting

Rincon Consultants Inc. (Rincon) prepared a Habitat Assessment for the proposed Project (Rincon 2021; see Appendix B). The purpose for the Habitat Assessment was to identify characterize habitat present on the Project site, identify potential for special status species and sensitive habitats, and document presence of jurisdictional waters. Potential jurisdictional waters includes waters of the United States (U.S.) subject to the jurisdiction of the U.S. Army Corps of

Engineers (USACE) under Section 404 of the Clean Water Act; waters of the State subject to the jurisdiction of the Los Angeles Regional Water Quality Control Board (RWQCB), pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act; and California Department of Fish and Wildlife (CDFW) jurisdictional streambeds subject to the jurisdiction of CDFW pursuant to California Fish and Game Code Section 1600 et seq.



Photograph 4. The Project site is characterized by low-grown non-native herbaceous species traversed by disturbed dirt roads.

The Project site is undeveloped and generally dominated by non-native Mediterranean grass. Other non-native species identified in this community include common fiddleneck (*Amsinckia intermedia*), foxtail brome (*Bromus madritensis* ssp. *rubens*), downy chess (*Bromus tectorum*), yellow-star thistle (*Centaurea solstitialis*), coastal heron's bill (*Erodium cicutarium*), shortpod mustard (*Hirschfeldia incana*), and bull thistle (*Cirsium vulgare*). There are also occurrences of big sagebrush (*Artemisia tridentata*) and saltbush (*Atriplex* sp.). Many of the dirt roads within the Project site can be classified as ruderal. No sensitive vegetation communities are located within the Project site (Rincon 2021).

Special Status Species

For the purposes of the Habitat Assessment prepared by Rincon (2021), special-status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (ESA); species that are under review may be included if there is a reasonable expectation of listing within the near future
- Species listed as candidate, threatened, endangered, or rare by the CDFW under the California Endangered Species Act (CESA) or Native Plant Protection Act
- California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1 and 2 plant species.

The Habitat Assessment determined that there are three special status plant and wildlife species with a moderate or high potential to occur within the Project site: alkali mariposa lily (*Calochortus striatus*), northern California legless lizard (*Anniella pulchra*), and coast horned lizard (*Phrynosoma blainvillii*).

- Alkali mariposa lily (CRPR 1B.2): Alkali mariposa lily is found in chaparral, chenopod scrub, Mojavean desert scrub, meadows, and seeps. Alkali mariposa lily was not observed during the field survey, but suitable scrub habitat is present immediately adjacent to the west of the Project site. The nearest occurrence recorded in the California Natural Diversity Database (CNDDB) was observed in 1988 and is located approximately 0.2 miles south of the Project site. Based on the presence of suitable habitat adjacent the Project site and a nearby CNDDB occurrence, alkali mariposa lily has a moderate potential to occur within the Project site (Rincon 2021).

- Northern California Legless Lizard (CDFW Species of Special Concern [SSC]): Northern California legless lizard is a CDFW SSC that is found in sandy or loose loamy soils under sparse vegetation. They require soils with a high moisture content. Suitable loamy and sandy soils are present within the Project site. The nearest CNDDDB occurrence was recorded in 1988 within the Project site. Based on the presence of suitable habitat and an overlapping CNDDDB occurrence, Northern California legless lizard has a high potential to occur within the Project site (Rincon 2021).
- Coast Horned Lizard (CDFW SSC): Coast horned lizard is a CDFW SSC that inhabits lowlands along sandy washes with scattered low bushes. They require open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects. Suitable habitat requirements, including open areas, sandy soils, and shrubs for cover, are present within the Study Area. The nearest CNDDDB occurrence was recorded in 1991 and approximately 4.2 miles south of the Project site. Based on the presence of suitable habitat and a nearby CNDDDB occurrence, coast horned lizard has a high potential to occur within the Project site (Rincon 2021).

Drainage Features and Riparian Habitat

The National Hydrography Dataset (NHD) did not identify any water features within the Project site and the surrounding vicinity. However, the desktop analysis and data collected in the field as part of the Habitat Assessment identified three hydrology features, which are discussed in detail below (Rincon 2021).

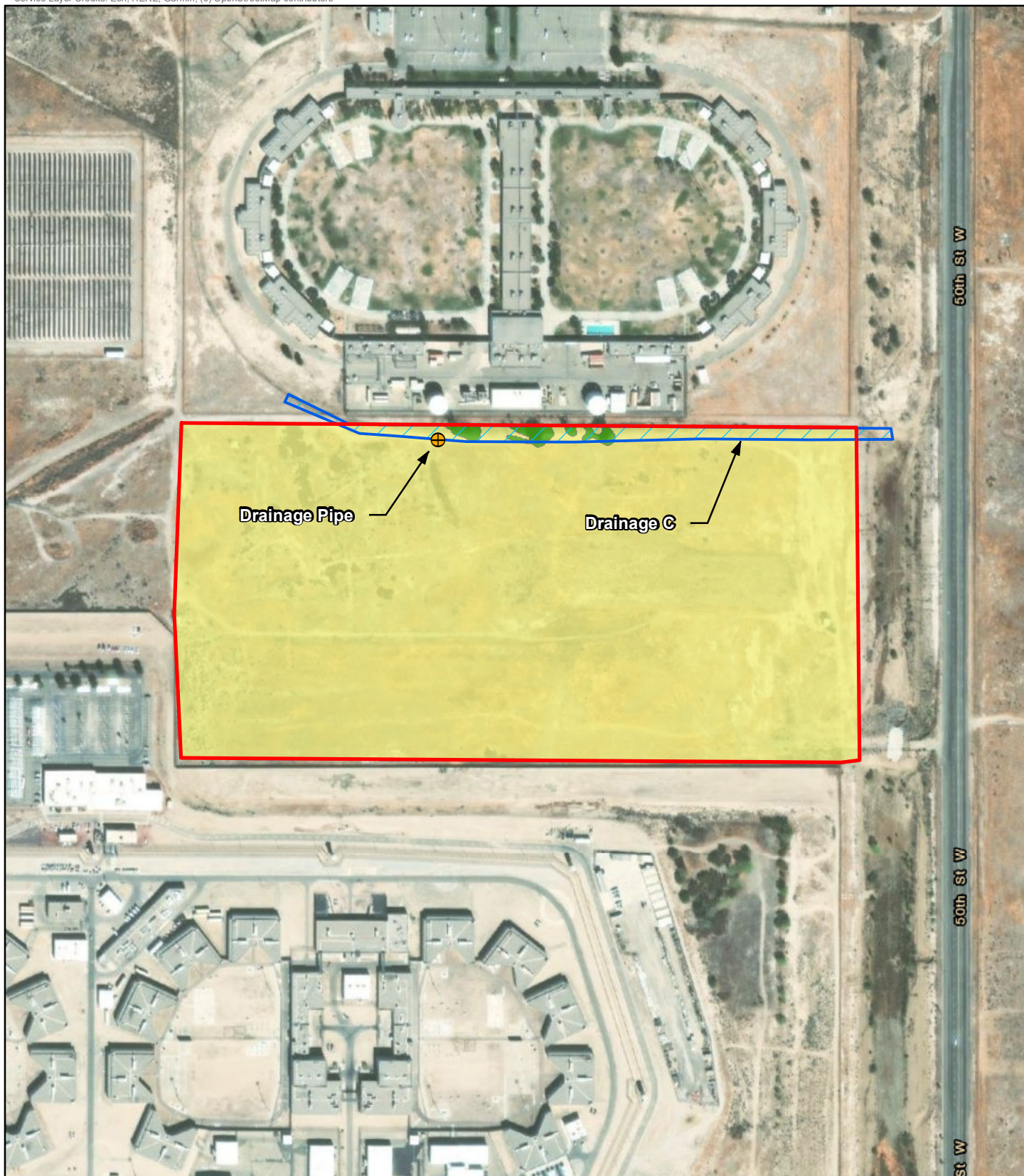
Three drainage features were identified within the vicinity of the Project site including: Drainage A to the northwest; Drainage B to the west; and Drainage C located along the northern boundary of the Project site. (Rincon 2021). Drainage A and Drainage B were both dry during the field survey; however, during rain events, the drainages likely temporarily collect surface stormwater runoff from the facility.

The drainages are isolated and do not provide flow to downstream features, and no wetland vegetation or other hydrology indicators (i.e., standing water, ordinary high water mark, etc.) were observed (Rincon 2021).



Photograph 5. Drainage C is located within the northern portion of the Project site. This drainage would be located outside of the proposed perimeter fence and would not be affected by construction or operation of the proposed Project.

Drainage C, which is located along the northern boundary of the Project site (see Figure 5), is also a V-shaped ditch that was dry during the time of the survey. The drainage originates from the property to the northeast and continues to the east where it eventually connects with a basin to the east of the Project site. In addition, there is a water pipe that drains water from the CMYC, which empties into this drainage. This drainage supports a small cluster of trees consisting of red willow (*Salix laevigata*), mesquite (*Prosopis glandulosa*), juniper (*Juniperus* sp.), and other unknown ornamental trees, identified as “red willow thickets” (Rincon 2021).



Path: \\sdg1-fs1\GIS\3551_Planning\SunPower_SolarProject_2055100079\MXD\ReportFigures\InitialStudy\Fig5_ProjectSiteVegetation.mxd, aaron.johnson 4/28/2023



⊕ Drainage Pipe

▬ Drainage C

▭ Project Site

Vegetation Communities

▭ Mediterranean Grass Grassland

▭ Red Willow Thickets

1 inch = 400 feet
0 200 400 Feet



FIGURE 5

Project Site Vegetation
Los Angeles County High Desert Project
Lancaster, CA

4.4.2 Project Impacts

- 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 Wildlife or the U.S. Fish and Wildlife Service?**

Less Than Significant Impact with Mitigation Incorporated. As previously described, one special status plant species and two special status wildlife species have the potential to occur within the Project site. The Project site contains some limited areas of scattered low growing shrubs that could support nesting birds protected under the Migratory Bird Treaty Act (MBTA) (16 U.S. Code [USC] §§703-712) and the California Fish and Game Code Section 3503. Additionally, nesting activities could occur within existing trees and facilities/structures located adjacent to the Project site and along the reconductoring route. Construction activities including vegetation removal and grading could result in direct mortality or indirect disturbance (e.g., construction-related noise) of these species, if present at the time of construction. However, with the implementation of a Worker Environmental Awareness Program (WEAP) Training (MM BIO-1) as well as pre-construction surveys and relocation or avoidance of special-status species (MM BIO-2 and -3) construction-related activities would result in less than significant impacts to these species.

Over the long-term, the proposed Project would not substantially reduce habitat within the Project site. As previously described the Project site is dominated by low-grown surrounding non-native herbaceous species that do not provide high quality or unique habitats. Given the disturbed nature of the Project site as well as the surrounding development, the Project site routinely experiences noise, lighting, and other edge effects that likely make it less suitable for sensitive species as compared to other nearby areas. The proposed solar PV facility would be fenced and visits to the Project site would be infrequent. As such, long-term impacts to special status species and their habitats would be less than significant and no mitigation measures would be required.

- ii) **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 Wildlife or U.S. Fish and Wildlife Service?**

No Impact. As previously described Drainage C occurs within the northern portion of the Project site. Rincon (2021) determined that this drainage may be subject to the jurisdiction of the CDFW and RWQCB. Additionally, one sensitive vegetation community, red willow thickets, is present within Drainage C, and comprises a portion of the jurisdictional area. This community, which typically occurs in ditches, floodplains, lake edges, and low-gradient depositions along streams, is co-dominated by red willow, juniper, mesquite, and other ornamental species.

Disturbance within Drainage C would require a Water Quality Certification issued by the Los Angeles RWQCB pursuant to Section 401 of the CWA and Lake and Streambed Alteration Agreement issued by CDFW pursuant to Section 1602 of the California Fish and Game Code. However, the proposed solar PV facility would avoid this drainage entirely (refer to Figure 5). This drainage would be located outside of the proposed perimeter fence and would not be affected by construction or operation of the proposed

Project. Avoidance of this area would be specifically discussed during the WEAP Training (MM BIO-1). Therefore, no permitting or associated mitigation would be required and there would be no impact to riparian or sensitive habitats.

- 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?**

No Impact. Refer to Biological Resources (b) above.

- 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?**

Less Than Significant Impact. Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated wildlife populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape (Rincon 2021). The Project site has connectivity with natural open spaces east of 50th Street West and limited undeveloped areas to the west. Open spaces on the Project site, however, are limited in extent and do not lead to any other areas of natural open space. Wildlife could feasibly cross 50th Street West and traverse the Project site; however, the presence of development on three sides of the Project site would constrain wildlife movement. Project implementation may impact wildlife movement on the Project site, but is not expected to affect regional wildlife or interfere substantially with the movement of any native resident or migratory fish and wildlife species in more open areas adjacent to the site, nor impede the use of native wildlife nursery sites. Impacts would be less than significant and no mitigation measures would be required.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?**

No Impact. The proposed Project would result in the removal on non-native Mediterranean grass and other non-native herbaceous species. However, the proposed Project would not conflict with any local policies or ordinances protecting biological resources. For example, the proposed Project would not result in the removal of trees within the Project site or along the reconductoring route that would conflict with local tree ordinances. No impacts on local policies or ordinances protecting biological resources would occur and no mitigation measures would be required.

- 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?**

No Impact. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans which are applicable to the Project site. No impacts would occur as a result of the proposed Project, and no mitigation would be required.

4.4.3 Mitigation Measures

MM BIO-1: Worker Environmental Awareness Program (WEAP) Training: A biological resources WEAP training shall be presented by a qualified biologist to all construction workers prior to the initiation of any ground-disturbing activities associated with proposed Project. The purpose of the WEAP training shall be to educate construction workers about the potential for special-status plant and wildlife species within the Project site and the measures to protect them, if encountered. This would include a clear delineation of sensitive areas to be avoided during construction including Drainage C and the associated redwillow thicket vegetation community. The WEAP shall explain the measures to avoid impact to sensitive biological resources and the consequences of not complying with protective measures.

MM BIO-2: General Pre-Construction Survey: A general pre-construction survey of the Project site shall be conducted by a qualified biologist familiar with the sensitive biological resources on-site no more than 1 week prior to the initiation of any ground disturbing construction-related activities. Any sensitive species found in the work area during the pre-construction survey shall be left to leave on their own or shall be relocated by the biologist off-site to an area that provides suitable habitat conditions, which would be identified by the biologist, prior to construction. If sensitive plant or wildlife species are found during the pre-construction survey, the biologist shall clearly mark the location (with staking and flags) and/or install exclusionary fencing. All construction activities within up to 500 feet of the sensitive plant or wildlife species – as determined by the biologist – would be ceased until they leave on their own or are relocated by the biologist.

MM BIO-3: Pre-Construction Survey for Nesting Birds. To the maximum extent practicable, construction activities – including construction activities within the Project site and along the reconductoring route – shall avoid the nesting bird season (February 1 through August 31). This will avoid potential violations of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 3513. However, if activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season, a pre-construction nesting bird survey shall be conducted by a qualified biologist. Nest surveys shall include the Project site and adjacent areas where construction activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin as originally planned. If nesting birds (including nesting raptors) are found to be present, then avoidance or minimization measures shall be undertaken in consultation with CDFW. Measures shall include establishment of an avoidance buffer until nesting has been completed. The width of the buffer shall be determined by the qualified biologist. Typically, this is a minimum of 300 feet from the nest site in all directions (500 feet is typically recommended by CDFW for raptors), until juveniles have fledged and there has been no evidence of a second attempt at nesting. The qualified biologist will monitor the nest(s) during construction and document any findings.

4.5 Cultural Resources and Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES AND TRIBAL 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?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d. 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 of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
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?				

4.5.1 Environmental Setting

WSP USA, Inc. (WSP) completed a cultural resources desktop analysis and records search for the proposed Project (see Appendix C). The records search was conducted to determine the presence of any known archaeological resources in the study area, which was defined as the area within a 1-mile radius of the Project site.

Ethnographic Background

The western Mohave Desert and Antelope Valley were occupied by at least four groups of Native Americans: the Vanyume/Serrano, the Kawaiisu, the Tataviam, and the Kitanemuk (Antelope Valley Indian Museum 2010; County of Los Angeles 2011). A fifth group, the Haminot, that lived in the Lancaster and Palmdale area likely was a name given to the Kitanemuk by their Native American neighbors (Blackburn and Bean 1978; County of Los Angeles 2011). The languages of the Vanyume, Tataviam, and Kitanemuk appear to have been dialects of Serrano or Serran (Bean and Smith 1978; County of Los Angeles 2011).

Little is known about this period in the Antelope Valley region. Local groups continued to live in large, semi-permanent villages during the winter, and during the spring, summer, and fall would

separate into smaller groups to hunt and gather the locally available resources including, among others, piñon nuts, mesquite, and yucca. Most of the ethnographic groups of the area shared similar cultural traits and practices and for the most part maintained friendly relations with each other (Applied Earthworks 2007; County of Los Angeles 2011).

Historic Background

In 1772, Lieutenant Pedro Fages, leading a small force of Spanish soldiers, became the first Europeans to enter the Antelope Valley. Other explorers passed through the valley over the next century, but little change to the lifestyles of the local populations of the valley was evident until 1876, when the Southern Pacific Railroad completed its line between the Los Angeles Basin and the San Joaquin Valley (Norwood 1995; Tang et al. 2004; County of Los Angeles 2011).

The history of the City of Lancaster began when Moses Landley Wicks, a real estate developer, bought 640 acres of land from the railroad and laid out the town of Lancaster in 1884 (Tang et al. 2004; County of Los Angeles 2011). The new town boomed during the 1880s and early 1890s; however, several years of drought beginning in 1895 forced most residents to leave the area (Tang et al. 2004). The City began to recover after the turn of the century, the turning point being the completion of the Los Angeles aqueduct through the region in 1914, which permitted agricultural expansion (Norwood 1995; County of Los Angeles 2011).

After World War II, the aerospace and defense industry became the largest business sector in the area with the construction of several aeronautical plants and the associated influx of workers to staff them (Tang et al. 2004; County of Los Angeles 2011). The City of Lancaster was incorporated in 1977 and has grown steadily since that time.

In 1941, the U.S. Air Force opened War Eagle Field and the Polaris Flight Academy on a large parcel that included at least a part of the current project site. As the U.S. had not yet entered the war, the Academy trained British and Canadian cadets. In 1942, following the entry into the war, the Academy also began training U.S. Air Force cadets, and became one of the only civilian schools to conduct basic training for military cadets. The base soon doubled in size. The airfield was centered on two large hangars and included a control tower and administration building among others. The two hangars and other war-era buildings are still in existence, now located on the grounds of the Mira Loma Detention Center (County of Los Angeles 2011).

The flight academy closed in 1945 at the end of the war, but the airfield remained open a few more years. It was converted to a later converted to a correctional facility in the 1950s, which became the now vacant Mira Loma Detention Center (County of Los Angeles 2011).

Record Search Requests

WSP submitted a records request to the Office of Historic Preservation (OHP) California Historical Resources Information System (CHRIS) and the South Central Coastal Information Center (SCCIC) on February 23, 2021. The request was fulfilled on April 7, 2021, and included CHRIS database records, archaeological reports and site records, and custom maps of the study area showing the location of previous archaeological investigations and documented sites. WSP also consulted the Built Environment Directory (BERD) for Los Angeles County (OHP 2021). WSP submitted a Native American Heritage Commission (NAHC) Sacred Land File search request in February 2021. The request was fulfilled on March 3, 2021.

Results of the records search requests indicate no archaeological sites have been documented

within the Project site or the immediate surrounding vicinity. The results of the records search and historical map and aerial imagery review indicate that the proposed Project has low archaeological resource potential (WSP 2021a). Additionally, no previously recorded aboveground buildings and/or structures were identified in the Project site area (WSP 2021a).

4.5.2 Project Impacts

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

No Impact. CEQA requires a lead agency to determine whether a project may have a significant effect on one or more historical resources. A “historical resource” is defined as a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (PRC Section 21084.1); a resource included in a local register of historical resources (CEQA Guidelines Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][3]). The cultural resource desktop analysis and records search conducted by WSP (2021a) did not identify any historical resources within the Project site. Therefore, implementation of the proposed Project would not have an impact on historical resources pursuant to Section CEQA Guidelines 15064.5 and no mitigation measures would be required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Less than Significant Impact with Mitigation Incorporated. As described in Cultural Resources and Tribal Cultural Resources (a) above, the cultural resources desktop analysis and records search conducted by WSP (2021a) did not identify any historical resources within the Project site. Additionally, the proposed reconductoring route is located along developed roadways and has previously been disturbed as a result of the construction of the original transmission line. Based on the results of the records search and historical map and aerial imagery review WSP (2021a) determined that the proposed Project has low archaeological resource potential (WSP 2021a). Nevertheless, it is possible these archaeological materials could be unearthed during grading and other construction activities associated within the proposed Project. These impacts would be mitigated to a less than significant level with the implementation of MM CUL-1, which would require a temporary stop in construction work within the vicinity as well as evaluation and recovery of the find.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No known human remains have been documented or are expected to occur within the Project site. It is highly unlikely that the proposed Project would disturb human remains, therefore no impact is anticipated.

Nevertheless, consistent with CEQA Guidelines Section 15064.5(e), if human remains are accidentally discovered or recognized during grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the

coroner has 24 hours to notify the NAHC. The NAHC would then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who would then help determine what course of action should be taken in dealing with the remains. Per PRC Section 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC Section 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

- d) **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 of historical resources as defined in Public Resources Code section 5020.1(k), or**
 - 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?**

Less Than Significant Impact. Assembly Bill (AB) 52, which went into effect on July 1, 2015, established a consultation process with all California Native American tribes on the NAHC List and required consideration of Tribal Cultural Values in the determination of Project impacts and mitigation. AB 52 established a new class of resources, tribal cultural resources, defined as a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe that is either: 1) on or eligible for the California Historic Register or a local historic register; or 2) treated by the lead agency, at its discretion, as a traditional cultural resource per PRC Section 21074 (a)(1)(A)-(B).

As previously described WSP sent a letter to the NAHC in February 2021, requesting a search of their Sacred Lands Files and their recommendation on potential Native American concerns. In response, the NAHC provided a list of 13 tribal representatives who may have knowledge of cultural resources in the vicinity of the Project site area. Notification letters sent to the tribal representatives to inform them of the proposed Project and to inquire about whether they have information regarding cultural resources within the Project site.

4.5.3 Mitigation Measures

MM CUL-1: If an archaeological deposit or resource is encountered during grading or activities, all activity within up to 50 feet of the find shall cease until it can be evaluated by a qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology. If the find is determined to be

potentially significant, the archaeologist, in consultation with the City and appropriate Native American group(s) (if the find is a prehistoric or Native American resource), shall develop a treatment plan. All work within up to 100 feet of the unanticipated discovery shall cease until the qualified archaeologist has evaluated the discovery, or the treatment plan has been implemented. If the archaeologist determines that data recovery is necessary, a Phase III recordation report would be prepared and the find would be curated in a facility meeting the standards described in 36 Code of Federal Regulations (CFR) Part 79.

4.6 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. 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?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

4.6.1 Environmental Setting

SCE and the Southern California Gas Company (SoCalGas) are the electricity and natural gas providers within Los Angeles County. Existing electrical infrastructure (e.g., overhead power lines) and natural gas infrastructure (e.g., buried pipelines) are located in the immediate vicinity of the Project site and serve the surrounding correctional facilities.

As discussed in Section 2.1.2, *Regulatory Background for Solar Energy Projects*, California policy encourages the development of renewable energy resources to reduce reliance on fossil fuels; to diversify energy portfolios; to reduce GHG emissions; and to assist creation of “green” jobs within the State of California. The RPS was established in 2002 by SB 1078 with the initial requirement that 20 percent of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50-percent RPS by 2030. The proposed project qualifies as an eligible renewable energy resource as defined by the California PRC Section 25740 et seq. and would assist the electric service provider in meeting its RPS requirements.

4.6.2 Project Impacts

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Less Than Significant Impact. During construction, temporary consumption of energy resources (e.g., diesel and gasoline fuels) would be required for the construction worker trips, delivery of construction materials, the use of heavy construction equipment, and the

use of generators). However, compliance with Federal, State, and local regulations (e.g., CARB's requirement to limit engine idling times, etc.) would reduce short-term energy demand during the implementation of the proposed Project to the maximum extent feasible. Typical temporary construction activities associated with the proposed Project, which would last for a period of less than 12 months, would not be anticipated to result in wasteful or inefficient use of energy and impacts would remain less than significant and no mitigation measures would be required.

Operation of the proposed Project would produce a new source of renewable energy and is anticipated to have beneficial impact related to energy consumption.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would generate renewable energy, further decreasing the State's reliance on fossil fuel energy and increasing its reliance on renewable energy. Both of these items are identified in Appendix F of the CEQA Guidelines as ways to accomplish the CEQA energy conservation goal. Additionally, implementation of the proposed Project would be consistent with the Countywide Energy and Environmental Policy as well as the County of Los Angeles Climate Action Plan and the City of Lancaster Climate Action Plan (see Section 4.8, *Greenhouse Gas Emissions*). Additionally, the proposed reconductoring would improve and increase the capacity of existing transmission lines. Therefore, implementation of the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and would result in a beneficial impact related to improvements to existing efficiency, reliability, and sustainability of energy sources and facilities.

4.6.3 Mitigation Measures

Implementation of the proposed Project would have a less than significant impact on energy. Therefore, no mitigation measures would be required.

4.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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, or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Table 18- 1-B of the 1994 UBC, creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

4.7.1 Environmental Setting

A Geotechnical Investigation has been prepared for the proposed Project by Moore Twining Associates (2021) and is provided in Appendix D. The findings of the report are summarized, where relevant, in this analysis.

Regional Seismicity

The Antelope Valley is located in the western edge of the Mojave Desert, which is bound by the San Andreas Fault Zone on the southwest, the Garlock Fault Zone on the northwest, and the Colorado River on the east. The Tehachapi Mountain range defines the northern and northwestern boundary of the Valley, and the San Gabriel, Sierra Pelona, and Liebre Mountains define the southern and southwestern boundaries. The valley is relatively flat, except for the Quartz Hill to the south and the Fairmont and Antelope Buttes to the west (City of Lancaster 2009b).

The geologic and seismic activity within the City of Lancaster generally results from its proximity to the “active” San Andreas Fault. The San Andreas Fault is considered the most significant

earthquake threat in California, and has been the source of numerous significant earthquakes in the past. According to the Seismic Hazard Evaluation of the Lancaster East and West Quadrangles the City of Lancaster could be subject to intense seismic shaking associated with a large earthquake along the San Andreas Fault. The expected peak horizontal ground accelerations are dependent on several factors: distance from an active fault (in this case, the San Andreas Fault); the maximum earthquake that can be expected on that fault; and the underlying soil conditions. Within these evaluations, firm rock, soft rock, and alluvium conditions were analyzed to determine the potential ground movement associated with a seismic event. The City of Lancaster could be subjected to ground accelerations between 0.87g and 0.30g in soft rock conditions. These accelerations are based on a 7.8 magnitude event occurring along the San Andreas Fault zone in close proximity to the City (California Geological Survey 2005; City of Lancaster 2009b)

The San Andreas Fault is located approximately 6 miles southwest of the Project site, running northwest to southeast along the San Gabriel Mountains (Moore Twining Associates 2021).

Subsurface Soil Conditions

In general, the subsurface soils encountered beneath the Project site consist of lean clays, lean clays with sand and sandy lean clays. However, some of the soil borings collected by Moore Twining Associates (July 2021) encountered discontinuous, interbedded layers of clayey sands, silty sands, sandy silts or silts with sand, fat clays, with interbeds of poorly graded sands, and well graded sands with silt extending to the maximum depth explored, approximately 16.5 feet below ground surface (bgs). Fill soils were encountered in several of the borings to depths ranging from about 1.5 feet to 3.5 feet bgs.

As previously described in Section 4.5, *Cultural Resources and Tribal Cultural Resources*, the Project site was formerly used as an airfield. Due to this previous use, there is potential to encounter buried obstructions and debris/remnants of the former development (e.g., asphalt debris, grout and concrete fragments, tire fragments, and metal debris). Based on sub-surface soil conditions, Moore Twining Associates established recommendations for additional siting investigation, which were completed in September 2021. The subsurface soils encountered during the second investigation were consistent with those identified in the July 2021. However, the second investigation also identified asphalt debris, grout debris, concrete fragments, tire fragments, and metal debris. Due to the significant amount of debris present, debris fill materials are not considered suitable for support of the proposed ground mounted solar array foundations or surface equipment pads. All recommendations included in the Geotechnical Investigation, including removal and export of these debris fill materials, will be incorporated into the proposed Project as a part of the final design process.

Paleontological Resources

Paleontological resources are fossils, or recognizable remains or evidence of past life on earth, including bones, shells, leaves, tracks, burrows, and impressions. Paleontological resources are mapped based on the presence of known resources and the geologic sediments in the region. Over 1,000 fossil localities have been recorded, and in excess of a million specimens have been collected in Los Angeles County.

A paleontological resources records search was completed by the Los Angeles County Natural History Museum (LACNHM) for the City of Lancaster 2030 General Plan update in 2008. In addition, Dr. Sam McLeod of LACNHM conducted a review of the museum's vertebrate

paleontology records for an adjacent solar project site and vicinity in 2010, located immediately adjacent to the west of the Project site. In both reviews, the LACNHM indicated that no known fossil localities have been previously recorded within vicinity of the Project site, but fossil localities have been found nearby from sedimentary deposits that are similar to those that occur in the Project site.

4.7.2 Project Impacts

a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving**

iv) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant Impact. There are no known active faults traversing the Project site or the proposed reconductoring route, and neither is located within an Alquist-Priolo Earthquake Fault Zone or zones established by Los Angeles County. Based on review of the 2010 Fault Activity Map of California, the nearest active fault with the potential for surface rupture is the San Andreas Fault Zone, which is located approximately 6 miles southwest of the Project site. Accordingly, the potential for surface rupture at the Project site is considered low (Moore Twining Associates 2021). Additionally, the solar PV facility would not involve any habitable buildings that would increase risk of loss, injury or death resulting from an earthquake and associated ground shaking. Therefore, impacts associated with the proposed Project would be less than significant and no mitigation measures would be required.

a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving**

ii) **Strong seismic ground shaking?**

Less Than Significant Impact. The primary seismic hazard for the Project site and the proposed reconductoring route, as with most of the Southern California region, is the susceptibility to ground shaking due to the presence of active faults in the region (e.g., San Andres Fault). The proposed solar PV facility and associated infrastructure would be exposed to strong ground shaking during a seismic event associated with the San Andres Fault and other active faults nearby, which could result in structural damage to the solar PV panels, mounting structures, transmission lines, etc. However, the proposed Project would be required to comply with the 2020 County of Los Angeles Building Code (Title 26), which incorporates the California Building Code and includes design parameters to ensure structure stability during a strong seismic event. Additionally, none of the structures associated with the proposed Project are habitable and therefore there would be a very low risk of loss, injury, or death. With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would result in a less than significant impact and no mitigation measures would be required.

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving**

iii) **Seismic-related ground failure, including liquefaction?**

Less Than Significant Impact. Potential secondary effects of strong seismic ground shaking include liquefaction, lateral spreading, and seismically induced settlement/differential compaction. Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Soil types most susceptible to liquefaction include loose, saturated silty to clean fine sands. Lateral spreading refers to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. The effects of liquefaction could also include excessive differential settlement for structures supported on the liquefying soils.

Based on the generally clayey nature of the soils encountered in the borings, a review of historical groundwater data, the liquefaction analysis, and the lack of settlement sensitive structures planned for the proposed Project, the Geotechnical Investigation determined that the potential for liquefaction, lateral spreading, or seismically induced settlement at the Project site is considered to be low (Moore Twining Associates 2021). With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would result in a less than significant impact and no mitigation would be required.

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving**

iv) **Landslides?**

Less Than Significant Impact. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquake induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. According to the California Geological Survey Seismic Hazard Zone Map, the Project site is not currently included in a zone with seismic hazards, such as seismically induced landslides. No landslides have been mapped or noted in areas where planned improvements would occur.

Due to the flat topography of the Project site, the Geotechnical Investigation determined that the potential landslide-related hazards is low (Moore Twining Associates 2021). With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would result in a less than significant impact and no mitigation would be required.

- b) **Result in substantial soil erosion or the loss of topsoil?**

Less Than Significant Impact. The soil survey maps, prepared by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), indicate that the soils underlying the Project site have a moderate susceptibility to erosion (Moore Twining Associates 2021). The proposed Project could result in minor soil erosion during

excavation, grading, and construction of the proposed Project. Earthwork associated with reconductoring (e.g., trenching of underground transmission lines) could also increase the potential for soil erosion. However, the potential impacts of soil erosion on the Project site would be minimized through implementation of a SWPPP in compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which is required for projects that disturb more than 1 acre. The SWPPP would prescribe temporary best management practices (BMPs) to control wind and water erosion during and shortly after construction of the proposed solar PV facility. With implementation of BMPs as prescribed in the SWPPP (e.g., limitations on construction during high winds, covering soil stockpiles, watering exposed soils, etc.), the impact on soil erosion and the loss of topsoil associated with the proposed Project would be less than significant and no mitigation measures would be required.

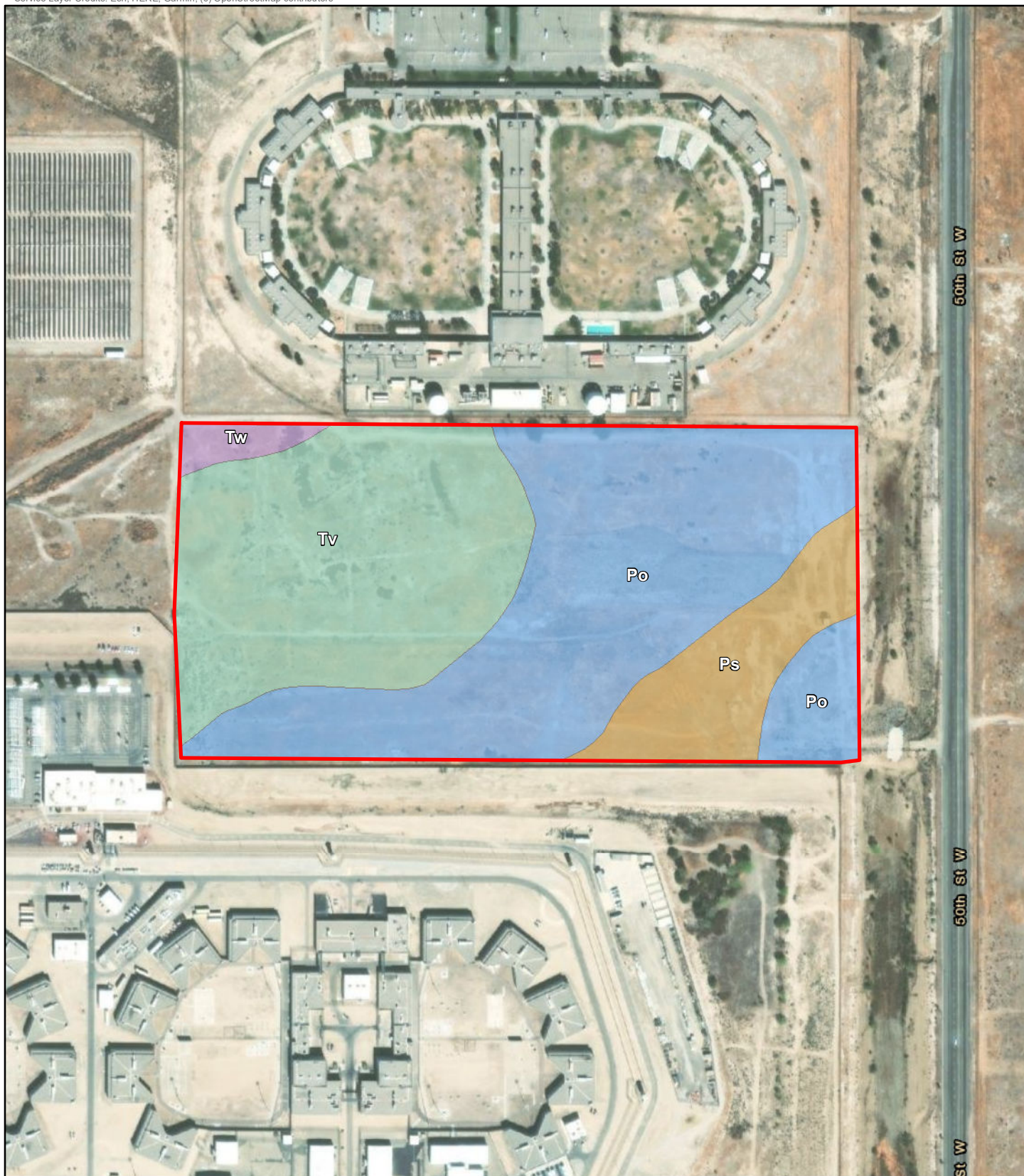
Following construction, operation of the proposed solar PV facility would not differ measurably increase soil erosion rates as compared to existing conditions. The operation of the facility would generally be passive with limited maintenance visits and associated activities (refer to Section 2.4, *Operations and Maintenance*). The impact on soil erosion and the loss of topsoil associated with the proposed Project would be less than significant and no mitigation measures would be required.

- 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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

Less Than Significant Impact. As previously described, the Geotechnical Investigation determined that the potential for liquefaction, lateral spreading, or seismically induced settlement to impact the proposed Project is considered to be low (Moore Twining Associates 2021). With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would result in a less than significant impact and no mitigation measures would be required.

- d) **Be located on expansive soil, as defined in Table 18- 1-B of the 1994 UBC, creating substantial direct or indirect risks to life or property?**

Less Than Significant Impact. Expansive soils shrink or swell as the moisture content decreases or increases. Volumetric changes associated with the shrinking or swelling can, over long periods of time, shift, crack or break structures or foundations built atop such soils. As described in the Geotechnical Investigation, the expansion index test indicated that surface soils on the Project site have a very low to medium expansion and should be considered in the design of the proposed solar PV facility. The Geotechnical Report recommends that the equipment pads be supported on a minimum of 18 inches of aggregate base over moisture conditioned and compacted soils. With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would result in a less than significant impact and no mitigation measures would be required.



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Project Site

Soils

Po - Pond loam

Ps - Pond silty clay loam

Tv - Tray sandy loam, saline-alkali

Tw - Tray loam, saline-alkali

1 inch = 400 feet
0 200 400 Feet



FIGURE 6

Project Site Soils
Los Angeles County High Desert Project
Lancaster, CA



- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

No Impact. The proposed solar PV facility would not include toilets, kitchens, bathrooms, or other facilities that would generate wastewater requiring disposal into the sewer system or a septic tank. The operation of the facility would generally be passive with limited maintenance visits and associated activities (refer to Section 2.4, *Operations and Maintenance*). Therefore, there would be no impacts and no mitigation measures would be required.

- f) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less Than Significant Impact with Mitigation Incorporated. Based on previous reviews of the Project site and surrounding vicinity, the potential to encounter shallow buried paleontological resources is low. However, deeper excavations that extend into older deposits may under significant paleontological resources. These impacts would be mitigated to a less than significant level with the implementation of MM GEO-1, which would require a temporary stop in construction work within the vicinity as well as evaluation and recovery of the find.

4.7.3 Mitigation Measures

With the incorporation of the design and construction recommendations provided in the Geotechnical Investigation as well as compliance with all applicable building codes and standards, implementation of the proposed Project would generally result in less than significant impacts. However, MM GEO-1 would be required to address any inadvertent discoveries of previously unrecorded paleontological resources.

MM GEO-1: Inadvertent Discovery of Paleontological Resources: If paleontological resources are encountered during the course of excavation, grading, or other construction activities, work within up to 50 feet of the find shall cease until a qualified paleontologist can document the discovery as needed, evaluate the potential resource, assess the significance of the find, and develop an appropriate treatment plan. At a minimum, a unique field number shall be assigned to each specimen identified; photograph the specimen and its geographic and stratigraphic context along with a scale near the specimen and its field number clearly visible in close-ups; record the location using a global positioning system (GPS) unit with accuracy greater than 1 foot horizontally and vertically (if such equipment is not available, horizontal measurements and bearings to nearby permanent features or accurately surveyed benchmarks, and vertical measurements by sighting level to points of known elevation will be used); record the field number and associated specimen data (identification by taxon and element, etc.) and corresponding geologic and geographic site data (e.g., location, elevation, etc.) in the field notes and in a daily monitoring report; stabilize and prepare all fossils for identification; identify to lowest taxonomic level possible by paleontologists, qualified and experienced in the identification of that group of fossils; and record on the outside of the container or bag the specimen number and taxonomic identification, if known.

4.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

4.8.1 Environmental Setting

Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere which, in turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through fossil fuel combustion in conjunction with other human activities appears to be closely associated with global warming (California Governor's Office of Planning and Research [OPR] 2008).

GHGs, as defined under AB 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of each GHG is multiplied by the prevalence of that gas to produce carbon dioxide equivalent (CO₂e). AB 32, the California Global Warming Solutions Act of 2006, recognizes that California is the source of substantial amounts of GHG emissions. In order to avert these consequences, AB 32 established a State goal of reducing GHG emissions to 1990 levels by the year 2020. In 2016, the legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. Most recently, Governor Jerry Brown signed SB 100 in September 2018, which set a target of 60 percent renewable electricity by 2030, and 100 percent renewable electricity by 2045.

The Project site is currently undeveloped and does not directly generate GHG emissions due to the absence of on-site water use, energy use, and vehicle trip generation. The AVAQMD's CEQA established the AVAQMD GHG Significance Threshold of 548,000 pounds of CO₂e per day and 100,000 tons of CO₂e per year (AVAQMD 2016). A project with emissions rates below these thresholds is considered to have a less than significant impact on climate change.

4.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Construction and operation of the proposed Project would generate GHG emissions. During construction, GHG emissions would result from construction worker vehicle trips, off-road diesel equipment exhaust, heavy haul truck trips for construction material delivery, etc. Construction GHG emissions were estimated using CalEEMod, version 2022.1 and project-specific construction data (e.g., construction schedule, construction workers, heavy haul truck volumes, heavy construction equipment, etc.). See Appendix A for a complete list of construction assumptions, including equipment, and vehicles.

Table 3. Construction-Related Greenhouse Gas Emissions

Construction Phase	Maximum Daily (lbs/day)	Annual (tons/year)
Project Construction Emissions	5,757	240
AVAQMD Thresholds	548,000	100,000
Exceeds Thresholds?	No	No

Source: See Appendix A.

Construction of the proposed solar PV facility and associated infrastructure would result in the 5,757 lbs/day of GHG emissions, far less than the AVAQMD thresholds.

Once operational, the proposed Project would result in GHG emissions from limited maintenance visits for inspection, panel washing, and panel adjustment, if needed. However, these emissions would amount to less than 1 metric ton of CO₂e per year. Additionally, the renewable energy generated by the proposed Project would displace GHG emissions that would be otherwise generated in the electrical grid by non-renewable resources. This displacement, estimated at up to a maximum of 249.12 pounds of CO₂e per megawatt-hour (MWh) using USEPA eGrid future-year emission factors (USEPA 2018) would far outweigh the amortized construction emissions and operational emissions over the estimated 35-year life of the proposed Project.² Therefore, operation of the proposed Project would have a beneficial impact by resulting in a net reduction in GHG emission.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. AB 32 and SB 32 establish Statewide goals to reduce GHG emissions to 1990 levels by 2020 and 40 percent below 1990 levels by 2030, respectively. CARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32 goals. The latest 2017 Climate Change Scoping Plan, which outlines a path to achieve the SB 32 target goal,

² Because additional renewable resources will be integrated into the Statewide electrical grid as a result of the RPS, the annual displaced GHG emissions achieved by the proposed Project would decline as a function of time (i.e., reductions per MWh would reduce as the grid gets cleaner, meaning the emissions that are displaced would reduce over time). The maximum displacement of GHG emissions would occur when the proposed Project first becomes operational, resulting in a maximum displacement of 249.12 pounds of CO₂e per MWh in 2028. This would gradually reduce over time to a displacement of 0 pounds of CO₂e per MWh in 2045, when it is assumed that the entire grid will be powered by renewable energy pursuant to SB 100.

outlines a series of technologically feasible and cost-effective measures to reduce Statewide GHG emissions. The 2017 Climate Change Scoping Plan includes implementation of the RPS as an individual measure. The RPS promotes multiple objectives, including diversifying the electricity supply. Increasing the renewable energy supply towards 100 percent zero-carbon by 2045 is designed to accelerate the transformation of the electricity sector, including investment in the transmission infrastructure and system changes to allow integration of large quantities of intermittent wind and solar generation. The proposed Project would add renewable solar-generated energy to the electricity supply and result in an emissions benefit. As such, the proposed Project facilitates the Statewide goal of reducing GHG emissions.

With respect to local plans proposed Project would be consistent with the Countywide Energy and Environmental Policy as well as the County of Los Angeles Climate Action Plan and the City of Lancaster Climate Action Plan, each of which were adopted for the purpose of reducing GHG emissions. As previously described, the renewable energy generated by the proposed Project would displace GHG emissions that would be otherwise generated in the electrical grid by non-renewable resources. This displacement would far outweigh the amortized construction emissions and operational emissions over the estimated 35-year life of the proposed Project.

There would be no impacts related to conflicts with adopted plans or policies for the purpose of reducing the emissions of GHG and no mitigation measures would be required.

4.8.3 Mitigation Measures

Implementation of the proposed Project would result in a net beneficial impact related to GHG emissions. Therefore, no mitigation measures would be required.

4.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a 0.25-mile radius of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which 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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

4.9.1 Environmental Setting

The discussion of past and current hazardous material users on and near the site is based on the Phase I ESA prepared by WSP (see Appendix E). The goal of the Phase I ESA was to identify recognized environmental conditions in connection with the subject property based on a records review, the site visit, and interviews.

WSP (2021b) did not identify any recognized environmental conditions associated with the Project site. This includes regulated hazardous substances, wastes, and/or petroleum products in association with current property use; hazardous substances, wastes and petroleum products associated with past property use; above or below ground storage tanks; presence of strong or unnatural odors; stained soils; or septic systems.

However, the Geotechnical Investigation prepared for the proposed Project did identify an area of debris (e.g., asphalt debris, grout/concrete debris, tire fragments, and metal debris) in the northeast corner of the Project site. As described in Section 4.7, *Geology and Soils* this debris would be excavated and removed from the Project site and replaced with engineered fill soils to support the proposed mounting structures (Moore Twining Associates 2021; see Appendix D).

As described in Section 1.4.2, *Adjacent Properties*, the Mira Loma Detention Facility is located to the west of the Project site and CMYC and LAC are located to the north and south of the Project site, respectively. No recognized environmental conditions that may adversely affect the Project site were identified at any of these adjoining properties (WSP 2021b).

4.9.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact with Mitigation Incorporated. Construction activities associated with the proposed Project would involve the use of hazardous materials for construction, such as solvents, acids, curing compounds, grease, oils, and other chemicals, which could pose risks to construction workers, if not properly stored, used, and disposed of. However, compliance with existing Federal and State regulations related to the transport, handling, use, and disposal of hazardous materials during all construction activities would ensure that impacts would be less than significant and no mitigation

measures would be required. Following the completion of construction, no hazardous materials would be stored on the Project site.

Cleaning of the PV panels would involve water spraying of the panels to remove dust buildup. However, soap, detergent, glass cleaner, surfactants, or chemicals can be used to remove grime, bird droppings, and/or soot from the PV panels. Water and any cleansers would be absorbed into the soils and may lead to soil and/or groundwater contamination over time. Therefore, no cleaning agents or additives should be used with the water for panel cleaning. If cleaning agents or additives become necessary, MM HAZ-1 would require cleaning agents to be biodegradable, non-toxic, and non-hazardous to plants, wildlife, and the groundwater.

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?

Less Than Significant Impact with Mitigation Incorporated. Potential impacts related to the storage, use, and handling of hazardous materials during construction are discussed in Hazards and Hazardous Materials (a) above.

With regard to the potential to encounter hazardous materials (e.g., contaminated soils during construction activities), the Phase I ESA did not identify and recognized environmental concerns associated with the Project site or the adjacent properties. However, the Geotechnical Investigation prepared for the proposed Project did identify an area of debris (e.g., asphalt debris, grout/concrete debris, tire fragments, and metal debris) in the northeast corner of the Project site. As described in Section 4.7, *Geology and Soils* this debris would be excavated and removed from the Project site and replaced with engineered fill soils to support the proposed mounting structures (Moore Twining Associates 2021; see Appendix D). Depending on the nature of this buried debris excavation and removal could result in the exposure of previously unknown contaminated soils or other hazardous materials. As required by MM HAZ-2 if abnormal soil staining and/or odors are encountered during excavation and grading activities, construction activities shall cease and an assessment of the soils shall be conducted prior to the continuation of excavation or grading activities. If chemical levels are above regulatory standards, remediation and/or removal of contaminated soils in compliance with applicable local, State, and/or Federal standards. Further, as required by MM HAZ-3 any contaminated soils or other hazardous materials encountered on the Project site requiring off-site disposal shall be transported off-site by a properly licensed hazardous waste hauler who shall be in compliance with all applicable State and federal requirements, including Caltrans regulations under Title 49 of the CFR.

With the implementation of MM HAZ-2 and -3, any potential impacts associated with the release of hazardous materials would be reduced to a less than significant level.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a 0.25-mile radius of an existing or proposed school?

No Impact. There are no schools located within 0.25 mile of the Project site. The nearest school is Sundown Elementary located at 6151 W. Avenue J-8, approximately 1.3 miles to the south of the Project site. Neither the construction of, nor operation of, the proposed solar PV facility would lead to hazardous emissions or the handling of hazardous or acutely

hazardous materials, substances, or waste that would affect off-site locations. The proposed reconductoring would occur adjacent to Quartz Hill High School at the intersection of West Avenue L and West Avenue K. However, the replacement of existing transmission lines in this location would not result in hazardous emissions or wastes that could affect receptors at the school. Therefore, no impacts on nearby schools would occur and no mitigation measures would be required.

- d) **Be located on a site which 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?**

Less Than Significant Impact. Government Code Section 65962.5(a)(1) requires that the California Department of Toxics and Substances Control (DTSC) “shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following:(1) [a]ll hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (“HSC”).” The hazardous waste facilities identified in HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC Section 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment (California Environmental Protection Agency 2022).

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no impact and no mitigation measures would be required.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in safety hazard or excessive noise for people residing or working in the project area?**

Less Than Significant Impact. The proposed Project would not be located within 2 miles of a public airport or public use airport. The nearest public-use airport to the Project site is the General William J. Fox Airfield, located 2.5 miles north of the Project site. The Project site is not located within the Airport Land Use Plan (ALUP) for this airport (County of Los Angeles Department of Public Works 2013). The Project site is located just outside of Zone E (Other Airport Environs) of the Compatibility Zones for this airport (County of Los Angeles Department of Public Works 2013). Therefore, the proposed Project would not be subject to review by the Airport Land Use Commission (ALUC) for consistency with the General William J. Fox ALUP. Nevertheless, the proposed Project would not create residences or other land uses that would be sensitive to aircraft noise. All features of the proposed Project would be outside the airfield properties. Consequently, there are no impacts from airport-related noise or safety hazards and no mitigation measures would be required.

- f) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact. The City of Lancaster has an adopted Emergency Operations Plan (EOP) that details the responsibilities of private organizations and Federal, State, and local agencies

in the event of disaster. West Avenue I has been identified as an evacuation route (City of Lancaster 2009b). However, no improvements are proposed on 50th Street West in association with the proposed Project. Construction activities would be staged on the Project site and would not obstruct evacuation procedures or implementation of the City's EOP. The implementation of the proposed Project is not anticipated to affect an adopted emergency response plan or emergency evacuation plan. There would be no impact and no mitigation measures would be required.

g) Expose people or structures either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project site is surrounded by several public facilities and is not adjacent to wildlands or in or near areas designated as a Very High or High Fire Hazard Severity Zone. Therefore, there would be no impact on wildfire protection and no mitigation measures would be required.

4.9.3 Mitigation Measures

MM HAZ-1: During operation of the solar PV facility, panel washing shall be completed using cleaning agents or additives that are biodegradable, non-toxic, and non-hazardous to plants, animals, and groundwater.

MM HAZ-2: If abnormal soil staining and/or odors are encountered during grading and excavation activities that could indicate the presence of petroleum hydrocarbons, heavy metals, or other contamination, construction activities shall be halted and an assessment of the soils shall be conducted prior to the continuation of grading or excavation activities. If the results of the soil testing show the presence of chemicals below regulatory levels, grading or excavation may proceed accordingly. If chemical levels are above regulatory standards, remediation and/or removal of contaminated soils in compliance with applicable local, State, and Federal standards and requirements shall be conducted prior to construction of the proposed Project.

MM HAZ-3: Any contaminated soils or other hazardous materials encountered on the project site requiring off-site disposal shall be transported off-site by a properly licensed hazardous waste hauler who shall be in compliance with all applicable State and federal requirements, including California Department of Transportation (Caltrans) regulations under Title 49 of the Code of Federal Regulations (CFR). Hazardous materials that may be encountered during proposed project implementation would be handled, treated, and/or disposed of in accordance with applicable regulations and/or the requirements of the local oversight agency(ies).

4.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
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	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, result in release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

4.10.1 Environmental Setting

The Project site is located within the Railroad Canyon watershed (Hydrologic Unit Code [HUC] 180902061406) within the Amargosa Creek watershed (HUC 1809020614). The Railroad Canyon watershed encompasses approximately 34,610 acres and is bounded by Portal Ridge to the southeast. The Project site is underlain by the Antelope Valley Groundwater Basin (Basin), which serves as a major source of domestic water for the Antelope Valley.

As described in Section 4.4, *Biological Resources* the NHD did not identify any water features within the Project site and the surrounding vicinity. However, the desktop analysis and data collected in the field as part of the Habitat Assessment identified three hydrology features, which are discussed in detail below (Rincon 2021).

Three drainage features were identified within the vicinity of the Project site including: Drainage A to the northwest; Drainage B to the west; and Drainage C, which is located along the northern boundary of the Project site. (Rincon 2021). Drainage A and Drainage B were both dry during the field survey; however, during rain events, the drainages likely temporarily collect surface stormwater runoff from the facility. The drainages are isolated and do not provide flow to downstream features, and no wetland vegetation or other hydrology indicators (i.e., standing water, ordinary high-water mark, etc.) were observed (Rincon 2021).

Drainage C, which is located along the northern boundary of the Project site (refer to Figure 5), is also a maintained V-shaped ditch that was dry during the time of the survey. The drainage originates from the property to the northeast and continues to the east where it eventually connects with a basin to the east of the Project site. In addition, there is a water pipe that drains water from the CMYC, which empties into this drainage.

Based on a review of Federal Insurance Rate Map (FIRM) Panel No. 06037C0405F (effective September 26, 2008). The Project site is not located within the 100-year floodplain (1-percent annual chance of flood); however, it is located within the 500-year floodplain (i.e., 0.2-percent annual chance of flood) (Federal Emergency Management Agency [FEMA] 2008).

4.10.2 Discussion

a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Less Than Significant Impact. Implementation of the proposed Project has the potential to generate water pollutants during the construction phase of the proposed Project. Soil disturbance from construction activities associated with site grading, solar array and mounting system installation, electrical conduit trenching or utility pole excavation and power inverter concrete pad installation could cause soil erosion and the eventual release of sediment into storm water runoff. Under the NPDES Construction General Permit, applicants are required to develop a SWPPP, implement BMPs to reduce and/or treat stormwater runoff, and perform stormwater monitoring during construction. A SWPPP shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and include the construction site BMPs to control pollutants, such as sediment control and construction materials management. A short list of possible BMPs that may be used during construction of the proposed Project includes the following:

- Temporary Soil Stabilization: silt fencing, gravel bag berms, sandbag barriers, straw bale barriers, sediment traps, soil binders, and straw mulch, and fiber rolls
- Wind Erosion Control: portable water, dust and erosion control
- Tracking Control: street sweeping and entrance/outlet tire washing
- Waste Management and Material Pollution Control: vehicle and equipment cleaning, stockpile management, proper material delivery and storage, solid waste management, concrete waste management, and contaminated soil management

Check berms and desilting basins may be developed during construction to prevent off-site sediment transport. A typical BMP stormwater pollution interception system may include a temporary detention/sedimentation basin and a filter or clarifier device to remove pollutants from runoff before release from the property.

The small-scale construction activities associated with the proposed Project and the required implementation of a SWPPP would reduce all potential construction impacts to below significant levels. The proposed Project involves the installation of solar PV panels with little maintenance activities, as such there would be no operational impacts on water

quality or waste discharge requirements.

Compliance with the SWPPP and the BMPs established in the NPDES permit would ensure that impacts on the detention basin identified near the proposed Project site would be less than significant and no mitigation measures would be required.

- b) **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Less Than Significant Impact. The proposed Project would include the creation of minimal amounts of impervious surfaces associated with the solar array. Rainfall would flow off of the solar PV panels into the pervious ground adjacent to the panels. Given the size of the Project site and relatively small amount of impervious surface required for implementation of the proposed Project (e.g., mounting structures, pads, etc.), it is anticipated that storm water runoff would still infiltrate the Project site and have a negligible impact on groundwater recharge.

Potential sources of water for required panel washing include water trucked in from the local municipality or water from nearby wells (including privately-owned local wells). Well owner production rights have annual volume limits thereby controlling groundwater deficits. Since a modest amount of water use is planned for the operation and maintenance of the project, the project would not significantly deplete groundwater supplies.

Potential impacts to groundwater recharge would be less than significant and no mitigation measures would be required.

- 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;**

Less Than Significant Impact. Refer to Geology and Soils (a) and (b) above.

- 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:**

- ii) **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;**

Less Than Significant Impact. The proposed Project would not result in any substantial topographic changes that would affect local drainage patterns. As described in Section 4.7, *Geology and Soils*, the Project site is generally flat. Future runoff from the Project site would continue to follow its existing flow paths. There would be no substantial increase in runoff or other impacts to Drainage C located to the north of the proposed solar array. Similarly, there would be no impacts to Drainage A or B located to the west. Therefore, impacts would be less than significant and no mitigation measures would be required.

- 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:**

- 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**

Less Than Significant Impact. As previously described, the proposed Project would potentially decrease the area of impervious surfaces on the Project site. The proposed Project would not be likely to introduce new or substantial additional sources of polluted runoff. Therefore, impacts would be less than significant and no mitigation measures would be required.

- 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:**

- iv) **Impede or redirect flood flows?**

No Impact. As previously described, the Project site is not located within the 100-year floodplain (1-percent annual chance of flood); however, it is located within the 500-year floodplain (i.e., 0.2-percent annual chance of flood) (FEMA 2008). Excavation and grading associated with the proposed Project would be minimal and given the nature of the solar PV facility, with mounting structure elevating the solar PV panels, the proposed Project would not substantially redirect and flood flows. Impacts would be less than significant and no mitigation measures would be required.

- d) **In flood hazard, tsunami, or seiche zones, result in release of pollutants due to project inundation?**

No Impact. As previously described the Project site is not located within a 100-year floodplain or Special Flood Hazard Zone (FEMA 2008). The Project site is located more than 30 miles from the ocean and is outside the tsunami inundation areas along the coast. Additionally, there are no hillside areas within 4 miles of the Project site that could generate mudflow at the Project site. No impacts related to seiche, tsunami, or mudflow would occur and no mitigation measures would be required.

- e) **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Less Than Significant Impact. The City is subject to the objectives and limits of the Water Quality Control Plan for the Los Angeles Region (Basin Plan) under the jurisdiction of the Los Angeles RWQCB. The proposed Project would require the use of water during excavation, grading, and other construction activities. As previously described water use would be limited to dust suppression activities and panel washing. Additionally, compliance with the SWPPP during construction would ensure that there would be no adverse effects to water quality during construction. The proposed Project would not conflict with or obstruct implementation of a water quality control plan or a sustainable groundwater management plan.

4.10.3 Mitigation Measures

The implementation of the proposed Project would result in less than significant impacts to hydrology and water quality. Therefore, no mitigation measures would be required.

4.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

4.11.1 Environmental Setting

As described in Section 1.4.1, *Project Site*, the Project site is currently undeveloped and is surrounded by correctional facilities and vacant land. Adjacent land uses include the vacant Mira Loma Detention Center to the northwest, High Desert Recovery Services to the west, LAC to the south, CMYC and vacant land to the east, the Los Angeles County Animal Care and Control Facility to the northeast (refer to Figure 2).

The Project site and adjacent State and County facilities are designated as P (Public Use and Semi Public) and the areas to the north, east and west and are designed as LI (Light Industrial), except for Urban Residential areas to the west (developed with multi-family uses) and north of Lancaster Boulevard. The area south of West Avenue J is also designated as Urban Residential. Areas farther to the north and west are designated as Non-Urban Residential (City of Lancaster 2009a).

The Project site is zoned P (Public Use and Semi Public) in the Lancaster Zoning Map, along with surrounding State and County facilities. Areas south and southwest of LAC are zoned Single-Family Residential (R-7,000) and land west of 60th Street West is zoned Moderate Density Residential (7.1 to 15 dwelling units per acre). Lands north, northeast, and northwest of the Project site are zoned Rural Residential (1 unit per 2.5 acres), and land east of the site is zoned Moderate Density Residential (Lancaster 1998).

4.11.2 Discussion

a) Physically divide an established community?

No Impact. The City of Lancaster land use designation and zoning for the Project site is P (Public Use and Semi Public) (City of Lancaster 1998, 2009). The Project site surrounded by properties with the same land use designation and zoning (i.e., Mira Loma

Detention Center, LAC, and CMYC). The proposed solar PV facility would be similar to the adjacent solar PV facilities constructed in 2011 and 2012. The proposed Project would not conflict with existing land uses and would not divide an established community. Therefore, no impacts would occur and no mitigation measures would be required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The City of Lancaster land use designation and zoning for the Project site is P (Public Use and Semi Public) (City of Lancaster 1998, 2009). The P land use designation is for lands in public ownership, including governmental administration and service facilities (City of Lancaster 2009a). The P zoning is intended for public facilities and uses which provide a full range of urban services and may include airports, animal shelters, prisons, and other uses which are consistent with the purpose and intent of public use zoning. The proposed solar PV facility would serve a community's needs by providing electrical energy to electrical grid and help the County meet its energy conservation goals. The proposed Project would be consistent with the existing land use designations and zoning. No impact would occur and no mitigation measures would be required.

4.11.3 Mitigation Measures

Implementation of the proposed Project would have no impact on land use and planning. Therefore, no mitigation measures would be required.

4.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.12.1 Environmental Setting

According to the City of Lancaster 2030 General Plan Master Environmental Assessment, the western Mojave Desert region has historically been an important source of both metallic and nonmetallic minerals and rocks (City of Lancaster 2009b). Metal ores such as gold, silver, and tungsten were mined for years in the Mojave mining district. Minor deposits of tin, lead-zinc, copper, manganese, and radioactive materials were also exploited, but eventually became uneconomical after World War II, due largely to depletion of the deposits. Currently, there are no active mines within the region. A number of exploratory energy wells were drilled in the region over the past century, however none of the wells ever indicated the presence of oil or gas. The geologic marine formations that underlie the Mojave Desert are too metamorphosed to act as a

source for oil or gas.

To protect and allow for the economical utilization of aggregate resources, the Surface Mining and Recovery Act (SMARA) charges the State Mining and Geology Board to inventory and classify potential aggregate resources throughout the State. The City of Lancaster is located in the Palmdale Production-Consumption (P-C) region; production consumption region is the market area of a mineral commodity, in this case, sand and gravel.

According to the most recent data from the California Geological Survey, the Project site is located within the MRZ-3 resource area, which indicates an area which contains potential but presently unproven resources. According to the General Plan, it is not considered likely that the City has large valuable mineral and aggregate deposits, and the Project site is not designated as a potential mineral resource recovery site (City of Lancaster 2009a).

4.12.2 Discussion

- 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?**

No Impact. The City of Lancaster General Plan does not designate any area within the City as containing mineral resources (City of Lancaster 2009a). The Project site and surrounding areas are not designated as a potential mineral resource recovery site. The Project site has never been used for mineral recovery or mining activities, and no designated, regionally significant mineral resources are on or near the Project site (California Department of Conservation 1987). Therefore, the proposed solar array would not result in the loss of availability of locally important mineral resources. No impacts would occur and no mitigation measures would be required.

- 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?**

No Impact. Refer to Mineral Resources (a) above.

4.12.3 Mitigation Measures

Implementation of the proposed Project would have no impact on mineral resources. Therefore, no mitigation measures would be required.

4.13 Noise and Vibration

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE AND VIBRATION. 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 the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

4.13.1 Environmental Setting

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. Under these guidelines, single-family homes are “normally acceptable” in exterior noise environments up to 60 Community Noise Equivalent Level (CNEL) and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and businesses, commercial, and professional uses. The 70 CNEL maximum criteria developed by State Office of Noise Control serves as a general guideline for identifying community noise problems. Sensitive receptors including schools, libraries, hospitals, and nursing homes are unacceptable in exterior environments, which exceed 70 CNEL, while residential uses are unacceptable in exterior environments in excess of 65 CNEL. Under existing conditions, very few areas within the City experience ambient noise levels in excess of 70 CNEL (City of Lancaster 2009b).

The predominant sources of noise affecting the Project site are from existing vehicle traffic on West Avenue I, 50th Street West, and noise from activities on the adjacent correctional facilities (e.g., public announcements, noise from outdoor activities, etc.). However, based on the low-density nature of the site, distance from the City center and airport areas, the ambient noise levels in the Project site are typical of low density and rural areas, ranging from 45 to 60 A-weighted decibels (dBA).

Three airport installations are present within and adjacent to the City of Lancaster - Edwards Air Force Base, Air Force Plant 42 (Palmdale Regional Airport), and General Fox Air Field. These are each significant noise generators within the area (City of Lancaster 2009b). The Project site is located approximately 2.5 miles to the south of the General Fox Air Field; all land within 1 mile of the airport boundary has been rezoned as industrial due to noise compatibility issues (City of Lancaster 2009b). The Project site located just outside of the Zone E compatibility zone of the airport, which is identified as a Low Noise Impact area with no compatibility issues since it is

beyond the 55 Community Noise Equivalent Level (CNEL) noise contour.

4.13.2 Discussion

- 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 the local general plan or noise ordinance, or applicable standards of other agencies?**

Less Than Significant Impact. The Noise Control Ordinance in the City of Lancaster Municipal Code (Section 8.24) prohibits a variety of nuisance noises. Construction-related noise is regulated by means of a limitation on the hours for construction activity for projects located within 500 feet of an occupied residential dwelling. In such cases, construction is prohibited between the hours of 8 p.m. and 7 a.m. and all day on Sunday.

Site preparation would include vegetation clearing, site grading, solar array and mounting system installation, electrical conduit trenching or utility pole excavation, and power inverter concrete pad installation. Temporary construction-related noise and groundborne vibration would be generated by excavation, grading, and other activities, including operation of a grader, a dozer, a backhoe, loaders, water trucks, and heavy haul trucks (see Table 4). Additional sources of temporary construction-related noise could include generators and the use of hand-operated power tools.

Table 4. Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 Feet
Grader	85
Dozer	82–85
Backhoe	78–80
Loader	79–80
Heavy Haul Trucks	82–95
Impact Pile Driver	95–101

Note: Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.

Source: Federal Highway Administration 2017.

The noise generated by these pieces of equipment, would result in a temporary increase in ambient noise levels consistent with the general noise levels presented in Table 4. The Project site would be situated approximately 95 feet from the southernmost wall of CMYC and 101 feet from the northernmost wall of LAC. However, the nearest habitable structure at the CMYC is located approximately 250 feet from the Project site and the nearest habitable structure is located the LAC approximately 450 feet from the Project site. At these distances, maximum construction noise levels (i.e., heavy haul trucks) experienced at these sites would be reduced to 87 and 82 dBA, respectively.³ This increase would be short-term and intermittent, and construction activities associated with the proposed Project would be consistent with the Noise Control Ordinance in the City of Lancaster Municipal Code (Section 8.24). No other sensitive receptors in the vicinity of the Project site would experience measurable increases in noise as a result of the construction

³ The average noise levels at the nearest noise sensitive receptors would typically be much lower because mobile construction equipment would move around the Project site with different loads and power requirements.

Construction equipment would only be on the northern and southernmost edges of the Project site for limited times.

activities. Noise impacts would be less than significant and no mitigation measures would be required.

Operation of the proposed Project would not generate long-term operational noise impacts. Noise from operation of solar panels is estimated to have low, if any, on-site or off-site noises. Periodic maintenance would consist primarily of using a truck with a water tank and sprayer approximately one to four times per year and panel adjustments, approximately four times a year. Noise from these activities would be less than significant and no mitigation measures would be required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The proposed Project may result in additional instances of ground borne vibration over the construction period from use of construction equipment, pile drivers, and heavy haul trucks. Groundborne vibration generated by construction projects is usually highest during pile driving. For continuous vibration from construction activities such as vibratory compaction or vibratory pile driving, an indoor peak particle velocity (PPV) exceeding 0.035 inches/sec is generally considered to be distinctly perceptible, whereas a PPV of 0.2 inches/sec is annoying. Caltrans provides thresholds of significance for vibration and methodology for calculating vibration levels at distances from generation. Vibration levels at the offsite sensitive uses were determined with the following equation⁴:

$$PPV_{Projected} = PPV_{Ref} (25/D)^n$$

Where: PPV_{Ref} = reference PPV at 25 feet; D = distance from equipment to the receiver in feet; n = 1.1 (a recommended conservative value pertaining to attenuation rate of vibration through ground).

PPV from impact pile drivers at 25 feet can range from 0.644 to 1.518 (Caltrans 2020). At 250 feet, would range from 0.05 to 0.12 in/sec. Given the distance between the Project site and nearest sensitive uses at approximately 250 feet away, vibration impacts would be less than significant. No mitigation measures would be required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is located approximately 2.5 miles south of the General Fox Airfield, outside the 55-dBA CNEL existing and future airport noise contours (County of Los Angeles Department of Public Works 2013). The proposed Project would not include the development of noise-sensitive uses. While aircraft overflights would be heard, people working in the Project site would not be exposed to excessive aircraft noise levels. No impacts would occur and no mitigation measures would be required.

4.13.3 Mitigation Measures

Compliance with the Noise Control Ordinance in the City of Lancaster Municipal Code

⁴ Caltrans. 2013. Transportation and Construction Vibration Guidance Manual, Equation 12.

(Section 8.24) would ensure that noise impacts resulting from the implementation of the proposed Project would be less than significant. Therefore, no mitigation measures would be required.

4.14 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 Environmental Setting

Lancaster is part of the section of the North Los Angeles County Subregion, which includes Palmdale and the unincorporated areas of the Antelope Valley. Table 5 describes the projected population growth for the City of Lancaster as described in the General Plan (City of Lancaster 2009b). However, based on the latest 2020 data from the U.S. census, the current population of Lancaster is already 157,601. Long-term projections indicate the City's population could reach 260,000 by 2030. This population growth is largely attributable to former residents of the Los Angeles area who had been priced out of that market have moved to Lancaster and the Antelope Valley to purchase a home (City of Lancaster 2009b).

The Project site is vacant and there are no residents, housing units, or employees currently at the site. The nearest single-family residential areas are located approximately 0.5 to the south of the Project site.

Table 5. Regional Growth

Area	2006	Growth Rate (2000-2006)		2030	Growth Rate (2000-2030)	
		Change	Percent		Change	Percent
Lancaster City	138,392	19,674	16.6	259,696	140,978	118.8

Source: City of Lancaster 2009b

The majority of housing in the City of Lancaster is composed of detached single-family homes. However, changing demographics and lifestyles (e.g., baby boomers, empty nesters, and Generation X / Millennial households) are anticipated to increase the demand for alternative forms of housing including mixed-use development and transit-oriented development. The Housing Element of the City's General Plan contains goals, policies, and programs have been established to address housing issues in the City of Lancaster and to meet State law housing requirements.

The objective is to facilitate and encourage safe, decent housing that fulfills the diverse needs of current and future residents. To achieve this vision, the Housing Element identifies long-term housing goals and shorter-term policies and programs to address identified housing needs, constraints to development, and resources available to address the housing needs (City of Lancaster 2022).

4.14.2 Discussion

- 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)?**

No Impact. The proposed Project would not establish new housing or extend any roads or urban services. Construction employment opportunities provided by the proposed Project would not result in long-term relocation by workers due the temporary nature of the proposed construction activities. The proposed Project would neither affect population or housing located within the City of Lancaster, nor in the greater vicinity of Los Angeles County. Therefore, there would be no population growth impacts as a result of the proposed Project and no mitigation measures would be required.

- b) **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact. The Project site is vacant and the construction of the solar PV facility would not affect housing availability or displace existing housing. Therefore, the proposed Project would have no impacts on population and housing and no mitigation measures would be required.

4.14.3 Mitigation Measures

Implementation of the proposed Project would result in no impact to population and housing. Therefore, no mitigation measures would be required.

4.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project 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 other performance objectives for any of the public services:				
a. Fire Protection?	☐	☐	☐	☒
b. Police Protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

4.15.1 Environmental Setting

The City of Lancaster, including the Project site, is served by the following public services:

Fire Protection

The Los Angeles County Fire Department (LACFD) provides fire protection services to the Antelope Valley, which includes the City of Lancaster and the surrounding unincorporated area. The LACFD was formed to provide wildland and structural fire protection. The City of Lancaster is a member of the consolidated Fire Protection District and maintains a contract with the County of Los Angeles to receive staff and fire protection services. LACFD's goal is to have a fire station within 1.5 miles of all fully developed urban areas. The nationally recognized guideline is a five-minute response time in urban areas, which is usually achieved within a 1.5-mile distance. Development within Lancaster is subject to compliance with all relevant LACFD general requirements, which address ingress and egress access for emergency response, access and fire and life safety requirements during construction, water mains, fire flows and fire hydrants, access roadways to Fire Department apparatus and maintenance of access roads and fire sprinkler systems.

Police

Police protection services within the City of Lancaster, including the Project site, are provided by the Los Angeles County Sheriff's Department on a contractual basis. Two patrol stations are located within the Antelope Valley. These include the Palmdale Station located at 750 East Avenue Q in the City of Palmdale and the Lancaster Station located at 501 West Lancaster Boulevard in downtown Lancaster.

Hospitals and Other Inpatient Medical Facilities

There are currently two hospitals that provide comprehensive medical and emergency services to the City of Lancaster and the surrounding vicinity, Lancaster Community Hospital and Antelope Valley Hospital. both of these hospitals also provide emergency services.

Schools

The Antelope Valley Union High School District (AVUHSD) provides education services for students grades nine through 12 within 1,100 square miles of the Antelope Valley, including Lancaster and Quartz Hill. There are seven comprehensive high schools in the AVUHSD and four that serve the City of Lancaster: Antelope Valley High School, Eastside High School, Quartz Hill High School, and Lancaster High School. There are no schools within close vicinity to the Project site; the nearest school is Sundown Elementary School located approximately 1.5 miles to the

southwest.

Parks

Parks and recreational facilities are made available to City of Lancaster residents through the Department of Parks, Recreation, and Arts. The State of California, County of Los Angeles, the City of Lancaster, and private groups provide and operate recreation facilities in the north Antelope Valley area, which includes the City of Lancaster (City of Lancaster 2009b). There are no parks within vicinity of the Project site.

4.15.2 Discussion

a) Fire Protection?

No Impact. The proposed project would not involve the construction of new habitable structures, increase fire hazards, substantially increase the demand for fire protection, or pose substantially adverse physical impacts that could impair emergency fire response.

During construction, emergency access to the Project site would be maintained along roadways and any lane closures would be temporary. Following the completion of construction-related activities, the proposed Project would not result in a change in land use or activities. Nor would the proposed Project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. Therefore, there would be no impact related to fire protection services and no mitigation measures would be required.

b) Police Protection?

No Impact. Implementation of the proposed Project would not generate an increase in population and thus would not alter the County's existing officer-to-resident population ratio. Therefore, no new or physically altered police protection facilities would be required. In addition, security lighting associated with the Mira Loma Detention Center, CMYC, and LAC facilities surrounds the Project site. Patrol services around the solar facilities are expected to continue to be provided by the County Sheriff's Department personnel. Construction of the proposed Project would be contained within the currently vacant dirt lot and is not anticipated to result in temporary interruption or delays for law enforcement response times. Therefore, implementation of the proposed Project would have no impact on police protection and no mitigation measures would be required.

c) Schools?

No Impact. No new residential units would be constructed as a part of the proposed Project, and the proposed Project would not result in new permanent populations that would require school facilities. As such, the proposed Project would not increase demand on local schools. No impact would occur and no mitigation measures would be required.

d) Parks?

No Impact. The proposed Project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. Further, the proposed Project would not stimulate demand for such facilities

because it would not generate increases in the community's residential or employee populations. No impact would occur and no mitigation measures would be required.

e) Other public facilities?

No Impact. The proposed Project does not include development of residential uses and would not generate any new permanent residents that would increase demand on other public services or facilities. As such, no impact to other public facilities would occur from implementation of the proposed Project and no mitigation measures would be required.

4.15.3 Mitigation Measures

Implementation of the proposed Project would result in no impact to public services. Therefore, no mitigation measures would be required.

4.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a. Would the project 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?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

4.16.1 Environmental Setting

The City of Lancaster Parks, Recreation and Arts Department supervise and maintain park, recreational and cultural facilities in Lancaster. The City currently maintains 13 City parks and recreational facilities, which consist of approximately 448 acres of developed and undeveloped park and recreation land (City of Lancaster 2009b). The Parks, Recreation & Arts Master Plan was developed by the City of Lancaster in 2007 to meet existing needs and proactively respond to the anticipated future population growth. This Master Plan determines future need for parks, open space, recreation and arts services; identifies operation needs, such as program staff and maintenance; and determines how to fund improvements.

The City has a park standard of 5.0 acres of parkland per 1,000 residents. According to the existing conditions report prepared for the City of Lancaster Master Plan of Parks, Recreation and Arts, as of August 2006, the City's overall level of service was 3.39 acres of parkland per 1,000 residents or 1.61 acres per 1,000 less than the minimum level of service indicated by the General Plan. Rapid City growth that has made it difficult to achieve and maintain adequate park acreage and facilities. Chapter 15.72 of the Lancaster Municipal Code requires dedication of land or payment of park in-lieu fees for park acquisition, park development and park maintenance, prior to the issuance of any building permit for construction of residential developments (City of

Lancaster 2009b).

There are no parks or other recreation areas located within the vicinity of the Project site.

4.16.2 Discussion

- a) **Would the project 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?**

No Impact. The proposed Project would not generate an increase in residential population. With no new households or residents, the proposed Project would not increase the use of local parks nor create a demand for local or regional recreational facilities. Also, no recreational facilities are included as a part of the proposed Project. The proposed Project does not involve the creation of new or expansion of existing recreational facilities that would have an adverse physical effect on the environment. No impact would occur and no mitigation measures would be required.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

No Impact. Refer to Recreation (a) above.

4.16.3 Mitigation Measures

Implementation of the proposed Project would result in no impacts to recreation. Therefore, no mitigation measures would be required.

4.17 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VXII. TRANSPORTATION. Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

4.17.1 Environmental Setting

The existing roadway network in the City of Lancaster and the surrounding vicinity is primarily designed in a north-south and east-west grid pattern with major and secondary arterials spaced at 1- and 0.5-mile intervals, respectively (City of Lancaster 2009b). Regional access to the project site is provided by SR-14, which starts at Interstate (I-) 5 in the Santa Clarita Valley area, running northeasterly through the Angeles National Forest, then northerly through the Cities of Palmdale and Lancaster. The Project site is located approximately miles to the west of SR-14, and generally bordered by West Avenue I to the north, Avenue J to the south, 50th Street West to the east, and 60th Street to the west. Both Avenue I and Avenue J are major arterial roads characterized by free flowing traffic.

The Project site is undeveloped and does not generate vehicle trips on the freeway or area roadways. There are no existing or proposed bicycle routes or trails on or near the Project site. An existing dirt road off 50th Street West provides access to the Project site.

4.17.2 Discussion

a) **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Less Than Significant Impact. Construction workers traveling to the Project site as well as construction vehicles and equipment and construction materials deliveries would generate approximately 35 passenger vehicle trips and approximately 21 heavy haul truck trips per day to the area during the construction period, which will last for 1 year or less. Regional access to the Project site would be provided via SR-14 or SR-138. Direct access to the Project site would be provided via 50th Street West.

The City of Lancaster does not designate any truck routes or restrict hour for truck activities. However, the Los Angeles County Department of Public Works may enter into an agreement with incorporated cities permitting heavy haul truck trips on designated truck routes. The Los Angeles County Department of Public Works has an agreement with the City of Lancaster that designates several streets for truck routes, including Avenue I, Avenue J, 50th Street West, and 60th Street West (County of Los Angeles 2011).

Operation of the proposed Project would not alter existing circulation patterns or generate substantial numbers of new vehicle trips on the surrounding roadways. Vehicle trips would occur for the annual inspections and maintenance events, which would result in a maximum of 10 trips annually. The proposed Project would not conflict with any program, plan, ordinance or policy addressing the circulation system. Impacts would be less than significant and no mitigation measures would be required.

b) **Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

Less Than Significant Impact. As previously described, construction workers traveling to the Project site as well as construction vehicles and equipment and construction materials deliveries would generate approximately 35 passenger vehicle trips and approximately 21 heavy haul truck trips per day to the area during the construction period, which will last for 1 year or less.

Additionally, operation of the proposed Project would involve vehicle trips would occur for the annual inspections and maintenance events, which would result in a maximum of 10 trips annually.

According to the Technical Advisory on Evaluating Transportation Impacts from the State of California Governor's Office of Planning and Research, "absent substantial evidence indicating that a project would generate a potentially significant level of vehicle miles traveled (VMT), or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact." (OPR 2018). Therefore, impacts related to VMT during construction and operation of the proposed Project would be less than significant.



Photograph 6. Access to the Project site is provided via a dirt road off of 50th Street West.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The Project site is accessible by an existing dirt road on 50th Street West. The proposed Project would not involve roadway improvements, changes to street layouts or designs, and would not create new or increased hazards, particularly given the negligible increase in vehicle trips related to operation of the solar PV facility. Similarly, the replacement of transmissions lines along the proposed reconductoring line would not create any new long-term roadway hazards. Therefore, no impact would occur and no mitigation measures would be required.

d) Result in inadequate emergency access?

No Impact. Construction staging and equipment laydown areas would be located within the undeveloped areas within the Project site (i.e., outside of the public right-of-way) and would not impair or physically interfere with the circulation of surrounding roadways, including accessibility of emergency response vehicles. Operationally, the existing ingress/egress locations provided off of 50th Street West would remain unchanged. The proposed Project would not affect surrounding roadways or interfere with emergency access to surrounding properties. Therefore, the proposed Project would have no impact and no mitigation measures would be required.

4.17.3 Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to transportation. Therefore, no mitigation measures would be required.

4.18 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX.UTILITIES AND SERVICE SYSTEMS. 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?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which 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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

4.18.1 Environmental Setting

Antelope Valley is located in a desert environment and underlain by a closed groundwater basin. The two primary sources of supply to the valley are imported water from the State Water Project delivery program via the California aqueduct and groundwater extracted from the Antelope Valley groundwater basin. Water service to the City of Lancaster is provided by numerous retail water agencies. Each water retail agency within the City is unique, yet all water provided is from either groundwater, imported water from the Antelope Valley-East Kern Water Agency, or a combination of both.

The site is located within the service boundaries of the Los Angeles County Waterworks District No. 40, which derived approximately 37 percent of its supply from groundwater sources and approximately 63 percent from the California Aqueduct (via the State Water Project) in 2004 (City of Lancaster 2009b). There are no water, sewer, or solid waste disposal services at the Project site. The undeveloped site also does not generate solid wastes requiring collection and disposal. Water to serve the adjacent County facilities is derived from a groundwater well located at the Mira Loma Detention Center.

The Antelope Valley Basin is understood to be in a state of groundwater overdraft. Records indicate that extraction has continued beyond the safe-yield causing areas of land subsidence and the loss of basin (aquifer) storage. Increasing groundwater extraction will lead to further decline of the water table unless a combination of water conservation and groundwater recharge balance extraction and natural recharge. In November 2005, the Los Angeles County Waterworks District began injecting treated surface water into the groundwater basin. The project is known as the Aquifer Storage and Recovery Program. This artificial recharge is planned in the Antelope

Valley to assist in the water balance.

Sewer services to the adjacent County facilities are provided by the Los Angeles County Sanitation District No. 14 through the Avenue I West Trunk line that is located on the eastern section of the County parcel. Storm water that falls on the Project site during a rain event is either absorbed into the surrounding soils or travels as sheet flow into the on-site drainage swales on the project. As discussed in Section 4.10, *Hydrology and Water Quality*, Drainage C directs surface flows to an off-site detention basin to the east.

4.18.2 Discussion

- 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?**

Less Than Significant Impact. The proposed Project would be limited to the installation of the proposed solar PV facility. The proposed Project would not involve the installation of new or expansion of existing water, wastewater, storm drain, natural gas, or telecommunication facilities. As such, beyond the temporary increase in water usage during construction activities (e.g., for dust suppression), the proposed Project would not increase demand for water, wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities, such that additional facilities may be required in the future. The proposed Project would install overhead or underground transmission lines on-site which would connect to the inverters, to the Southern California Edison electrical systems. Additionally, the proposed Project would result in reconductoring of up to 3.8 miles of existing transmission lines connecting the proposed SCE interconnection point with the Quartz Hill substation, located approximately 2.1 miles south of the Project site. However, these activities would involve minor ground disturbance (e.g., trenching to a depth of between 18 and 24 inches) and would not cause significant environmental impacts or interruptions in utilities service. Therefore, impacts to existing utilities and service systems would be less than significant and no mitigation measures would be required.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Less Than Significant Impact. The Project site is located within the Antelope Valley Groundwater Basin (6-044). The Antelope Valley Groundwater Basin encompasses 1,580 square miles and spans across the Los Angeles, Kern, and San Bernardino counties. Following concerns regarding basin overdrafting, the basin was adjudicated in 2015 and currently, groundwater production in Antelope Valley Groundwater Basin is restricted to adjudicated rights fixed by the Judgment and managed by a court appointed Watermaster. The proposed Project would require minimal and short-term water supply during construction activities (e.g., watering exposed soils during grading). Given the limited scope of the Project, this demand would be minor. Assuming an average of 2,400 gallons of water used for dust control each day, 22 days of site watering per month, and a 12-month construction period, total water use during the construction period is estimated to be 2.34 acre-feet (633,600 gallons). Given the lack of existing infrastructure on the Project site, this water would likely be trucked to the Project site.

Operationally, the proposed Project would require water for PV washing one to four times

a year which would be provided via water truck through subcontract with a private company. Operational water use demand for maintenance is estimated at 0.03 acre feet per year (8,000 gallons per year). As with water required for dust suppression during construction, given the lack of existing infrastructure on the Project site, this water would also likely be trucked to the Project site.

Overall, impacts related to water supply would be less than significant and no mitigation measures would be required.

c) Result in a determination by the wastewater treatment provider which 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?

No Impact. The wastewater conveyance system for the Antelope Valley consists of a network of trunk sewers and local sewers serving the Palmdale and Lancaster service area. Wastewater services in the City of Lancaster are provided by approximately 64 miles of trunk sewers which convey wastewater generated within the City of Lancaster to the Lancaster Water Reclamation Plant (Los Angeles County Sanitation District 2022). The proposed Project would not include housing or other development which would generate an increase in wastewater. Installation and operation of the proposed solar PV facility would not generate new sources of wastewater requiring treatment services from the Los Angeles County Sanitation District. Therefore, the proposed facilities would not result in increased demand for wastewater treatment. There would be no impacts and no mitigation measures would be required.

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?

Less Than Significant Impact. Construction of the proposed Project would result in the generation of minor amounts of construction wastes which would either be re-used on-site or transported to a local permitted landfill, as necessary. As previously described in Section 2.3.2, *Site Preparation and Grading Activities*, implementation of the proposed Project would require removal of debris from the Project site. However, the amount of solid wastes generated by the proposed Project would be minor and would be well within the existing capacity of landfills in the region. For example, Lancaster Landfill, located approximately 6 miles northeast of the Project site, permits 3,000 tons of solid waste per day and, as of December 2019, had a remaining capacity life of 22 years (Los Angeles County Department of Public Works 2018). Construction activities would comply with the County's Construction and Demolition Debris Recycling and Reuse Code (Los Angeles County Code 20.87) which requires all construction projects to recycle at least 50 percent of construction wastes. All waste generated during construction of the proposed Project would be handled and disposed of in compliance with all applicable federal, State and local statutes and regulations related to solid waste. Following the completion of construction activities, operation of the proposed Project would not generate solid waste. Therefore, impacts related to landfill capacity and solid waste regulations would be less than significant.

- e) **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

No Impact. Refer to Utilities and Service Systems (d) above.

4.18.3 Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to utilities and service systems. Therefore, no mitigation measures would be required.

4.19 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (e.g., 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.19.1 Environmental Setting

The Los Angeles County Fire Department provides Fire Prevention and Suppression Services in the City of Lancaster. Much of the undeveloped area is comprised of dry desert vegetation that is prone to periodic burning, to a lesser degree than the heavily brushed areas of Southern California mountains.

Based on current mapping provided by Cal Fire, areas within the City are mapped within Moderate Fire Hazard Severity Zones (City of Lancaster 2021).

California Government Code Section 65302(g)(3) requires the Safety Element of a General Plan to identify and update mapping, information, and goals and policies to address wildfire hazards. As part of this requirement, any jurisdiction that includes State Responsibility Areas or Very High Fire Hazard Severity Zones in the Local Responsibility Areas, is required to transmit the updated

Safety Element to the Board for review and approval. Very High Fire Hazard Severity Zones are not located within the Lancaster city limits (California Department of Forestry and Fire Protection 2022); therefore, compliance with Section 65302(g)(3) is not required at this time.

All of the major north-south arterials in the City between 50th Street West and 10th Street East are designated as local emergency evacuation routes. In addition, all of the major east-west arterials between Avenues H and L are also designated as local evacuation routes. The regional evacuation routes for the Lancaster area include SR-14, Sierra Highway, and State Route 138 (SR-138) (City of Lancaster 2009b). Both Avenues I and J, which boarder the project site, are designated as east/west City evacuation routes.

4.19.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project site and surrounding areas within the City of Lancaster are located within a local responsibility area or the wildfire hazard severity zones established by the State of California (California Department of Forestry and Fire Protection 2022). Neither the Project site nor the surrounding area is located within a fire hazard severity zone. The Project site and surrounding vicinity are generally flat with no significant topographic relief. The Project site is surrounded by undeveloped lots and residential development. The Project site is not located near substantial amounts of native plants or fire-prone vegetation. The proposed Project would comply with all fire safety regulations and code requirements to ensure no potential for wildland fires. Therefore, no impact would occur.

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?

No Impact. Refer to Wildfire (a) above.

c) Require the installation or maintenance of associated infrastructure (e.g., 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?

No Impact. Refer to Wildfire (a) above.

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?

No Impact. Refer to Wildfire (a) above.

4.19.3 Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to wildfire. Therefore, no mitigation measures would be required.

4.20 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
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 decrease 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 major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the project's incremental effects are considerable when compared to the past, present, and future effects of other projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?	☐	☐	☒	☐

4.20.1 Discussion

- 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 decrease 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 major periods of California history or prehistory?**

Less than Significant Impact with Mitigation Incorporated. As described in Section 4.4, *Biological Resources* discussion, the proposed Project site is disturbed and characterized by non-native vegetation that provides little value in terms of suitable habitat for wildlife species, including special status species. With the implementation of MM BIO-1 through -3, which would involve a WEAP training as well as pre-construction surveys, impacts would be less than significant. As described in Section 4.5, *Cultural Resources*, no known historic built resources or buried archaeological resources are known to occur within the Project site. With the implementation of MM CUL-1, which would address incidental discovery of previously unknown archaeological resources, impacts would be less than significant.

- b) **Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's incremental**

effects are considerable when compared to the past, present, and future effects of other projects)?

Less than Significant Impact. As previously described in Section 1.4.2, *Adjacent Facilities*, two 1.130-MW solar PV facilities were recently constructed in 2011 and 2012 to offset energy use at CMYC and the Mira Loma Detention Center as well as LAC. Additionally, the CMYC and the Mira Loma Detention Center are undergoing changes that would change their historic uses as correctional facilities. No other planned or pending development projects are located in close proximity to the Project site.

As described in more detail in the individual impact discussions, the proposed Project would not result in any significant or potentially significant impacts. Because of the small scale and discrete nature of the proposed Project as well as the fact that it involves the construction of a solar PV facility, the proposed Project would not result in significant cumulative impacts on the environment. Criteria air pollutant and GHG emissions associated with the construction of the proposed Project would not be cumulatively considerable because they would fall below AVAQMD daily significance thresholds and would be in line with State goals to reduce GHGs. Operation of the proposed facility would not require additional employees, nor would it generate waste. It would also require very little maintenance, except for periodic washing of the panels. For these reasons, the proposed project's impacts would not be cumulatively considerable. Therefore, this impact would be less than significant. less-than-significant impact would occur.

c) Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?

Less than Significant Impact. Substantial direct or indirect adverse effects on human beings are not anticipated as a result of the proposed project. Although there would be some short-term impacts on the immediate environment during construction related to equipment emissions and other pollutant emissions generated by construction activity and vehicles, noise from construction activity, and fugitive dust, such impacts would be less than significant because the emissions would be below comparable AVAQMD significance thresholds. As discussed above, the proposed Project would not result in any significant and unavoidable impacts. Compliance with standard BMPs and local and state regulatory requirements would ensure that impacts would be less than significant and, thus, would not have the potential to cause substantial adverse effects on human beings.

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