

Westside Canal Battery Storage Project Initial Study

Initial Study

April 9, 2020

Prepared for:

County of Imperial Planning & Development Services 801 Main Street El Centro, CA 92243

Prepared by:

Stantec Consulting Services Inc. 290 Conejo Ridge Avenue Thousand Oaks, CA 91362



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Abbreviations

A-3 Agriculture Zone
AB Assembly Bill
AC Alternating current

APN Assessor Parcel Number

AF Acre-feet
AP Alquist-Priolo

APCD Air Pollution Control District

Applicant/CED Consolidated Edison Development
ASCE American Society of Civil Engineers
BESS Battery Energy Storage Systems
BLM Bureau of Land Management
BMS Battery Management System

BRTR Biological Resources Technical Report
CAAQS California Ambient Air Quality Standards
CAISO California Independent System Operator
CALFIRE Department of Forest and Fire Protection
Caltrans California Department of Transportation

Canal Westside Main Canal

CARB California Air Resources Board

CBC California Building Code

CdTe Cadmium telluride

CEC California Energy Commission
CED Consolidated Edison Development
CEQA California Environmental Quality Act

County Imperial County

CRHR California Register of Historical Resources

CWA Clean Water Act

DWR Department of Water Resources
EIR Environmental Impact Report
FRA Federal Responsibility Area

ft feet

gpd Gallons per day

GW Gigawatt

HDD Horizontal Directional Drilling

HVAC Heating, Ventilation, and Air Conditioning

I Interstate

ICFD/OES Imperial County Fire Department/Office of Emergency Services



ICOE Imperial County Office of Education

ICSO Imperial County Sheriff's Office

IID Imperial Irrigation District

IS Initial Study

ISMND Initial Study Mitigated Negative Declaration

IV Substation Imperial Valley Substation

kV Kilovolt kW Kilowatt

ICAC Imperial County Agricultural Commissioner
ICDPW Imperial County Department of Public Works

LE Land Evaluation

LESA Land Evaluation and Site Assessment

Li-ion Lithium ion

LRA Local Responsibility Area

M-2 Medium Industrial

MCE Maximum Considered Earthquake

MLD Most Likely Descendant
MRZ Mineral Resources Zone

MW Megawatts

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission

NFPA National Fire Protection Agency

NO2 Nitrogen dioxide
NOP Notice of Preparation

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places

O&M Operating and Maintenance

O₃ Ozone

PM Particulate Matter

PM_{2.5} Particulate matter 2.5 micrometer or less in diameter PM₁₀ particulate matter 10 micrometers or less in diameter

Project Westside Canal Battery Storage Project

PV Photovoltaic SA Site Assessment

SCIC California Historical Resources Information System: Southern California

Information Center

S-Line S-Transmission line

SCADA Supervisory Control and Data Acquisition

SF₆ Sulfur hexafluoride



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SoCal Gas Southern California Gas Company

SR State Route

SRA State Responsibility Area
UL Underwriters Laboratories

U.S. United States

USEPA United States Environmental Protection Agency

USGS United States Geological Survey
VHFHSZ Very High Fire Hazard Severity Zone



1.0 INTRODUCTION

1.1 PROJECT TITLE

Westside Canal Battery Storage Project (Project, proposed Project)

1.2 LEAD AGENCY NAME AND ADDRESS

County of Imperial Planning and Development Services 801 Main Street El Centro, CA 92243-2811

1.3 CONTACT PERSON AND PHONE NUMBER

Dave Black, Planner IV
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
442-265-1749

1.4 PROJECT LOCATION

The Project is proposed to be located in the unincorporated Mount Signal area of Imperial County (County), approximately 8.0 miles southwest of the city of El Centro and approximately 5.3 miles north of the U.S.-Mexico border (Figure 1). The Project site is comprised of two parcels, Assessor Parcel Number (APN) 051-350-010 and APN 051-350-011, totaling approximately 148 acres. These parcels have limited access corridors for vehicular traffic and are considered less desirable for agricultural production, as reflected by the last 15 years in which no farming activities have occurred, as indicated on the Project Site Aerial (Figure 2).

The Project site is located approximately one-third mile north of the Imperial Valley Substation (IV Substation) and directly south of the intersection of Liebert Road and the Imperial Irrigation District's (IID) Westside Main Canal (the Canal). The Project site is bounded by the Canal to the north, Bureau of Land Management (BLM) lands to the south and west, and vacant private land to the east. The Campo Verde solar generation facility is located north of the Project site, across the Canal. The two Project parcels will be developed as a utility-scale energy storage complex. The Project will utilize portions of two parcels located north of the Canal (APN 051-350-019 owned by IID and APN 051-350-018 owned by a private landowner) for site access and as a temporary construction staging area. The Project will also access a small portion of APN 051-350-009 within an IID easement for connection to the existing IID Campo Verde Imperial Valley 230 kilovolt (kV) radial gen-tie line during the construction of a substation on the Project site. The total proposed Project development footprint, encompassing both temporary and permanent impacts, will be 163.32 acres.



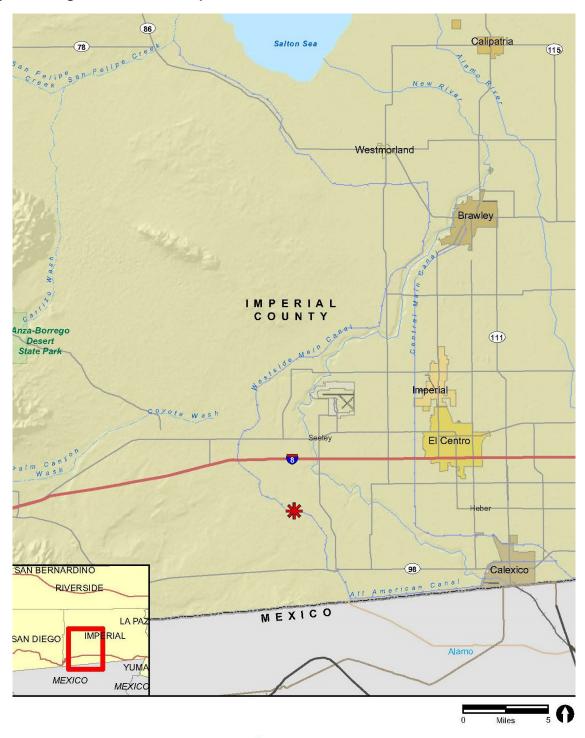


Figure 1. Regional Location Map

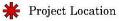
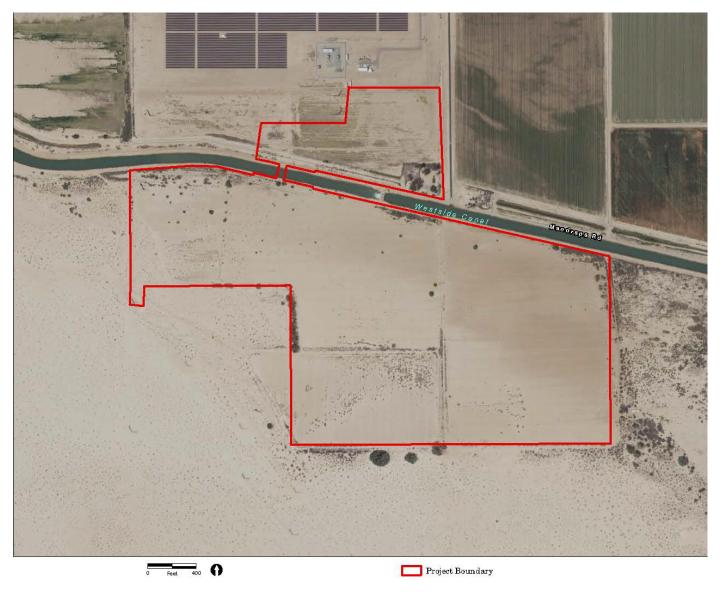




Figure 2. Project Site Aerial

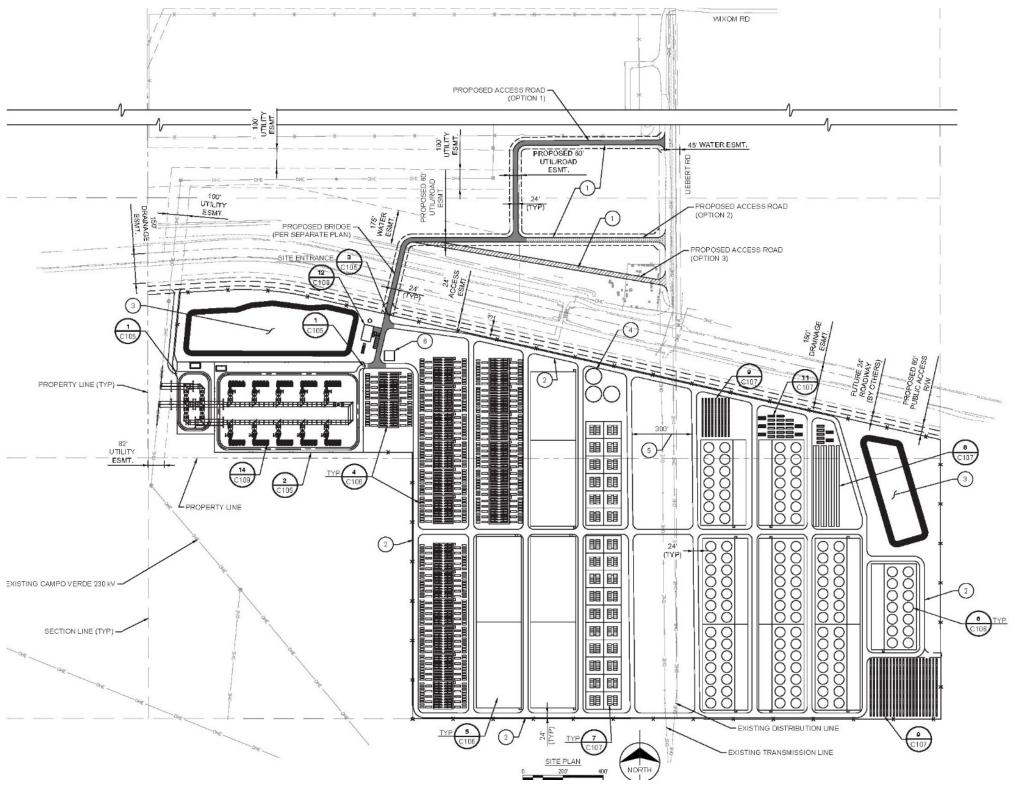


Prepared by RECON Environmental, Inc.



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Figure 3. Proposed Site Plan



KEY NOTES:

1) SITE ACCESS ROAD (GRAVEL).

2 PROPOSED GRAVEL ROADWAY.

3 STORMWATER RETENTION AREA (TYP). SEE NOTE 2.

PROPOSED WATER STORAGE TANK. SEE UTILITY PLAN C182.

TEMPORARY 300' CORRIDOR, DEFINED EASEMENT TO BE DETERMINED WITH IMPERIAL IRRIGATION DISTRICT FOR S-TRANSMISSION LINE

6 CENTRALIZED LOCATION FOR EMERGENCY GENERATORS.

NOTES:

- THIS LAYOUT IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE DURING DETAILED DESIGN.
- STORMWATER BASINS WILL BE DESIGNED IN ACCORDANCE WITH IMPERIAL COUNTY REGULATIONS. FINAL LOCATION AND SIZE OF STORMWATER FACILITIES AND BEST MANAGEMENT PRACTICES TO BE DETERMINED AT FINAL DESIGN.
- ALL COMPONENTS INTERCHANGEABLE TO ANY LOCATION WITHIN THE SITE BOUNDARY.

Prepared by Burns McDonnell for ConEdison Development.

1.5 PROJECT SPONSOR'S NAME AND ADDRESS

Curtis Kebler
Director, Business Development
Consolidated Edison Development (CED, or Applicant)
KeblerC@ConEdCEB.com
619-318-6735
101 West Broadway, Suite 1120
San Diego, CA 92101

1.6 GENERAL PLAN DESIGNATION AND ZONING

Table 1: General Plan Land Use Designations and Zoning

Relationship to Project Site	APN	Existing Land Description	General Plan Land Use Designation	Zone
Southwest	051-350-009	Agricultural	Recreational	A-3
Project Site	051-350-010	Agricultural	Agricultural	A-3
Project Site	051-350-011	Agricultural	Agricultural	A-3
North	051-350-018	Agricultural	Agricultural	A-3
North	051-350-019	Agricultural	Agricultural	A-3

1.7 PURPOSE AND INTENDED USE OF THE PROJECT

Development of the Westside Canal Battery Storage Project (Project) will provide a utility-scale energy storage complex incorporating lithium-ion battery systems and/or flow battery technologies throughout the site. The Project will allow excess, intermittent renewable energy to be stored and later dispatched optimally back into the existing electrical grid as firm, reliable generation when needed. The Project would complement currently operating clean energy solar and wind projects, as well as those planned for development, in the County and supports the broader Southern California bulk electric system by serving as a transmission asset.

1.8 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

1.8.1 Intended Uses of the Initial Study and Permit Requirements

This Initial Study (IS) is an informational document intended to inform the lead agency, other responsible or interested agencies, and the general public of potential environmental effects of the proposed Project. The environmental review process has been established to enable public agencies to evaluate potential environmental consequences and to examine and implement methods of eliminating or reducing any potentially significant adverse impacts. This document is intended to aid the County and the Applicant in determining the appropriate California Environmental Quality Act (CEQA) document needed to support



agency discretionary approvals, permits, and consultations. These permits, approvals, and consultations are described in Table 2.

Table 2: Agency Permits and Environmental Review Requirements

Agency	Permits and Other Approvals				
County of Imperial	General Plan Amendment				
	Zone Change				
	Development Agreement & Conditional Use Permit				
	Solar Overlay Annexation				
	Grading Permit				
	Conceptual Drainage Plan				
	Domestic Wastewater/Septic System Permit				
	Fire Suppression Plan				
	Variance of Height Limits				
	Transportation Permits				
	Mechanical Permits				
	Electrical Permits				
	Structural/Foundation Permits				
	Haul Route Plan				
	Rule 310 Dust Control Plan & Rule 801 Compliance				
	National Pollutant Discharge Elimination System (NPDES) Construction General Permit				
	NPDES General Permit for MS4 Compliance				
	AB 52 Consultation & SB 18 Consultation				
	SB 610 Water Supply Assessment				
Imperial Irrigation District	Generator Interconnection Agreement				
California ISO	Generator Interconnection Agreement				
United States Army Corps of Engineers	Clean Water Act (CWA) Section 404				
Regional Water Quality Control Board	CWA Section 401				
California Department of Fish and Wildlife	California Fish and Game Code 1600				
County of Imperial Air Pollution Control District	Dust Control Plan				

2.0 PROJECT DESCRIPTION

The Applicant is proposing to develop the Westside Canal Battery Storage Project (proposed Project, Project) which would provide a utility-scale energy storage complex with solar panels, lithium-ion battery systems, and/or flow battery technologies distributed throughout the site. The Project would allow for excess, intermittent renewable energy to be stored and later dispatched optimally back into the electric grid as firm, reliable generation. The Project complements both the existing operational renewable energy facilities, and those planned for development, in the County and supports the broader Southern California bulk electric system by serving as a transmission asset.



2.1 PROJECT OBJECTIVES

The Project is pursuing the following objectives:

- To allow for the storage of power/renewable power to help meet the state energy needs.
- To be able to receive renewable generated electricity during times of excess generation or times
 of less desirable generation and store that power for future release when the customer (i.e., a loadserving entity) deems it to be more valuable.
- To be a valuable tool in allowing the customer and system operators to manage and convert intermittent renewable generation into reliable, dispatchable generation upon demand.
- To utilize available land that is in a less desirable location for agricultural production, due to over 15 years of agricultural inactivity, but also due to limited access corridors for vehicular traffic to the remote property.

2.2 PROJECT LOCATION AND SITE DESCRIPTION

The Project is proposed to be located in the unincorporated Mount Signal area of the County, approximately 8.0 miles southwest of the City of El Centro and approximately 5.3 miles north of the U.S.- Mexico border.

2.2.1 Current Side Conditions

The Project site is comprised of two parcels, Assessor Parcel Number (APN) 051-350-010 and APN 051-350-011, totaling approximately 148 acres. This land has limited access corridors for vehicular traffic and was historically used for agricultural production but has not been farmed for the last 15 years. The Project would also utilize portions of two parcels, totaling approximately 15 acres, located north of IID's Canal (APN 051-350-019 owned by IID and APN 051-350-018 owned by a private landowner) for site access and as a temporary construction staging area. The Project would also access a small portion of APN 051-350-009 within an IID easement, for connection to the existing IID Campo Verde Imperial Valley 230 kV radial gentie line during the construction of a substation on the Project site. The total proposed Project development footprint, encompassing both temporary and permanent impacts, would be approximately 163 acres.

2.2.2 Surrounding Land Uses

The Project site is approximately one-third mile north of the IV Substation and directly south of the intersection of Liebert Road and the Canal. The Project site is bounded by the Canal to the north, BLM lands to the south and west, and vacant private land to the east. The Campo Verde solar generation facility is located north of the Project site, across the Canal. Figure 2 shows an aerial photograph of the Project site and the above-mentioned nearby facilities.



The General Plan land use designation and zoning for the Project site and all surrounding parcels to the north and southwest is Agriculture and Recreational. County of Imperial's General Plan land use designation and zoning does not apply to BLM lands that surround the Project site to the west. The Campo Verde solar generation facility is located north of the Project site and agricultural uses are located northeast of the Project site. Parcels farther north of the Project site also include a mix of agricultural uses and solar generation facilities. The parcel immediately east of the Project site is undeveloped. BLM land south and west of the Project site is generally undeveloped, relatively flat, and barren. The IV Substation is located approximately one-third mile south of the southern property line of the site.

2.3 PROJECT COMPONENTS

The Project is expected to be constructed in 3-5 phase over a 10-year period, with each phase ranging from approximately 25 megawatts (MW) up to 400 MW per phase. Construction of the first phase includes roads, bridge and common facilities, and the first battery storage facility and, if approved, is anticipated to begin in 2021 with completion expected in 2022. Subsequent phases would then be completed as demand/market conditions require. Phase I of the Project would store energy for up to a 12-hour duration based on grid and market conditions. The total nameplate (or rated capacity) capacity of the Project at full build-out (all phases completed) is approximately 2,000 MW.

On-site photovoltaic (PV) solar generation would serve as station auxiliary power and be deployed throughout the Project site as both rooftop solar on buildings, as well as ground-mounted solar, constructed during each phase of the Project. Figure 3 shows the conceptual site plan for the Project with a representation of the various energy storage technologies, ground and roof-mounted solar, common facilities within the Project site, and vehicular access and bridge outside the Project site.

2.3.1 Phasing

The timing and energy storage capacity of the Project's phases would be dependent on commercial contracts for the energy/capacity to be stored/discharged in response to the need for energy storage to manage renewable energy growth throughout the greater southern California area. This energy storage complex would thus become a valuable tool for commercial customer(s) and system operators to better manage intermittent renewable generation by converting it into reliable, dispatchable generation. The date for Project build-out is currently not known and would be dependent on the factors listed above. It is anticipated that each phase would be constructed within 1 to 2 years of each other.

2.3.2 Common Components

The Project would consist of multiple phases of development, construction, and operation of an energy storage facility. Although the Applicant plans to build the energy storage components over time and in multiple phases, the first phase of Project construction would include the majority of required construction activities. The first phase would include construction of the Operating and Maintenance (O&M) facilities, water connections and fire suppression systems for the Project, storm water retention, substation, and legal permanent vehicle access, as well as the first energy storage facility. As per the site plan (see Figure 2), the northwest area of the Project serves as the location for the common facilities, which include



substation(s) and the O&M building. With the Project being built in phases, the necessary infrastructure, such as water-mains, retention ponds and access roads, would be built out to serve the Project phases from west to east and expanded over time to serve each phase.

A summary of the common facilities is presented below:

- 230 kV loop-in substation
 - Connection to Campo Verde Imperial Valley 230 kV radial transmission line
 - Located on Applicant property
- Project substation
- O&M building
- Project parking
- Storm water detention basins
- Fencing and Gates

Large industrial buildings, warehouses, engineered containers, and/or electrolyte storage tanks would be the primary structures needed to house the main Project components. Other components to be located on the Project site and adjacent to the proposed buildings/warehouses include some of the following:

- Inverters, transformers, power distribution panels
- Underground water-main loop for Project operation and fire prevention
- Underground wiring to connect to Project substation
- Project site access roads (unpaved/crushed rock)
- Fire water storage tanks
- Aboveground water storage tanks
- Heating, Ventilation, and Air Conditioning (HVAC) units
- Ground-mounted or roof-mounted PV arrays
- Energy Storage sites
- Emergency backup generator(s)

2.3.2.1 Operations and Maintenance Facilities

The O&M building described in Phase 1 above is expected to be the only manned facility on the site and would include up to approximately 20 full-time employees working in three shifts during a 24-hour period. No offices or staffed control centers would be located within the storage-specific warehouses/buildings. For sanitary waste, the Project would include a septic leach field to be located near the O&M building. The proposed O&M building would also require an HVAC unit.

2.3.2.2 Water Connections

During construction the Project would utilize at least two temporary connections to the Canal for dust suppression and other construction uses such as concrete production. Permanent water to serve the Project's water and fire suppression needs would come from the Canal. Water infrastructure for the water/fire suppression would be laid underground throughout the site by open trenching. A segment of line from the Project boundary to the connection at the Canal would be constructed by a horizontal directional drilled underground bore to clear the existing IID Canal O&M road. It is anticipated that approximately 210 acre-feet (AF) of water would be required for the full buildout/construction of the site, over the projected 10-year construction time frame.



Following construction, service water would be supplied either by an on-site water treatment system (package plant) drawing water from the Canal or from deliveries from water suppliers via the Canal connection. This service water would be used for operations using on-site aboveground storage. Water usage for the O&M building and personnel would be less than 10,000 gallons per day (gpd). Additionally, approximately 1,000,000 gallons of water would be stored on site in storage tanks for fire suppression.

The Project would connect to the Canal via an underground horizontal directional drilling (HDD). Once drilling commences, drilling would extend into the side of the Canal underwater. A water pipe (size to be decided once final engineering design is complete) will be installed through the drill hole and into the Canal. The Applicant understands that IID prefers an underground bore versus open excavation watermain trenching to IID canals.

2.3.2.3 Stormwater Retention

As part of the proposed Project, stormwater retention basins would be constructed at designated locations throughout the site, based upon the hydrology analysis, to channel and manage stormwater flows. The retention basins would be sized in accordance with the County's design guidelines. Based upon these design guidelines, the basins will be able to retain at least 3 inches of rainfall across the entire site. The current basin design has a maximum depth of 5 feet with 4:1 side slopes and provides a retention volume of approximately 40.8 AF. The basins will be excavated out of and constructed using native soil. Retention basins may be added with each phase, such that the site might have different drainage areas contributing to each basin.

2.3.2.4 Permanent Vehicle Access

There are no circulation element roadways in the immediate vicinity of the Project site. The nearest freeways are Interstate 8 (I-8), located 4.6 miles north of the Project site, and State Route 98 (SR-98), located 5.2 miles south of the Project site. Drew Road, a 2-lane collector, is located 1.3 miles east of the Project site. All other roadways in the immediate vicinity of the Project site are rural roadways. All roadways that would be used to access the Project site from I-8 are currently paved, except for the portion of Liebert Road south of Wixom Road. However, this segment would be paved prior to Project operation.

Public Access Roads

Prior to any construction on the main Project site (Phase I), vehicular access for the Project would need to be established. The proposed Project site is surrounded by private landowners to the east, BLM land to the south and west, and IID maintenance roads and the Canal to the north. Due to the property having no current (or legal) direct vehicular access routes, the Applicant is proposing to construct public access roads on both the north and south side of the canal on private land and a permanent clear-span bridge over the Canal (Figure 4 and 5). The proposed new public access roads would be designed and constructed in accordance with County standards. In addition, the Project would dedicate 60 feet of frontage along the north Project fence line and south of the IID maintenance road to be used for both employee access to the site as well as limited public access (i.e., adjacent neighboring landowners).



Clear-Span Bridge

The permanent new clear-span County/California Department of Transportation (Caltrans) specified bridge would span the Canal to connect to a proposed access road easement on the north side of the Canal. The north proposed access road would ultimately connect the Project to Liebert Road.

Construction of the permanent clear-span bridge spanning the IID's Westside Main Canal requires CED to have access to both the north side and the south of the Canal to perform the necessary construction activities. In addition to being necessary to facilitate construction of the new permanent clear-span bridge, access from the south side of the Westside Main Canal would allow CED to commence construction on the initial phase (Phase I) of the Project simultaneously, thereby shortening the duration of construction and potentially minimizing the associated impacts. CED is evaluating various options for temporary construction access, including accessing the Project site from the south side of the Canal off SR-98, as well as options involving access from the north side of the Canal from I-8. The preferred temporary access option would be used until construction of the permanent bridge is completed.

2.3.2.5 Substation Components

The proposed Project substation is a central hub for the 34.5 kV collector circuits from the energy storage components and step-ups the electricity voltage from 34.5 kV to 230 kV. The substation site is comprised of approximately 10 acres and includes, but is not limited to, the following major components:

- 1. 34.5 kV bus and associated switching devices
- 2. 230 kV bus and associated switching devices
- 3. 34.5/230 kV transformers
- 4. 34.5 kV capacitors, as needed
- 5. Tubular steel support structures
- 6. Circuit Breakers
- 7. Grounding grid
- 8. Prefabricated modular control building to house Supervisory Control and Data Acquisition (SCADA) (unoccupied except during inspection and maintenance)

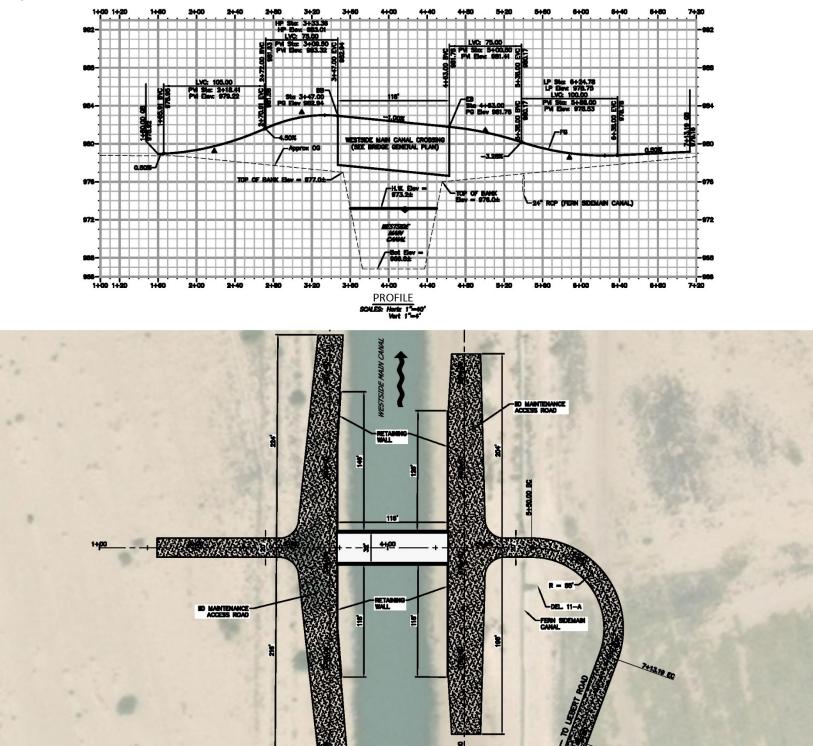
The substation will be constructed as part of the Phase I of the Project. Sequencing is proposed as follows:

The entire 10-acre site will be graded:

- Install concrete foundations
- Install grounding grid
- Install steel support structures
- Install bus, switching devices, capacitors
- Install control building
- Install fencing
- Install transformer



Figure 4. Westside Main Canal Bridge Site Plan

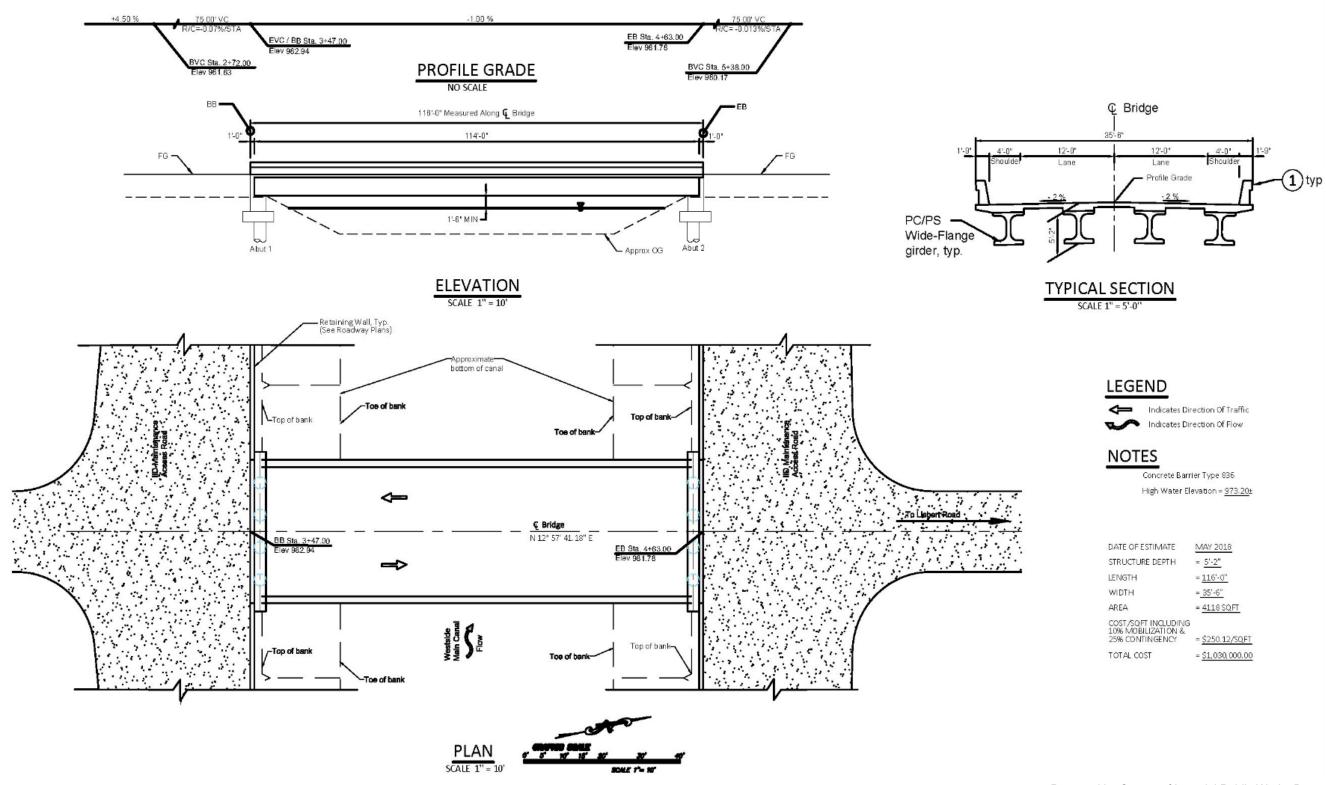


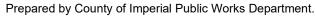
PLAN SCALE 1 -40



Prepared by County of Imperial Public Works Department.

Figure 5. Westside Main Canal Bridge Elevation





Items 2, 4, 5, and 8 (from above) will be constructed in conjunction with each new Project phase. The perimeter fence, ground grid, and grading will be fully completed for the entire Project during Phase I construction. SCADA and Alternating Current (AC) collection circuits will be constructed per their corresponding phase. The transformers will contain mineral oil or natural esters oil and would not contain Sulfur hexafluoride (SF₆). The substation would be an open-air substation (not gas insulated).

2.3.2.6 Construction

The Project would include the construction of a substation located at the western Project boundary. The substation would include equipment such as switches, circuit breakers, and transformers.

2.3.2.7 Fire Protection/Fire Suppression

Fire protection systems for battery systems will be designed in accordance with California Fire Code 2016 and will take into consideration the recommendations of the National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems. Depending on the technology used in a phase, fire suppression agents such as Novec 1230 or FM 200, or water may be used as a suppressant. In addition, fire prevention methods will be implemented to reduce potential fire risk, including voltage, current and temperature alarms. Energy storage equipment will comply with Underwriters Laboratories (UL) standard UL-9540 and will account for the results of UL-9540A. The Project has the potential to utilizing either lithium-ion batteries and/or flow batteries. Flow batteries are generally not flammable and do not require fire suppression systems. In locations where equipment is located within buildings, automated fire sprinkler systems will be designed in accordance with California Fire Code. A fire loop system and fire hydrants will be located throughout the site for general fire suppression. Buildings and containers for both lithium-ion and flow batteries will be unoccupied enclosures. These buildings will have an automatic sprinkler system designed in accordance with California Fire Code Section 903.

To mitigate potential hazards, redundant separate methods of failure detection will be implemented. These include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection will be implemented, as applicable. These are in addition to other protective measures such as ventilation, overcurrent protection, battery controls operating batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Flow battery tanks would be designed to have secondary containment in the event of a failure. Remote alarms will be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan will be implemented depending upon the technology installed for each phase.

Additionally, the Project intends to commit to purchase or contribute its proportionate share to purchase, a Type 1 Fire Engine which shall meet all NFPA standards for structural firefighting for the Imperial County Fire Department. The Type 1 Fire Engine would be housed off-site within Fire Station 2, located approximately 12 miles from the Project site.

The fire suppression systems will be designed in accordance with the 2016 California Fire Code or current Fire Code at the time of construction. A fire loop system will be installed around the site with fire hydrants



spaced at 300-foot intervals in accordance with fire flow requirements. The fire loop will be built out and extended to serve each phase as the Project site is developed. Fire water will be obtained by tapping into the Canal and will be stored in tanks (described above) adjacent to the Canal. Multiple tanks will be required to provide the needed fire flow volume, and the tanks will also be installed in phases as the site is developed and eventually built-out. The fire suppression system will consider NFPA 855 standards. Depending on the technology used in a particular phase, fire suppression agents such as Novec 1230 or FM 200 may be used. In addition, fire prevention methods will be implemented to reduce potential fire risk, including voltage, current and temperature alarms. Energy storage equipment will comply with UL-9540 and will account for the results of UL-9540A.

2.3.2.8 Supervisory Control and Data Acquisition

Each station (the substation and switching station) proposed on the site plan would also have fences installed around its perimeter in order to limit and control access.

2.3.3 Battery Storage Components

Once vehicle access to the Project site is established, the first phase of site construction would consist of either a lithium-ion battery storage facility or a flow battery storage facility. This first phase would be dependent on the first commercial contract awarded to the Applicant by a customer. Large industrial buildings, warehouses, and/or containers to house the storage equipment, including battery cells, modules, racks, and controls for lithium-ion technologies, would be needed. For flow battery technologies, cell stack modules, pumps, and controls may be installed inside industrial buildings or pre-engineered outdoor enclosures. Electrolyte storage tanks and associated piping may be located indoors or outdoors, depending on the technology.

2.3.3.1 Construction

Following completion of the access road and bridge over the Canal, the Project would grade the entire Project site and begin construction of the utility-scale energy storage complex. To access the Project site, construction workers would travel along I-8 and head 4.6 miles south to the Project site, utilizing the constructed bridge. During peak construction activities, approximately 200 workers and 30 daily deliveries would be required. Construction activities for the utility-scale energy storage complex would last for up to 32 months.

2.3.3.2 Battery Modules Technology

Flow Battery

A flow battery is a rechargeable fuel cell in which an electrolyte containing one or more dissolved electroactive elements flows through an electrochemical cell that reversibly converts chemical energy directly to electricity. Additional electrolyte is stored externally, generally in tanks, and is usually pumped through the cell (or cells) of the reactor, although gravity feed systems are also known to be used. Flow batteries can be rapidly "recharged" by replacing the electrolyte liquid while simultaneously recovering the



spent material for re-energization. Many flow batteries use carbon felt electrodes due to its low cost and adequate electrical conductivity.

Lithium-Ion Battery

A lithium-ion battery is also a type of rechargeable battery. In the batteries, lithium ions move from the negative electrode through an electrolyte to the positive electrode during discharge, and back when charging. Lithium-ion batteries use an intercalated lithium compound as the material at the positive electrode and typically graphite at the negative electrode. The batteries have a high energy density, no memory effect and low self-discharge.

Energy Storage

Energy storage is the capture of energy produced at one time for use at a later time. A device that stores energy is generally called an accumulator or battery. Energy comes in multiple forms including radiation, chemical, gravitational potential, electrical potential, electricity, elevated temperature, latent heat and kinetic. Energy storage involves converting energy from forms that are difficult to store to more conveniently or economically storable forms. Energy storage technology may be centralized or may be distributed throughout the plant. Depending on the technology selected for the energy storage component, the substation and transmission lines as well as the solar field inverters and transformers may be active during both daylight and nighttime hours.

2.3.3.3 Backup Generator

The Project would include an emergency backup generator(s) to supply auxiliary power to the facility during rare events in which the entire facility or portions of the facility are disconnected from the local electrical grid system. The generators would be sized to accommodate control systems and minimal targeted HVAC system loads for equipment protection. The purpose of the generators would be to provide system safety and during the event that neither the transmission interconnection or the on-site solar generation system are available to maintain battery safety and warranty temperature parameters.

These generators may be either installed in a central location near the common facilities or distributed among individual buildings. They may be diesel, natural gas, or propane fueled. The generators would be periodically tested each year to maintain backup capability in the event of a grid emergency. All generators would be subject to Imperial County Air Pollution Control District review and permitting requirements.

Below is a generalized table for emergency generators based on 1 gigawatt (GW) of lithium-ion (Li-lon) batteries and 1 GW of flow batteries, including their safety and warranty temperature parameters. Size and quantity will scale with the MW proposed in each phase. Detailed design is required to accurately calculate the generator load, which will be included with each design phase and the final battery technology selection.



Table 3: Approximate Generator Size

Technology	Project Size (MW)	Backup Gen Size (kW)	Backup Gen Qty.	Total Backup Gen Size (kW)
Li-ion	1,000	1,750	20	35,000
Flow	1,000	4,000	20	20,000
Total	2,000			55,000

2.3.4 Solar Facility Components

2.3.4.1 Photovoltaic Cells

Solar photovoltaic cells, also called PV cells, convert sunlight directly into electricity. PV gets its name from the process of converting light (photons) to electricity (voltage), which is called the PV effect. The panels are mounted at a fixed angle facing south, or they can be mounted on a tracking device that follows the sun, allowing them to capture the most sunlight. Many solar panels combined together to create one system is called a solar array. Traditional solar cells are made from silicon, are usually flat-plated, and generally are the most efficient.

Second-generation solar cells are called thin-film solar cells because they are made from amorphous silicon or non-silicon materials such as cadmium telluride (CdTe). Thin film solar cells use layers of semiconductor materials only a few micrometers thick. Because of their flexibility, thin film solar cells can double as rooftop shingles and tiles, building facades, or the glazing for skylights.

Third-generation solar cells are being made from variety of new materials besides silicon, including solar inks using conventional printing press technologies, solar dyes, and conductive plastics. Some new solar cells use plastic lenses or mirrors to concentrate sunlight onto a very small piece of high efficiency PV material. The PV material is more expensive, but because so little is needed, these systems are becoming cost effective for use by utilities and industries. However, because the lenses must be pointed at the sun, the use of concentrating collectors is limited to the sunniest parts of the country.

2.3.4.2 On-site Solar Generation

On-site PV solar generation will serve as station auxiliary power and be deployed throughout the Project site as rooftop solar on buildings, as well as ground-mounted solar, constructed during each phase. The solar PV generating component would consist of a 3.2 foot by 6.5-foot PV modules (or panels) on single-axis horizontal trackers in blocks. Each PV module would be constructed out of a poly-crystalline silicon semiconductor material encapsulated in glass, in which the PV effect would allow the electrons to flow through that material to produce electricity. The panels would be oriented from east to west for maximum exposure and the foundation would be designed based on soil conditions. The PV modules are made of a poly-crystalline silicon semiconductor material encapsulated in glass. Installation of the PV arrays would include installation of mounting posts, module rail assemblies, PV modules, inverters, transformers and buried electrical conductors. Concrete would be required for the footings, foundations and pads for the



transformers and substation work. Tracker foundations would be comprised of either driven or vibrated steel posts/pipes and/or concrete in some places (depending on soil and underground conditions).

2.3.4.3 Construction Sequence and Equipment

Construction activities would be sequenced and conducted in a manner that addresses storm water management and soil conservation. During construction, electrical equipment would be placed in service at the completion of each power-block. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel.

Construction would generally occur during daylight hours, Monday through Friday. However, non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For example, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. If construction is to occur outside of the County's specified working hours, coordination with the County will occur in advance of these activities.

2.4 SITE SECURITY

An eight-foot-tall fence (e.g., chain-link) topped with barbed wire would be installed around the entire Project site for safety and in order to control access. Each station proposed on the site plan would also have fences installed around its perimeter. A camera-equipped call button would be installed at the front entry gate to the site which would be monitored from the Project's O&M building. Throughout the site at various points, security cameras may be installed to monitor other areas of the Project site. During the construction of each Project phase, the Applicant would have on-site security personnel between dusk and dawn and during hours of non-active construction.

2.5 INTERCONNECTION OPTIONS

The proposed point of interconnection for the Project is the Imperial Valley Substation 230 kV bus. As reflected in the conceptual site plan, to achieve this, the Applicant plans to build a new loop-in substation on the Project site and connect to the existing IID Campo Verde Imperial Valley 230 kV Radial gen-tie line. This gen-tie line ultimately connects about one-third mile south of the Project site into the Imperial Valley Substation, which is ultimately the Project's point of interconnection to the California Independent System Operator (CAISO) grid. The Applicant submitted the necessary Interconnection Request Applications to the CAISO and IID in 2017 and 2018 and approval is pending.

2.6 EXISTING AND PROPOSED UTILITY EASEMENTS

Existing Easements

The site (APNs 051-350-10 and 051-350-011) has three major existing utility easements lying across the site. The first is for overhead collector transmission circuits and utility facilities, as well as access. This is for the IID Campo Verde Imperial Valley 230 kV transmission line easement, which lies inside and along the west property line and runs north/south. The second major easement is a prescriptive easement for an



overhead collector transmission circuit and utility distribution for access to/from the Project site. This easement runs north/south and lies directly in the center of the Project site. The IID transmission line within this prescriptive easement is known as the S-Transmission line (S-Line). The third major easement lies along the north property line. This easement was granted to IID for the purposes of the existing Canal and appropriate infrastructure and operation and maintenance roads for the Canal.

Proposed Easement

The Applicant and IID are in the process of determining the width of this S-Line easement to create a non-exclusive easement. This easement would also include the existing distribution line that lies within the easement. Until this new easement agreement is in place, the Applicant has planned for a 300-foot temporary corridor on the Project site plan (centerline of 300-foot corridor is the S-Line) to allow the IID energy engineering team to design and implement an appropriate new easement. Once the width and location of the new easement is determined, all other areas that are not part of the new S-Line easement lying within the 300-foot corridor would become part of the Project site

2.7 PROJECT OPERATION

Operation of the Project would require routine maintenance and security. It is anticipated that the Project would employ a plant manager and an O&M manager, as well as the addition of a facility manager once the complex deploys 500 MW of generation. The complex would also employ staff technicians, with at least one additional technician for every approximately 250 MW of generation.

Operation of the Project would require up to 20 employees or 2.5 employees working three eight-hour shifts in order to provide 24-hour personnel coverage at the plant. Assuming two one-way trips per employee, the Project would be anticipated to generate up to 40 trips per day from all maintenance and security personnel.

Figure 3 shows the floor plan for each lithium-ion 50 MW building. As shown, each building would include 10 air cooling units (5 on each side of the building) and 20 transformers and inverters (10 on each side of the building). The current site plan includes 20 of these buildings, and more would be constructed during subsequent phases as the market demands.

Depending on the technology selected for the energy storage component, the substation and transmission lines as well as the solar field inverters and transformers may be active during both daylight and nighttime hours.

2.8 CONSTRUCTION EQUIPMENT AND WORKFORCE

Construction would include the use of standard construction equipment such as scrapers, excavators, loaders, and water trucks, and other similar machinery. Construction equipment would be used for site preparation activities such as clearing, grading, perimeter fencing, development of staging areas and site access roads and would involve facility installation activities, including support masts, trenching utility connections, construction of electrical distribution facilities, O&M building, access roads and the clear-span bridge. Delivery trucks also would bring materials to the site. Depending on the specific phasing of the Project and construction schedule, on-site equipment may be used simultaneously or in phases.



Phase 1 of the proposed Project would require grading of the entire site and construction of the utility-scale energy storage complex, which would take approximately 12 months to complete. The remaining phases would be completed in approximately 24 months. During peak construction activities, approximately 200 workers and 30 daily deliveries would be required. Construction staff and equipment will be determined based on the size and design specifications of each phase. The table below shows estimates of the construction staff and equipment that will be needed for each phase. It is anticipated that the common facilities will be constructed simultaneously with the first phase of battery storage in order to bring both online at the same time.

Table 4: Estimated Construction Staff and Equipment Per Project Phase

	Phase	Phase 1		
Facility Type	Common Facilities	BESS ¹	BESS ¹	
Vehicle Type	# of eq	uipment for 8 ho	ours/day	
Air Compressor	1	2	2	
Backhoe	2	2	2	
Concrete Pump	1	1	1	
Crane	3	1	1	
Dozer	2			
Drill Rig	1			
Excavator	1	1	1	
Forklift	2	2	2	
Generator	2	3	3	
Grader	2			
Paver	1			
Rollers	3	2	2	
Scraper	1	1	1	
Water Truck	2	1	1	
Wheeled Loader	1	1	1	
Wheeled Tractor	1			
Construction Personnel	# of p	people for 8 hou	rs/day	
Site Superintendent	1	1	1	
Construction Manager	1	1	1	
Assistant Construction Manager	1	1	1	
Safety Manager	1	1	1	
Foreman	6	4	2	
Field Engineer	3	2	2	
Surveyor	2	2	2	



Geotechnical Engineer	1	1	1
Heavy equipment operator	19	12	12
Laborer/Installer	90	50	50

¹BESS = Battery Energy Storage System

2.9 SCHEDULE

Depending on the size of the battery system for a given phase, construction and commissioning (approval to operate) is anticipated to take approximately 6 to 12 months. The 100- to 200-MW first phase would require build out of Project facilities, roads, and the proposed clear-span bridge. Subsequent phases will require improvements such as additional substation equipment, water main and site road extension, but will not require construction of additional common facilities.

Construction activities may only occur Monday through Friday, between the hours of 7:00 a.m. and 7:00 p.m. or Saturday between the hours of 9:00 a.m. and 5:00 p.m., excluding holidays, per County Ordinance.

2.10 DISCRETIONARY ACTIONS

2.10.1 General Plan Amendment and Zone Change

The Project proposes a General Plan Amendment and Zone Change to change the land use designation and zoning for the Project site from Agriculture (A3) to Industrial. The Industrial zoning would be limited to Energy Production/Use.

2.10.2 Development Agreement

The Applicant may pursue a Development Agreement with the County of Imperial for this Project.

2.10.3 County Solar Overlay Annexation

The Applicant may pursue annexation into the County of Imperial Solar Overlay Plan.

2.10.4 Conditional Use Permit (CUP 19-0015)

The Applicant has requested a Conditional Use Permit to allow a utility-scale energy storage complex in an Industrial zone.

2.10.5 Water Supply Assessment

The Applicant has requested a Water Supply Assessment, in accordance with SB 610, to identify critical water supply and water quality needs for the proposed Project.



3.0 ENVIRONMENTAL SETTING, ANALYSIS, AND MITIGATION MEASURES

3.1 INTRODUCTION TO ENVIRONMENTAL ANALYSIS

As defined by Section 15063 of the State CEQA Guidelines and Section 7 of the County's Guidelines for Implementing CEQA, an Initial Study is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

According to Section 15065, an EIR is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

\square According to Section 15070(a), a Negative Declaration is deemed appropriate if the proposal would ne	ot
result in any significant effect on the environment.	

□ According to Section 15070(b), a Mitigated Negative Declaration is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study (IS) has determined that the proposed applications will result in potentially significant environmental impacts and therefore, an Environmental Impact Report is deemed as the appropriate document to provide necessary environmental evaluations and clearance for the proposed Project.

This Initial Study and Notice of Preparation are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated



the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

3.1.1 Intended Uses of Initial Study and Notice of Preparation

This IS and Notice of Preparation (NOP) are informational documents which are intended to inform County decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals. The IS and NOP prepared for the Project will be circulated for a period of 35 days for public and agency review and comments.

3.1.2 Environmental Assessment Methodology

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that requires mitigation to reduce the impact from "Potentially Significant" to "Less than Significant" as indicated by the checklist on the following pages.

\boxtimes	Aesthetics	\boxtimes	Greenhouse Gases		Public Services
\boxtimes	Agricultural and Forestry Resources	\boxtimes	Hazards and Hazardous Materials		Recreation
\boxtimes	Air Quality	\boxtimes	Hydrology and Water Quality		Transportation
\boxtimes	Biological Resources	\boxtimes	Land Use and Planning	\boxtimes	Tribal Cultural Resources
	Cultural Resources		Mineral Resources	\boxtimes	Utilities and Service Systems
	Energy Resources		Noise		Wildfires
\boxtimes	Geology and Soils		Population and Housing	\boxtimes	Mandatory Findings of Significance

3.1.2.1 Evaluation of Environmental Impacts

Section 3.0, Environmental Checklist and Environmental Evaluation presents the environmental checklist form found in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the Project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures, if needed.

For the checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant and for which mitigation has not been identified. If any potentially significant impacts are identified, an EIR must be prepared. An Initial Study Mitigated Negative Declaration (ISMND) cannot be used if there are potentially significant impacts that cannot be mitigated.



Less Than Significant with Mitigation Incorporated: This designation applies when applicable and feasible mitigation measures previously identified in prior applicable EIRs or in the General Plan Environmental Impact Report (General Plan EIR) have reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact" and, pursuant to Section 21155.2 of the PRC, those measures are incorporated into the ISMND.

This designation also applies when the incorporation of new project-specific mitigation measures not previously identified in prior applicable EIRs or in the General Plan EIR have reduced an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact".

Less Than Significant Impact: Any impact that would not be considered significant under CEQA, relative to existing standards.

No Impact: The proposed Project would not have any impact.

3.1.2.2 Important Note to the Reader

The California Supreme Court in a December 2015 opinion [California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding the proposed project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or IS) can include information of interest even if such information is not an "environmental impact" as defined by CEQA.



3.2 **AESTHETICS**

	AESTHETICS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
Exc	cept as provided in Public Resources Code Section 20	199:			
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 buildings within a State scenic highway?				
c)	In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public Views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, the potential of the project to 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?				

3.2.1 Environmental Setting

The proposed Project site currently consists of undeveloped parcels which were historically used for agricultural purposes. Surrounding uses consist of undeveloped land, agricultural uses, BLM land, solar PV installations and the IV Substation, further south. As the Project site would be developed with new energy facilities, industrial uses, structures, roadways and other new developed features, potential impacts to aesthetics are evaluated below.

3.2.2 Environmental Impact Analysis

a) Would the project have a substantial adverse effect on a scenic vista?

Finding: Less Than Significant Impact

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest. Panoramic views across the Project site include generally unobstructed views of agricultural and undeveloped areas surrounding the Project site. To the north is the Campo Verde solar generation facility and a construction staging area. To the west, BLM land is barren, undeveloped and relatively flat, with distant views of the Jacumba Wilderness Area and hills in the far distance. To the east are undeveloped and agricultural areas, and to the south is undeveloped land with the IV Substation further south.



The proposed Project site is characterized by open vistas and largely unobstructed views. While the Project proposes to construct buildings, warehouses, and other structures; however, there are extremely limited opportunities for the public to enjoy views of the Project site from any direction. There are no major public circulation roadways in the Project area, as the Project site is located in an area which is primarily accessible only by rural roadways. The nearest paved road is Drew Road, located approximately 1.3 miles east of the Project site.

Project components and structures may be visible from a distance along roadways in the vicinity; however, due to the lack of opportunities for the public to enjoy scenic vistas across the Project site, this impact would be less than significant and does not require further evaluation in the EIR.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Finding: Less Than Significant Impact

The State Scenic Highway Program, which is administered by the California Department of Transportation (Caltrans), identifies designated scenic highways across the state. The Project is not located within a state-or city-designated scenic highway, and there are no trees, rock outcroppings or historic buildings on the Project site. The closest highway which is considered as eligible for designation as a State Scenic Highway in the County is SR-111, in the vicinity of the Salton Sea by Bombay Beach, which is over 70 miles to the northeast of the Project site (Caltrans 2020). The County does not identify any officially designated scenic roadways; however, the County Circulation and Scenic Highways Element identifies four areas which have the potential to be considered eligible for designation as a state-designated scenic highway (Imperial 2008a). One of these areas is SR-111 by Bombay Beach along the Salton Sea, as described above. Another identified area is I-8 at its intersection with SR-98, by Ocatillo, which is approximately 25 miles west of the Project site. The other two areas are even farther away from the Project site. Due to the distance of the Project site from any state- or county-designated or eligible scenic highways, the Project site would not be visible. Therefore, there would be less than significant impact to scenic resources due to Project implementation, and no further analysis is required in the EIR.

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

Finding: Potentially Significant Impact

The Project is located in a non-urbanized area, and Project implementation may potentially impact the existing visual character of the Project site and its surroundings. According to the County Conservation and Open Space Element, the Project site is located in an area where maintenance of visual quality has high value (Imperial 2016). The Project proposes to construct large industrial buildings, warehouses, engineered containers and tanks, solar PV facilities, a permanent clear-span bridge over the Canal, new paved



roadways to provide access to the site, parking areas, and an elevated 230-kilovolt (kV) transmission line. These Project components would be constructed in several phases over a span of 10 years. Routine weed abatement and landscape maintenance would occur as needed.

At this time, detailed plans, building elevations and other details regarding the characteristics of these Project components are not yet available. Therefore, a more detailed evaluation of the Project's potential to degrade the existing rural and undeveloped character of the site is required, and this potentially significant impact will be analyzed further in the EIR.

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

Finding: Potentially Significant Impact

The Project site is currently undeveloped and does not contain any sources of light or glare. Implementation of the proposed Project would introduce new sources of illumination which could adversely affect nighttime views in the Project area. New buildings and warehouses would have lighting, and the Project would include illumination for safety around access points, parking areas and other areas throughout the site. Project components, including solar PV and other metallic features may be considered new sources of glare. In addition, during Project construction and operation, vehicles and trucks travelling to and from the Project site would be considered new sources of illumination due to their headlights, as well as potentially creating new sources of glare. Therefore, an evaluation of the Project's potential to create a new source of substantial light or glare is required, and this potentially significant impact will be analyzed further in the EIR.



3.3 AGRICULTURAL AND FORESTRY RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to 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 land or conversion of forest land to non-forest use?				\boxtimes
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?				

3.3.1 Environmental Setting

Agriculture has been the single most important economic activity of the County throughout the 1900s and is expected to play a major economic role in the foreseeable future. The gross annual value of agricultural production in the County has hovered around \$1 billion for the last several years, making it the County's largest source of income and employment. The County's agriculture industry is a major producer and supplier of high-quality plant and animal foods and non-food products. According to the Imperial County Agricultural Commissioner (ICAC), in 2016, agriculture contributed a total of \$4.50 billion to the county economy. Vegetable and melon crops were the single largest production category by dollar value (\$1.01 billion), comprising 48.8 percent of the County total. At 22.7 percent, livestock represented the second largest category (\$468.2 million) and consisted mostly of feedlot cattle (\$400.6 million). Field crops ranked third with \$381.2 million and 18.5 percent. Together, these three categories accounted for 89.9 percent of the County's direct farm production values (ICAC 2017).



3.3.2 Environmental Impact Analysis

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

Finding: Potentially Significant Impact

The majority of the proposed Project site is comprised of fallow agricultural lands, which have not been actively farmed and nor irrigated for over 15 years. The proposed Project site is landlocked but would be developed adjacent to other agricultural uses. Much of the land base in the vicinity of the Project area is considered productive farmland where irrigation water is available. Farming operations in this area generally consist of medium to large-scale crop production with related operational facilities. Crops generally cultivated in the area may include alfalfa, barley, and/or Bermuda grass in any given year. Row and vegetable crops, such as corn, melons and wheat, are also prominent in the area. Land of importance to the local agricultural economy is determined by each County's board of supervisors and a local advisory committee. According to the Important Farmland maps (California DOC 2016a), the Project site contains land which is mapped as Farmland of Local Importance.

A Land Evaluation and Site Assessment (LESA) Analysis was prepared for the Project, by RECON Environmental, Inc., in July 2019. The LESA model is intended to provide a quantitative evaluation of potential impacts to agricultural lands using a point-based evaluation using six different factors which are rated on a 100-point scale (RECON 2019b). A final LESA score between 40 to 59 points is considered significant if both the Land Evaluation (LE) and Site Assessment (SA) scores are greater than or equal to 20 points. Based on the Project specific LESA analysis, the final LESA score is 57.2, with an LE score of 27.2 and a SA score of 30.0. Therefore, the Project is considered to have a potentially significant impact on agricultural resources, and this impact will be analyzed further in the EIR.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Finding: Potentially Significant Impact

The proposed Project site is not located within or adjacent to a Williamson Act contract site (DOC 2016). However, the Project is proposing a General Plan Amendment and Rezone to change the land use designation and zoning for the Project site from Agriculture (A-3) to Industrial, with the Industrial zoning limited to Energy Production/Use. Therefore, although the Project would not conflict with a Williamson Act contract, the Project would conflict with existing zoning for an agricultural use. This potentially significant impact will be analyzed further in the EIR.

c) Would the project 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))?

Finding: No Impact

The proposed Project site is currently zoned as Agriculture (A-3), and there is no existing zoning designation for forest land, timberland, or timberland production within the proposed Project area. Therefore, there would be no impact to this significant threshold, and no further analysis is required in the EIR.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No Impact

There is no forest land within the proposed Project area. Therefore, there would be no impact to this significant threshold, and no further analysis of is required in the EIR.

e) Would the project 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?

Finding: Potentially Significant Impact

As discussed above, the Project does not contain any forest land which would be converted to a non-forest use. However, the proposed Project would involve the conversion of farmland to a non-agricultural use. Although, the Project site has had 15-plus years of agricultural inactivity, based on the LESA evaluation, the impact to agricultural resources is considered significant. Therefore, a more detailed evaluation of the Project's potential to impact the conversion of Farmland to non-agricultural use is required, and this potentially significant will be further analyzed in the EIR.



3.4 AIR QUALITY

	AIR QUALITY Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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 non-attainment under an 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?	\boxtimes			

3.4.1 Environmental Setting

Imperial County Air Pollution Control District (APCD) maintains five air quality monitoring stations located throughout the County. Air pollutant concentrations and meteorological information are continuously recorded at these stations and transmitted back to the APCD. The nearest active APCD monitoring station to the proposed Project is the El Centro Monitoring Station located approximately 9.6 miles northeast of the proposed Project site. The El Centro Monitoring Station measures ozone (O₃), Nitrogen dioxide (NO₂), and Particulate matter less than 10 and 2.5 micrometers (PM₁₀ and PM_{2.5}).

3.4.2 Environmental Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Finding: Potentially Significant Impact

The proposed Project would generate emissions primarily during the construction of the proposed Project. The Imperial APCD is the Air District responsible for the Project area. Some of the applicable air quality plans include the 2009 State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter, the 2013 State Implementation Plan for the 2006 24-Hour PM_{2.5} Moderate Non-Attainment Area, and the 2017 State Implementation Plan for the 2008 8-hour Ozone Standard.

The construction of these facilities has the potential to cause significant environmental effects through conflict or obstruction of the applicable air quality plans. Therefore, these impacts will be analyzed further in the EIR.



b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?

Finding: Potentially Significant Impact

The proposed Project site is located in a non-attainment area for National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for O₃ and PM. The majority of PM₁₀ and PM_{2.5} in the region is generated by windblown dust, vehicle traffic across unpaved roads, and other off-highway vehicle usage. The proposed Project has the potential to increase windblown dust and vehicle traffic during construction. Therefore, the construction of these facilities has the potential to cause significant environmental effects through a potential cumulatively considerable net increase of particulate matter during construction. Therefore, this potentially significant impact will be further analyzed in the EIR.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Finding: Potentially Significant Impact

While there are no sensitive receptors are located in the vicinity of the proposed Project, there is the low potential for pollutants to become mobilized due to thermal runaway events, as detailed below in Section 3.10, Hazards and Hazardous Emissions. While it is unlikely that sensitive receptors could be exposed to substantial pollutant concentrations, due to construction or operation of the proposed Project, there is the potential to cause significant environmental effects if such exposure (via an unforeseen thermal runaway) were to occur. As such, this potentially significant impact will be further analyzed in the EIR.

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

Finding: Potentially Significant Impact

While there is not a substantial number of people located in the vicinity of the proposed Project, there is the low potential for other emissions to become mobilized due to thermal runaway events, as detailed below in Section 3.10, Hazards and Hazardous Emissions. While it is unlikely that substantial numbers of people could be exposed to other emissions (such as odors) due to construction or operation of the proposed Project, there is the potential to cause significant environmental effects if such exposure (via an unforeseen thermal runaway) were to occur. Therefore, these potentially significant impacts will be further analyzed in the EIR.



3.5 BIOLOGICAL RESOURCES

	BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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 regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	\boxtimes			
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?	\boxtimes			
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?	\boxtimes			
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?	\boxtimes			
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	\boxtimes			
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?				

3.5.1 Environmental Setting

As part of the pre-application materials prepared by the Applicant, a Biological Resources Technical Report (BRTR) was prepared for the proposed Project footprint by Recon Environmental, Inc., on July 19, 2019. This BRTR used biological resource data obtained from a combination of literature review, a general biological survey, and focused biological surveys. Focused surveys were conducted for burrowing owl (*Athene cunicularia*), jurisdictional waters/wetlands, and rare plants.

According to the BRTR, focused burrowing owl and rare plant surveys were conducted at appropriate times of the year to detect presence/absence of target species, and the combined biological surveys covered all four seasons (RECON 2019a). Therefore, the likelihood of detection of migrants and seasonal visitors was high. Surveys were limited by temporal factors, as all surveys were conducted during the day or dusk. As a result, some nocturnal animals were observed directly as dusk turned to night following burrowing owl



surveys, and others were detected by signs such as tracks, scat, and/or burrows; however, a full suite of nocturnal animals would have required full night-time surveys or trapping.

Routine weed abatement and landscape maintenance would occur as needed. The Project site is bounded by roads, agricultural uses, and solar generation facilities. As the Project is not adjacent to natural lands, landscaping maintenance for maintaining a fire-clearing zone would be minimal and would result in less than measurable emissions.

3.5.2 Environmental Impact Analysis

a) Would the project 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 regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Finding: Potentially Significant Impact

The proposed Project site has the potential to support native habitats and/or sensitive species. Burrowing owls and burrows are commonly found along canals and drains. The Westside Main Canal is located within the Project site. Flat-tailed horned lizard, Loggerhead shrike, Black-tailed gnatcatcher, Abert's towhee, American badger, Colorado Desert fringe-toed lizard, and Yuma hispid cotton rat may also have the potential to occur on the Project site.

Additionally, the proposed Project site appears to have the potential to support rare or sensitive plant species includeing Utah vine milkweed (*Funastrum utahense*), mud nama (*Nama stenocarpa*), or California satintail (*Imperata brevifolia*). Additionally, the site appears to support sensitive communities including arrow weed thickets, quailbush scrub, common reed marshes, cattail marsh, and tamarisk thickets.

As such, a potentially significant impact is identified for this issue area. In addition, routine weed abatement and landscape maintenance would occur as needed. A biological resources technical study that will address the proposed Project's potential impacts on biological resources will be prepared and will be further analyzed in the EIR.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Finding: Potentially Significant Impact

The proposed Project, and the general surrounding region, has the potential to support rare and sensitive plant species, as well as sensitive natural communities. These rare and sensitive species could potentially include Utah vine milkweed (*Funastrum utahense*), mud nama (*Nama stenocarpa*), or California satintail (*Imperata brevifolia*). Additionally, the site appears to support sensitive communities including arrow weed thickets, quailbush scrub, common reed marshes, cattail marsh, and tamarisk thickets.



Therefore, a potentially significant impact is identified for this issue area. A biological resources technical study that will address the proposed Project's potential impacts on biological resources will be prepared and will be further analyzed in the EIR.

c) Would the project 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?

<u>Finding</u>: Potentially Significant Impact

The Project site contains areas of hydrophytic vegetation and contains potentially jurisdictional wetlands and non-wetland waters of the United States. Thus, a potentially significant impact is identified for this area. A jurisdictional delineation that will address the proposed Project's potential impacts on biological resources will be prepared, and this issue will be further analyzed in the EIR.

d) Would the project 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?

Finding: Potentially Significant Impact

Refer to Response 3.5.2 a). above. This impact is considered potentially significant and will be analyzed further in the EIR.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Finding: Potentially Significant Impact

Refer to Response 3.5.2 a). above. This impact is considered potentially significant and will be analyzed further in the EIR.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Finding: Potentially Significant Impact

Refer to Response 3.5.2 a). above. This impact is considered potentially significant and will be analyzed further in the EIR.



3.6 CULTURAL RESOURCES

	CULTURAL and TRIBAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				\boxtimes
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				\boxtimes
c)	Disturb any human remains, including those interred outside of formal cemeteries?				

3.6.1 Environmental Setting

The County is rich in cultural resources. Archaeological work in the County can be separated into two distinct sections: prehistoric and historic. All prehistoric archaeology deals with aboriginal culture and systems which existed prior to Spanish colonization in 1769. Historical archaeology deals with uncovering facts that no known historical documentation has provided. Thousands of prehistoric (aboriginal culture and systems existing prior to 1769) and hundreds of historic (uncovered facts containing no known historical documentation) are found throughout the County. Prehistoric evidence in the form of trails, rock art, geoglyphs, fish traps, and resource procurement and manufacturing locations are found in the regions surrounding the fertile valley portion of the County. From a historical standpoint, the intensive use of Imperial Valley for irrigation agriculture since the beginning of this century has impacted any resources that may have existed on land that is now farmland or under the Salton Sea. Historic resource sites date back to 1540, when the Hernando de Alcaron Expedition discovered Alta California from near the intersection of I-8 and Highway 186. The next major historical event occurred in 1775, when Juan Bautista de Anza first passed through the area. The Anza Trail itself constitutes a significant cultural resource in the Yuha Desert, as does the later Sonoran/Southern Emigrant Trail which served as a major route to and from coastal California from 1825 to 1865. Although very few structures or artifacts may remain from the use of these trails, the routes themselves are of historical significance. Various other structures, such as missions (Spanish period 1769-1821) and a fort (Mexican period 1821-1848) are still evident in regions throughout the County.

RECON Environmental, Inc., prepared a Cultural Resource Survey on July 18, 2019 for the proposed Project. The purpose of their study was to determine the potential effects of the Project on significant cultural resources (RECON 2019b). For this effort, a records search and an archaeological resources survey were conducted. The records search was requested from the California Historical Resources Information System, South Coastal Information Center at San Diego State University (SCIC). The files at SCIC showed three cultural resources mapped within or adjacent to the proposed Project site. The on-foot archaeological resources survey was conducted between September 14 through 16, 2018, and a second site visit was completed, on February 4, 2019. The records search obtained from the SCIC identified 116 cultural resources within a one-mile radius of the Project site. Three of these resources were mapped within or adjacent to the current Project site. The following were found on-site: lithic and ceramic scatter, a section



of the Canal, and the Fern Check Dam. The latter two are segments of the Canal and drain system. A small temporary camp in 1979 consisted of ceramic sherds and lithics. The site was expanded in 2012 to include two deposits consisting of 18 calcined bones. A west north west-trending dirt segment of the Canal intersects the northern segment of the Project property.

The Canal is approximately 80 feet wide. It is banked by earthen levees of vegetation and is unlined. Dirt access roads run along the levees on both sides of the Canal for maintenance and dredging access. Smaller interior Canal sections occur within the Project site, which delivered water to crops. The Fern Check Dam, a circa 1947 concrete and metal check structure that controls and measures the flow of water in the Canal entering the Fern Side Main Heading and into the Fern Side Main, runs parallel to the Canal. No historic addresses are listed on, adjacent to, or within one mile of the Project site. Forty-five reports have been recorded at the SCIC occurring within one mile of the Project site. Seven of these occur within portions of the Project site. A letter was sent to the Native American Heritage Commission (NAHC) in Sacramento on August 27, 2018 requesting a search of their Sacred Lands File. The NAHC replied on August 27, 2018, indicating that they had no record of Native American cultural resources in the immediate area of the Project.

3.6.2 Environmental Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?

Finding: No Impact

To be considered historically significant, a resource must meet one of four criteria for listing outlined in the California Register of Historical Resources (CRHR) (CEQA Guidelines 15064.3(a)(3)). In addition to meeting one of the criteria outlined in the CRHR, a resource must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues (CCR Title 14, Chapter 11.5 Section 4852 [c]). Further, based on CEQA Guidelines Section 15064.5(b), substantial adverse change would include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired. This can occur when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources, National Register of Historic Resources, a local register or historic resources.
- Demolishes or materially alters in an adverse manner those physical characteristics that account
 for its identification in an historical resources survey meeting the requirements of PRC § 5024.1
 (g), unless the public agency establishes by a preponderance of the evidence that the resource is
 not historically or culturally significant.

Literature review and subsequent cultural resources pedestrian survey of the portion of the study area located within the Project site indicates that twelve previously unrecorded archaeological resources were



identified during the survey. The cultural resources consist of three prehistoric sites and nine prehistoric isolates. It was determined that these newly recorded prehistoric sites and isolates do not meet any of the criteria for listing on the California Register of Historic Places. Therefore, no significant historical resources sites have been identified within the Project study area as such, no impact is anticipated.

In addition, a section of the Canal is eligible for the National Register of Historic Places (NRHP) and CRHR on the local and state levels under Criterion A/1 for its significance in association with development of the Imperial Valley. This resource would be impacted by the construction of a proposed bridge. However, the proposed bridge will not affect the qualities or values that qualify the resource for listing in the NRHP or CRHR and would not result in a significant impact under CEQA. Therefore, the Project would have no impact to the significance of a historical resource as identified in Section 15064.5, and no further analysis is required in the EIR.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Finding: No Impact

A substantial adverse change is defined as the physical demolition, destruction, relocation, or alteration of the resource of its immediate surroundings such that the significance of a historical resource would be materially impaired. Avoidance of the historic property/historical resource through project redesign is the preferred mitigation measure. If redesign is not feasible, minimizing impacts by limiting the degree of impacts or reducing the impact through a data recovery excavation and/or construction monitoring are mitigation options.

The Project will not result in impacts to historical resources since these resources have been recommended not eligible for listing on the NRHP or the CRHR. The Westside Main Canal is eligible for the NRHP and CRHR would be impacted by the Project due to the construction of a proposed bridge across the canal to provide vehicular access from Liebert Road. The proposed bridge would not result in physically destroying or altering that canal but would result in a visual impact to the Westside Main Canal. Because there are other visual impacts along the Westside Main Canal including other bridges and impacts from maintenance improvements such as dredging and concrete lining, the proposed bridge will not affect the qualities or values that qualify the resource for listing in the NRHP or CRHR and would not result in a significant impact under CEQA. Therefore, the Project would have no adverse effect.

The Canal will still maintain its association with the development of agriculture in Imperial Valley. The potential for intact subsurface prehistoric or historic historical resources to be present on the Project property is considered very low due to extensive disturbance owed to agricultural activities. Therefore, no impacts to the significance of an archaeological resource pursuant to Section 15064.5, and no further analysis is required in the EIR.



c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Finding: Less Than Significant Impact

Subsurface human remains could be impacted during construction of the proposed Project. The proposed Project site has been historically disturbed by past agricultural practices. The Project site is currently vacant land. Although the potential for encountering subsurface human remains within the Project footprint is unlikely, there remains a possibility that human remains could be present beneath the ground surface, and that such remains could be exposed during Project construction. Therefore, potential to encounter subsurface human remains is considered a potentially significant impact unless mitigation is incorporated during construction. No subsurface disturbance will occur during Project operation. Therefore, no impacts to subsurface human remains are anticipated during operation. Decommissioning activities will involve the removal of the Battery Energy Storage System (BESS) facility structure, associated wiring, and battery cells. Earth-moving activities similar to those occurring during Project construction will occur during the decommissioning phase of the Project. The ground disturbance that would occur as a result of decommissioning would be in the same locations of disturbance that occurred during construction of the Project. Therefore, additional ground disturbances outside of those during construction are not anticipated. As such, no further disturbance of potential human remains is anticipated to occur, therefore no further analysis in the EIR is required.

In the event that evidence of human remains are discovered, construction activities within 50 feet of the discovery shall be halted or diverted, and the County Coroner will be notified (Section 7050.5 of the Health and Safety Code). If the Coroner determines that the remains are Native American, the Coroner will notify the NAHC which will designate a Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).



3.7 ENERGY RESOURCES

	ENERGY RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?				\boxtimes

3.7.1 Environmental Setting

IID is the electrical service provider for unincorporated County areas, including the proposed Project site. IID maintains a number of distribution and substation facilities in the County. As discussed above, the proposed Project would include the construction and operation of a 230-kV loop-in substation to connect the Project to the Campo Verde 230 kV Radial transmission line. IID is required by the California Energy Commission (CEC) to publish a power content label (IID 2018) that describes the percentage mix of IID's energy sources

In 2018, IID obtained power from the following sources:

• Renewable: 29 percent

Large Hydroelectric 4 percent

Natural Gas: 27 percent

• Nuclear: 3 percent

Unspecified sources of power: 37 percent IID's renewable energy sources are further broke down as follows:

• Biomass & Biowaste: 2 percent

• Geothermal: 5 percent

Eligible Hydroelectric: 2 percent

Solar: 11 percentWind: 11 percent

There are several other renewable energy generation facilities in the vicinity of the proposed Project. The proposed Project would operate as a wholesale power storage facility, storing renewable power when demand is lower and releasing power to the grid during times of increased demand. The power would be exported to IID via the new loop-in substation that would be constructed as part of the proposed Project. As discussed above, the proposed Project would have a full build-out storage capacity of approximately 2,000 MW.



3.7.2 Environmental Impact Analysis

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Finding: Less than Significant Impact

Resources that would be consumed as a result of the proposed Project include water, electricity, and fossil fuels during construction and O&M. Construction would require the manufacture of new materials, some of which may not be recyclable at the end of the proposed Project's lifetime. The energy required for the production of these materials would also result in an irretrievable commitment of natural resources. The anticipated equipment, vehicles, and materials required for construction of the proposed Project are described above in Chapter 2; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources. Compliance with all applicable building codes, State of California, and County policies would ensure that all-natural resources are conserved to the maximum extent possible.

Construction, operation, and decommissioning of the proposed Project would result in a net increase in energy resources available for use. During operation, depending on the phase, the proposed Project would make available up to approximately 400 MW per phase of efficient, clean, renewable energy at times when demand is highest. This energy resource could be used to create other goods or more efficiently power regional services, thus ensuring that no wasteful or inefficient consumption of energy resources would occur and offsetting demand which would be met by less efficient methods of energy generation; therefore, there would be a less than significant impact to energy resources and no further analysis is required in the EIR.

Furthermore, to meet air quality requirements and save materials and fuel for economic gain, the Applicant has committed to implementing energy efficiency and fuel use reduction measures for all on-site equipment, and wherever possible during construction.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Finding: No Impact

The proposed Project would be compliant with all state and local plans for renewable energy or energy efficiency because it would develop a demand responsive renewable source of power, helping to offset the use of nonrenewable resources and contribute to an overall reduction of nonrenewable resources currently used to generate electricity. Additionally, the Project would increase the effectiveness of other regional renewable projects by increasing the available storage capacity; therefore, the Project would have no impact on a state or local energy plan, and no further analysis is required in the EIR.



3.8 GEOLOGY AND SOILS

		GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)		or indirectly cause substantial adverse effects, g the risk of loss, injury, or death involving:				
	i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii.	Strong seismic ground shaking?			\boxtimes	
	iii.	Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv.	Landslides?			\boxtimes	
b)	Result i	n substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	become potentia	ted on strata or soil that is unstable, or that would e unstable as a result of the project, and ally result in on- or off-site landslide, lateral ng, subsidence, liquefaction, or collapse?	\boxtimes			
d)	Table 1	cated on expansive soil, as defined in 8-1-B of the Uniform Building Code (1994), a substantial direct or indirect risks to life or $\sqrt{?}$	\boxtimes			
e)	of sept	oils incapable of adequately supporting the use ic tanks or alternative wastewater disposal swhere sewers are not available for the disposal ewater?				
f)		or indirectly destroy a unique paleontological e or site or unique geological feature?				

3.8.1 Environmental Setting

The Project site is located in the southern portion of the Salton Trough, a structural depression within the Colorado Desert geomorphic province. This province is generally a low-lying barren desert basin (in part about 230 feet below mean sea level) dominated by the Salton Sea. The province is a depressed block between active branches of the San Andreas fault system. The fault branches are buried by recent alluvial deposits. The dominant structural features related to the San Andreas fault system consist of northwest-trending faults and fault zones. The major northwest trending fault zones include the San Jacinto fault, Imperial fault, the Superstition Hills fault, the Elsinore fault and the San Andreas fault. The Salton Trough has been inundated during the Quaternary by an ancient freshwater lake (Lake Cahuilla) which resulted in



a sequence of lacustrine (lake) deposits consisting of interbedded sand silt and clay. Remnants of the ancient shorelines of the extinct Lake Cahuilla remain prevalent in the Salton Trough (NV5_2018).

3.8.2 Environmental Impact Analysis

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

Finding: Less Than Significant Impact

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

The Project site is not located within an Earthquake Fault Zone delineated by the State of California for the hazard of fault surface rupture. The surface traces of known active or potentially active faults are not known to pass directly through the site. The Alquist-Priolo (AP) mapped Route 247 fault zone is located approximately 1.3 miles to the west but does not trend towards the Project site. The AP-mapped Northern Centinela fault zone is located approximately 3.3 miles to the south and trends towards the Project site. It should be noted that ground surface rupture due to a seismic event may occur in areas where no evidence of ground rupture had been previously noted. However, based on the distance to the mapped trace of the faults and the distance to other faults in the vicinity of the Project site, the potential for damage due to surface rupture due to faulting at the Project site is considered low. Therefore, impacts would be less than significant, and no further analysis is required in the EIR.

ii. Strong seismic ground shaking?

The Project site is located in Southern California, which is considered a seismically active area, and as such, the seismic hazard most likely to impact the site is ground shaking resulting from an earthquake along one of the known active faults in the region. The seismic design of the Project may be performed using seismic design recommendations in accordance with the 2016 California Building Code (CBC). Preliminary seismic parameters were developed for the Project site based on the 2016 CBC) and American Society of Civil Engineers (ASCE) 7-10 guidance document. Using the United States Geological Survey (USGS) Ground Motion Parameter Online Calculator based on the following site coordinates: Latitude = 32.729506 degrees, and Longitude = -115.715528 degrees. The earthquake hazard level of the Maximum Considered Earthquake (MCE) is defined in ASCE 7-10 as the ground motion having a probability of exceedance of 2 percent in 50 years. Therefore, the Project would have less than significant impacts with regard to strong seismic ground shaking, and no further analysis is required in the EIR.

iii. Seismic-related ground failure, including liquefaction?

Liquefaction and dynamic settlement of soils can be caused by ground shaking during earthquakes. Dynamic settlement due to earthquake shaking can occur in both dry or unsaturated and saturated sands. Research and historical data indicate that loose, relatively clean granular soils are susceptible to liquefaction and dynamic settlement, whereas the stability of the majority of clayey silts, silty clays and clays



is not adversely affected by ground shaking. Liquefaction is generally known to occur in saturated loose cohesionless soils at depths shallower than approximately 50 feet. The potential for liquefaction under the same conditions of ground shaking intensity and duration will decrease for sands that are more well-graded, irregular, gritty, coarser and denser. Also, a pronounced decrease in liquefaction potential will occur with the increase in fine-grained (i.e., silt and clay) content and plasticity of the soil. Idriss and Boulanger (2008) have suggested that soils with plasticity index of greater than 7 may be considered non-liquefiable. The potential consequences of liquefaction to engineered structures include loss of bearing capacity, buoyancy forces on underground structures (including pipelines), increased lateral earth pressures on retaining walls, and lateral spreading.

The Project site is underlain by poorly to moderately consolidated alluvial materials. The subsurface exploration program encountered poorly to moderately consolidated alluvial silt, clay and silty sand, along with a relatively shallow ground water table. A simplified liquefaction analysis was performed using the liquefaction triggering analysis procedure proposed by Boulanger and Idriss (2014) and the California Geological Survey (CGS) Special Publication (SP)-117 procedures using the Standard Penetration Test (SPT) data from Project site borings and historical high groundwater level of 5 feet below ground surface. A peak ground acceleration (PGA) of 0.5g for geometric-mean and earthquake moment magnitude of 6.5 based on the results of deaggregation analysis using the USGS online tools were used in liquefaction analysis. The analyses indicated that minor liquefaction effects are expected at the Project site due to presence of few isolated saturated medium dense sand layers present between depths of 15 and 50 feet below ground surface. The total seismic settlement expected at the Project site is on the order of ¼ inch which concludes that the Project is not susceptible to liquefaction. Therefore, impacts would be less than significant, and no further analysis is required in the EIR.

iv. Landslides?

There are no high or steep natural slopes on or in close proximity to the Project site. Based on the Project's Geotechnical Report, there are no indications of landslides or deep-seated instability at the Project site. Therefore, the potential damage to the proposed Project facilities due to land sliding or slope instability is considered low and potential impacts would be less than significant. No further analysis is required in the EIR.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Finding: Less Than Significant Impact

Disturbance associated with site preparation activities leaves soils vulnerable to detachment by wind, resulting in net loss, or displacement. Construction soil erosion impacts are considered potentially significant short-term impacts under CEQA. Erosion is the detachment and movement of soil materials through natural processes (primarily wind or water) or human activities. Rates of erosion can generally vary according to the soil resource's capacity to drain water, slope angle and length, extent of groundcover, and human influence. Grading and excavation would be required at the Project site to create a foundation for the proposed Project facility and other required Project components. Electrical conduits and electrical wiring



would be installed and buried in designated areas throughout the Project site. However, since the existing site was previously an agricultural use and heavily farmed, only minor grading would be needed.

In compliance with federal Clean Water Act and regulations of the State Water Resource Control Board, the proposed Project would require implementation of a construction Stormwater Pollution Prevention Plan (SWPPP), including site-specific BMPs for erosion and sediment control. The SWPPP would require BMPs be adopted for the specific conditions at the Project site and would minimize any risk for substantial erosion during construction. In addition, County standards would include preparation, review and approval of a grading plan by the County Engineer and implementation of a Dust Control Plan (Rule 801) (discussed further in Section 4.1, Air Quality). A National Pollutant Discharge Elimination System (NPDES) Construction General Permit will be required for the Project because more than one acre would be disturbed. Given the relatively flat nature of the Project area and low precipitation in the area, it is unlikely that soil erosion from runoff would occur; however, with implementation of the BMPs contained in the required SWPPP, impacts would be less than significant, and no further analysis is required in the EIR.

c) Would the project be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Finding: Potentially Significant Impact

Construction of the proposed Project could present new loading for near surface soils that might eventually cause damage to Project facilities from subsidence over time. However, the proposed improvements would be required to adhere to all applicable California Building Standards Code and would help to mitigate any potential impacts associated with subsidence or any other potentially hazardous condition associated with the ability of underlying materials to adequately support the proposed improvements. Subsidence or collapse can also occur through the rapid removal of fluids such as groundwater or petroleum from the subsurface. The proposed Project does not include the extraction of any groundwater or petroleum.

The Project site is within a topographically flat area and soils predominately consist of clays with imbedded silts and sandy silts. The native surface clays within the agricultural lands exhibit high to very high swell potential when tested according to the Uniform Building Code Standard 18-2 methods. The clay is expansive when wetted and can shrink with moisture loss (drying). Causes for soil saturation include landscape irrigation, broken utility lines, or capillary rise in moisture upon sealing the ground surface to evaporation. Moisture losses can occur with lack of landscape watering, lose proximity of structures to downslopes and root system moisture extraction from deep rooted shrubs and trees placed near the foundations. The Project site could be subject to direct impacts resulting from potential swelling forces and reduction in soil strength resulting from saturation.

Therefore, mitigation measures to replace expansive soils or condition soils to minimize expansion would be required during Project construction to reduce direct impacts associated with expansive soils. Further, adherence to applicable building code requirements and industry standard geotechnical site preparations would be required to reduce the potential impact from unstable soils. Therefore, a potentially significant



impact is identified for this issue area. A project-specific Geotechnical Study that will address the proposed Project's potential impacts on geology and soil resources, which will be further analyzed in the EIR

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Finding: Potentially Significant Impact

Improvements including foundations and slabs in contact with earth materials with a high potential for expansion can be expected to be subject to distress based on the potential for volume change associated with highly expansive soil. Soils such as these should not be relied upon for foundation bearing. The Project site is underlain predominantly by poorly to moderately consolidated alluvial materials consisting of sandy silt to clay, silty sand and poorly graded sand with silts. Three tested samples of the near-surface silt and clay soils indicated medium to high expansion potential with an Expansion Index (EI) of 54 to 106. These materials are generally considered unsuitable for use as backfill for structure foundations, retaining walls or pipe bedding. Since site grading will redistribute on-site soils, potential expansive soil properties should be verified at the completion of rough grading for the proposed Project. Therefore, the proposed Project could be subject to potential impacts resulting from potential swelling forces and reduction in soil strength resulting from saturation. However, mitigation measures to replace expansive soils or condition soils to minimize expansion would need to be implemented during Project construction to reduce direct impacts associated with expansive soils. Thus, a potentially significant impact is identified for this issue area. A Geotechnical Study that will address the proposed Project's potential impacts on geology and soil resources will be prepared and will be further analyzed in the EIR.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

<u>Finding</u>: Potentially Significant Impact

The Project proposes the construction of an on-site septic systems. Therefore, a potentially significant impact is identified for this issue area. A Geotechnical Study that will address the proposed Project's potential impacts on geology and soil resources will be further analyzed in the EIR.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

<u>Finding</u>: Potentially Significant Impact

Construction activities on the Project site would occur on a previously heavily farmed agricultural field. Deposits near the ground surface (approximately five feet in depth) were subject to disking, tilling, and planting for years, effectively compromising any fossil deposits that may have once been present. No direct impacts to paleontological resources are anticipated in association with operation and maintenance of the Project. Indirect impacts to paleontological resources during operation and maintenance would be low because no major ground disturbing activities or excavations would be anticipated as part of routine



maintenance. When the proposed Project reaches the end of its operational life, Project components would be decommissioned and deconstructed. Concrete foundations would be removed to a depth of at least four feet below ground level and demolished; driven piles would be removed from the ground. Other concrete foundations, such as those for buildings, would be demolished and removed or used on-site for fill as needed. Excavation areas (e.g., foundation removal) would be backfilled and restored to an appropriate contour. Areas subject to decommissioning would have been disturbed during construction. Mitigation measures could be needed to address construction-related impacts to paleontological resources, as direct and indirect impacts to paleontological resources during construction, operation and decommissioning of the proposed Project could be potentially significant. A Geotechnical Study that will address the proposed Project's potential impacts on geology and soil will be prepared, and this issue will be further analyzed in the EIR.



3.9 GREENHOUSE GASES

	GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	\boxtimes			
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	\boxtimes			

3.9.1 Environmental Setting

Greenhouse gas (GHG) and climate change are a cumulative global issue, therefore its analysis is cumulative in nature. The United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) regulate GHG emissions within the United States and California respectively. CARB has primary regulatory responsibility within California for GHG emissions. However local agencies can also adopt policies for GHG emission reduction. The proposed Project is located in the local jurisdiction of the Imperial County APCD. The principal GHGs resulting from human activity that enter and accumulate in the atmosphere are listed below:

- Carbon Dioxide: CO₂ enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO₂ is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- Fluorinated Gases: Hydrofluorocarbons (HFCs), perfluorinated chemicals (PFCs), and Sulfur hexafluoride (SF₆) are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for O₃-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high global warming potential (GWP) gases.
- Methane: CH₄ is emitted during the production and transport of coal, natural gas, and oil. CH₄
 emissions also result from livestock and agricultural practices and the decay of organic waste in
 municipal solid waste landfills.
- **Nitrous Oxide:** N₂O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

According to Assembly Bill (AB) 32, California's Global Warming Solutions Act, GHGs of concern include the following gases: CO₂, CH₄, N₂O, PFCs, SF₆, and HFCs. The primary GHGs that would be generated by the proposed Project would include CO₂, CH₄, and N₂O. As a method of simplifying reporting, GHG



emissions are discussed in terms of metric tons of carbon dioxide equivalents (CO₂e), which accounts for the relative warming capacity (i.e., GWP) of each gas.

3.9.2 Environmental Impact Analysis

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

Finding: Potentially Significant Impact

The proposed Project would generate GHG emissions during both construction and operation. These emissions would be generated from multiple sources, including mobile equipment and other combustion engines such as water pumps. Therefore, the construction of these facilities has the potential to cause significant environmental effects through the generation of greenhouse gas emissions which may have a significant impact on the environment. These impacts will be analyzed further in the EIR.

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

Finding: Potentially Significant Impact

The proposed Project would generate greenhouse gas emissions primarily during the construction of the proposed Project. There are a number of applicable plans, policies, and regulations adopted for the purposes of reducing the emissions of greenhouse gases. These include executive orders, senate bills, assembly bills, and other state agency specific planning documents.

The construction of these facilities has the potential to cause significant environmental effects through conflict with an applicable plan, policy, or regulation due to the greenhouse gases generated during construction and operation of the Project. Therefore, these impacts will be analyzed further in the EIR.



3.10 HAZARDS AND HAZARDOUS MATERIALS

	HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	\boxtimes			
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 one-quarter mile of an existing or proposed school?				\boxtimes
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?				\boxtimes
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				\boxtimes
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

3.10.1 Environmental Setting

As discussed above in Chapter 2, the Project site is approximately one-third mile north of the IV Substation and directly south of the intersection of Liebert Road and the IID Canal. The Project site is bounded by the Westside Main Canal to the north, BLM lands to the south and west, and vacant private land to the east. The Campo Verde solar generation facility is located north of the Project site, across the Canal.

Fire protection systems for battery systems would be designed in accordance with California Fire Code 2016 and would take into consideration the recommendations of NFPA 855. Depending on the battery technology used in a phase, fire suppression agents such as Novec 1230 or FM 200, or water may be used as a suppressant, depending on what is most effective. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current and temperature alarms. Energy storage equipment would comply with UL-9540 and would account for the results of UL-9540A. As discussed above in Chapter 2, the proposed Project has the potential to utilizing either lithium-ion batteries and/or flow batteries. Flow batteries are generally not flammable and do not require fire suppression



systems. In locations where equipment is located within buildings, automated fire sprinkler systems will be designed in accordance with California Fire Code Section 903. A fire loop system and fire hydrants will be located throughout the site for general fire suppression. Buildings and containers for both lithium-ion and flow batteries will be unoccupied enclosures. These buildings will also have automatic sprinkler systems designed in accordance with California Fire Code Section 903.

3.10.2 Environmental Impact Analysis

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

Finding: Potentially Significant Impact

The proposed Project would routinely transport and use hazardous materials, including battery storage components and fuels such as gasoline would be necessary to support construction and operational activities. Disposal of battery components could contain potentially hazardous materials. Implementation of industry standards would serve to reduce the potential for a hazard resulting from the use of these materials. Therefore, a more detailed evaluation of the potential significant impacts associated with routine hazardous material transport, use, and disposal is required, and this potentially significant impact will be further analyzed in the EIR.

b) Would the project 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?

Finding: Potentially Significant Impact

The proposed Project would result in the installation and operation of a battery storage facility. Should an upset or accidental condition occur, such as a thermal runaway event, hazardous materials from the battery storage facility could be potentially released into the environment. Therefore, a more detailed evaluation of the potential significant impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment is required, and this potentially significant impact will be further analyzed in the EIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Finding: No Impact

As discussed above in Chapter 2, the proposed Project site is located in a remote area of the County and is not located within one-quarter mile of an existing or proposed school. The nearest school to the proposed Project is the Westside Elementary School, which was closed in 2013, is located approximately 2.1 miles north of the Project site. While the school is currently closed, it could be reopened in the future. The nearest active school to the proposed Project is Seeley Elementary School, located approximately 4.6 miles north of the Project. A review was conducted of existing publicly available information from the County Office of



Education and the Seeley Union School District to determine if any proposed schools would be located within one-quarter mile of the proposed Project site. No proposed schools were identified. Therefore, the Project is not located within one-quarter mile of an existing or proposed school, and no impact would occur. No further analysis is required in the EIR.

d) Would the project 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?

Finding: No Impact

The proposed Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, as outlined on the Geotracker and Envirostor databases (DTSC 2020, SWRCB 2020). As a result, the proposed Project would not create a significant hazard to the public or environment, and no impact would occur. No further analysis is required in the EIR.

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

Finding: No Impact

The proposed Project site is not located within the bounds of any airport land use plans, as outlined in the County of Imperial Airport Land Use Compatibility Plan (Imperial 1996). Therefore, the proposed Project would not result in a safety hazard or excessive noise for people residing or working in the Project area, and no impact would occur. No further evaluation is required in the EIR.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: No Impact

The proposed Project would be required to comply with all applicable emergency response plans and emergency evacuation plans as a condition of proposed Project approvals, as discussed above in Table 2, and in accordance with state and local regulations (Health and Safety Code, §25500-25520 and Cal. Code Reg., tit. 19, § 2720 et seq.).

The proposed Project does not include construction of residences or facilities that would require significant evacuation. During Project operation, up to twenty employees would be present. This number of employees would be accommodated under existing emergency response plans and emergency evacuation plans. The proposed Project would not remove roadways or regional access points and would increase local access via the new bridge. As such, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, there would be no impact to adopted emergency plans, and no further evaluation is required in the EIR.



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

Finding: No Impact

Discussed in further detail below in Section 3.20, Wildfire, the proposed Project is not located in an area mapped as a Very High Fire Hazard Severity Zone (VHFHSZ), nor is it in an area where nearby wildlands are present. Therefore, there would no impact to people or structures, and no further evaluation is required in the EIR.



3.11 HYDROLOGY AND WATER QUALITY

	HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				\boxtimes

3.11.1 Environmental Setting

The proposed Project site is located within the Salton Sea Transboundary Watershed within the Colorado River Basin Region (Biotech report citation). The site is bifurcated by the Westside Main Canal, a manmade, natural bottomed canal used by IID to convey water from the All-American Canal to the greater Imperial Valley area, primarily for irrigation and agricultural usages. The Westside Main Canal starts in the northern portion of the Project site and flows from east to west. In the nearby vicinity to the Project site, the Fern Check drop structure helps regulate water levels within the canal. Additionally, manufactured drainage ditches, both concrete lined and natural bottomed, occur along berms that define the boundaries of the abandoned agricultural fields which make up the Project site, but these ditches are non-functional. According to the Department of Water Resources (DWR 2020), the proposed Project overlies the Coyote Wells Valley groundwater basin.

Throughout the site, the elevation ranges from approximately sea level on the southwest portion to approximately 24 feet below sea level in the northeast corner. Delineated on Flood Insurance Rate Map



panel 06025C2050C, the proposed Project lies within the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area Zone X. Areas mapped as Zone X are areas of moderate to minimal flood hazard, having an average annual average change of less than 0.2 percent.

Given the phased nature of the proposed Project, it is assumed that the total amount of impervious surfaces is potentially speculative. Therefore, for the purpose of this analysis, it is conservatively assumed that the entire Project site would be covered with impervious surfaces, with the exception of the proposed drainage basins. This additional potential impervious surface area represents approximately 154.84 acres.

3.11.2 Environmental Impact Analysis

d) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Finding: Potentially Significant Impact

The proposed Project would result in the installation of a battery energy storage facility including a loop-in substation, a solar PV facility, a new bridge across the Westside Canal, and other associated pieces of infrastructure such as new drainage basins. Construction of the Project would require 210 AF of water for dust suppression and other construction activities (such as concrete preparation). Water used for dust suppression would not contain contaminants. The accidental release or mobilization of contaminants during construction or operation of the proposed Project could potentially result in water quality degradation within the Coyote Wells Valley Groundwater Basin. Potentially hazardous materials may include diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, and other fluids required for the operation of construction vehicles. Motorized equipment used at the proposed Project site during the construction or operation could leak potentially hazardous materials due to unnoticed or unrepaired damage, improper fueling, or operator error. This type of leak could occur either on the proposed Project site or on the vehicle and equipment routes between the off-site origin point and the proposed Project site. Any activities that require the use of motorized equipment may result in the accidental spill or release of potentially hazardous materials.

Direct contact with potentially hazardous materials could result from a leak or spill that occurs directly above or within the bed and banks of a flowing stream or waterbody. Additionally, the low risk of a thermal runaway event does present the potential for toxics to mobilize into the surrounding environment and throughout the regional water system via the Westside Canal. As a potentially significant impact could occur, this issue will be analyzed further in the EIR.

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

Finding: Less Than Significant Impact

As discussed above, the proposed Project would result in approximately 154.84 acres of new impervious surfaces. The water for Project construction and operation would be sourced via a new connection to the



Westside Main Canal, and a Will Serve letter from the local water purveyor (IID) was requested by the Applicant from the IID Water Manager, in February 2020. Water would not be sourced from the local groundwater basin.

The rate and amount of recharge and surface runoff is determined by multiple factors, including amount and intensity of precipitation, amount of other imported water that enters a watershed, and amount of precipitation and imported water that infiltrates to the groundwater. Infiltration is determined by several factors, including soil type, antecedent soil moisture, rainfall intensity, the number of impervious surfaces within a watershed, and topography. The rate of surface runoff is largely determined by topography and the intensity of rainfall over a given period of time. Changes in groundwater recharge alter the quantity of groundwater available to the environment, existing users, and other proposed projects. Projects that grade the land surface, remove vegetation, alter the conveyance and control of runoff, or cover the land with impervious surfaces alter the relationships between rainfall, runoff, infiltration and evapotranspiration. Total Project acreage is an indicator of the magnitude of the land surface disturbance and potential to alter runoff, infiltration and transpiration. The Coyote Wells Valley Groundwater Basin is approximately 64,000 acres in size (California's Groundwater Bulletin, 2004). Therefore, the proposed Project would conservatively represent an increase of approximately 0.2 percent, with the actual amount of impervious surfaces constructed anticipated to be less than the approximately 154.84 acres indicated above. Additionally, as described above in Chapter 2, the proposed Project would include the construction and operation of detention basins to preserve infiltration capacity for all stormwater and rainfall that were to enter the site.

Given the small percentage of the overall groundwater basin that would be rendered impervious by the proposed Project, the presence of the detention basis, and the lack of groundwater required for the proposed Project, a less than significant impact would occur. No further analysis of this issue is required in the EIR.

- Would the project 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.



<u>Finding</u>: Potentially Significant Impact

As discussed above, due to the phased nature of the proposed Project, there is the potential that the entire Project site (with the exception of the infiltration basins) would be rendered impervious. Therefore, a potentially significant impact could occur, and this impact will be analyzed further in the EIR.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Finding: No Impact

The proposed Project is located within the Mt. Signal area of Imperial County, which is not located within a tsunami or seiche zone. People or structures would not be exposed to hazards associated with seiche, tsunami, or mudflow since no large bodies of water exist near the proposed Project site. The Pacific Ocean is approximately 83.1 miles from the proposed Project site and separated by the barrier of the Peninsular Mountain Ranges. No water bodies capable of producing a seiche are located near the proposed Project site. The nearest large water body is the Salton Sea, located approximately 25.1 miles north of the Project, and is not directly connected to the Westside Canal, the nearest hydrologic feature to the Project.

Discussed above, portions of the proposed Project site fall within FEMA Flood Hazard Zone X. These areas reflect hazard zones that have a minimal to moderate risk of a 0.2 percent annual chance (100-year) flood each year. This flooding hazard reflects a baseline condition that exists prior to the construction of the proposed Project, and construction of the proposed Project would not alter the existing flood hazard. Therefore, as the proposed Project is not located in a flood hazard, tsunami, or seiche zone, and no impact from inundation would occur. As such, no further analysis is required in the EIR.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Finding: No Impact

The proposed Project would be constructed and operated in accordance with all applicable regulations and plans, including regional water quality control plans and sustainable groundwater management plans. As such, the proposed Project would not conflict with or obstruct the implementation of these plans, and no impact would occur. A such, no further evaluation is required in the EIR.



3.12 LAND USE AND PLANNING

	LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Physically divide an established community?				\boxtimes
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?				

3.12.1 Environmental Setting

The proposed Project site and surrounding parcels to the north and east have a land use designation of Agricultural (A-3), according to the County General Plan land use designations. Areas to the west and southwest are lands designated as open space/recreation areas. Lands southwest of the proposed Project site are BLM lands and are not subjected to County zoning designations (Imperial 2020).

According to the Imperial County Municipal Code, Section 90509.01 Permitted Uses in the A-3 Zone, the proposed Project component conflicts with the allowable uses in the A-3 Zone. Therefore, the Project proposes a General Plan Amendment and Zone Change to change the land use designation and zoning for the Project site from Agriculture (A-3) to Medium Industrial (M-2), specifically limited to Energy Production/Use.

3.12.2 Environmental Impact Analysis

a) Would the project physically divide an established community?

Finding: No Impact

The proposed Project would not physically divide any established community. The Project site is located in a portion of the County with similar industrial solar generation projects. The rest of the area is predominately agricultural, with a scattering of residences. The Project does not vacate any roads used by residents to connect with an established community. Temporary construction activities would access the Project site from the south side of the Canal, off SR-98, and/or from the north side of the Canal, from I-8. Construction activities would occur Monday through Friday between the hours of 7:00 a.m. and 7:00 p.m. Temporary access would be used until the construction of the permanent bridge is completed. Upon Project completion, approximately 60 feet of frontage road along the north Project fence line, south of the IID maintenance road, and a Caltrans specified bridge over the Canal, will provide public access to and from the Project site. Therefore, no impact would occur, and no further analysis of this topic is required in the EIR.



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

Finding: Potentially Significant Impact

The proposed Project site is currently zoned Agriculture (A-3), and the Project is proposing a General Plan Amendment and Zone Change to change the land use designation and zoning for the Project site to Medium Industrial (M-2), with the Industrial use zoning limited to Energy Production/Use. As such, the potential impact of this zone change will be analyzed further in the EIR.



3.13 MINERAL RESOURCES

	MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?				\boxtimes
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?				\boxtimes

3.13.1 Environmental Setting

According to the Imperial County General Plan Conservation & Open Space Element (Imperial 2016), there are a number of mineral extraction operations currently operating within the County, including extraction of precious minerals, such as gold, Construction and building materials such as clay, gravel, gypsum, lime, limestone, sand, stone, tuff, and other raw materials such as kyanite, manganese, micas, and potash. In Figure 8 of the Conservation and Open Space Element, existing mineral resources within the County are depicted, none of which are located in or near the proposed Project site. Additionally, mapping by the California Department of Conservation indicates that there are no mapped mineral resource zones (MRZ) in or near the proposed Project site (DOC 2015).

3.13.2 Environmental Impact Analysis

a) Would the project 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?

Finding: No Impact

As discussed above, the proposed Project would not be located on or near known mineral resources classified as MRZ-2 by the State Geologist. No MRZ's are located in or near the proposed Project site. Therefore, no impact would occur, and no further evaluation is required in the EIR.

b) Would the project 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?

Finding: No Impact

As discussed above, the proposed Project would not be located in or near known mineral resources, or mineral resources delineated on a local general plan, specific plan, or other land use plan (including the County of Imperial General Plan). Therefore, no impact would occur, and no further evaluation is required in the EIR.



3.14 NOISE

	NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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 two 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?				

3.14.1 Environmental Setting

As discussed above in Chapter 2, the proposed Project would include a General Plan Amendment and Zone change to change the land use designation and zoning for the Project site from Agriculture (A3) to Industrial. The construction of the access road and the bridge over the Westside Main Canal would last for eight to nine months. The Project would then grade/disturb the entire site and construction would last for approximately 32 months.

The County's General Plan Noise Element establishes construction time of day restrictions and noise level limits. Construction activities may only occur Monday through Friday between the hours of 7:00 a.m. and 7:00 p.m. or Saturday between the hours of 9:00 a.m. and 5:00 p.m., excluding holidays. Additionally, construction noise may not exceed 75 A-weighted decibel [dB(A)] 8-hour equivalent noise level [Leq (8h)] at the nearest sensitive receptor (Imperial 2015).

Imperial County Noise Abatement and Control. County Code of Ordinances Title 9, Division 7: Noise Abatement and Control, specifies noise level limits. Noise level limits are summarized in the table below. Noise level limits do not apply to construction equipment.



Table 5: Imperial County Property Line Noise Limits

Zone	Time	One-Hour Average Sound Level [dB(A) Leq]
Low Density Residential Zones	7:00 a.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
Medium to High-Density Residential	7:00 a.m. to 10:00 p.m.	55
Zones	10:00 p.m. to 7:00 a.m.	50
Commercial Zones	7:00 a.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	55
Manufacturing / Light Industrial / Industrial Park Zones including agriculture	(anytime)	70
General Industrial Zones	(anytime)	75

Source: Imperial County Board of Supervisors 2017

3.14.2 Environmental Impact Analysis

a) Would the project result in 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?

Finding: Less Than Significant Impact

Noise associated with construction and operation of the proposed Project would potentially result in short-term impacts to the surrounding properties; however, there are no nearby residences which would be affected by the noise associated with either the construction or operation of the proposed Project. As modeled in the Noise Technical Report, the maximum construction noise levels would be well below 75 dB(A) Leq(8h) at the nearest residential properties. As discussed above, the County General Plan Noise Element establishes the construction time of day restrictions and noise level limits. Construction activities would only occur between Monday through Friday, between the hours of 7:00 am and 7:00 pm, or Saturday between the hours of 9:00 am and 5:00 pm, excluding holidays. Therefore, construction of the Project would not result in a generation of a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance.

Operational sources of noise associated with the Project would include air cooling units, inverters, transformers, the substation, and the transmission gen-tie in lines. The O&M Building and the battery storage modules would also include HVAC units. As modeled in the Noise Technical Report, the noise associated with the Project operation would attenuate to less than 60 dB(a) $L_{eq(8h)}$ within the Project boundary. Noise levels would not exceed the applicable property line noise level limit of 70 dB(A) at the nearby adjacent properties. Therefore, the Project would not result in a generation of 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, and impacts would be less than significant. No further evaluation is required in the EIR.



b) Would the project exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Finding: Less Than Significant Impact

The nearest sensitive receptor to the proposed Project is a residence located approximately 0.85 mile from the Project's property line. The table below summarizes the general estimation of ground vibration from typical construction equipment at several distance,s based on methods specified in the Federal Transit Administration's Transit Noise and Vibration Impact Assessment (FTA 2006).

Table 6: Vibration from Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Pile driver (sonic/vibratory)	0.734	0.2595	0.1413	0.0918	0.0396
Large bulldozer	0.089	0.0315	0.0171	0.0111	0.0048
Loaded trucks	0.076	0.0269	0.0146	0.0095	0.0041
Jackhammer	0.035	0.0124	0.0067	0.0044	0.0019
Small bulldozer	0.003	0.0011	0.0006	0.0004	0.0002

Note:

PPV = peak particle velocity

Source: FTA 2006

The main vibratory sources from the proposed Project would be generated during construction activities and would be temporary and of short duration. The County of Imperial General Plan or Noise Ordinance do not contain any specific performance standards for vibration. Therefore, a vibration analysis exceeding 0.1 PPV would be considered the threshold of concern. At this level, the vibration would be somewhere between barely perceptible and distinctly perceptible by humans, with a doubling of vibration level still required to potentially generate damage to structures. As demonstrated above, typical construction equipment would not exceed 0.1 PPV outside of the Project site, and the nearest residence to the Project is approximately 4,448 feet from the Project. Therefore, vibration generated by the proposed Project would not be excessive, and impacts would be less than significant. No further evaluation is required in the EIR.



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 two 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?

Finding: No Impact

As discussed above in Section 3.10, the proposed Project site is not located within the bounds of any airport land use plans, as outlined in the County of Imperial Airport Land Use Compatibility Plan (Imperial, 1996). Therefore, the proposed Project would not result in a safety hazard or excessive noise for people residing or working in the Project area, and no impact would occur. No further evaluation is required in the EIR.



3.15 POPULATION AND HOUSING

	POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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)?			\boxtimes	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

3.15.1 Environmental Setting

As discussed above in Section 2 (Project Description), the proposed Project is located within the unincorporated Mount Signal area of the County of Imperial, approximately 8 miles southwest of the City of El Centro, and approximately 5.3 miles north of the U.S. – Mexico Border.

Within the unincorporated areas of Imperial County, there are 10 townsites which serve as population centers and where future population growth is being directed. These are Bombay Beach, Desert Shores, Heber, Niland, Ocotillo/Nomirage, Palo Verde, Salton City/Vista Del Mar, Salton Sea Beach, Seeley, and Winterhaven. Mount Signal is not a designated townsite. The closest townsite to the Project is Seeley, located approximately 4.56 miles to the north, followed by Heber, approximately 10.8 miles to the east.

According to the County of Imperial Housing Element (Imperial 2013), the total population of the County was 174,528 in 2010. Table 7, Imperial County Population Trends, illustrates the populations trends in the vicinity of the Project. As discussed above in Section 2, the Project would require approximately 200 workers during peak construction, and 20 employees during operation.



Table 7: Imperial County Population Trends

A	2000	0040	C	Change		
Area	2000	2010 Number		Percentage		
Bombay Beach	395	295	-100	-25%		
Desert Shores	805	1,104	299	37%		
Heber	3,007	4,275	1,268	42%		
Niland	1,205	1,006	-199	-17%		
Ocotillo	312	266	-46	-15%		
Palo Verde	279	171	-108	-39%		
Salton City	944	3,762	2,819	299%		
Salton Sea Beach	440	422	-18	-4%		
Seeley	1,576	1,739	163	10%		
Winterhaven	522	394	-128	-25%		
Total Townsites	9,485	13,435	3,950	42%		
Remaining Unincorporated	23,380	24,343	963	4%		
Total Unincorporated County	32,865	37,778	4,913	15%		
Total County	142,361	174,528	32,167	23%		

^{*}The remaining area of the County not covered by the designated townsites or incorporated cities. Source: (Imperial 2013)

Additionally, the Imperial County General Plan contains information on the housing supply within the County. According to the 2010 US Census, there was a vacancy rate of approximately 27 percent within the unincorporated County and a 12 percent vacancy rate in the county as a whole, potentially indicating that demand is lower than supply (Imperial 2013). Approximately half of the vacancies within the unincorporated County are available for seasonal or recreational use (Imperial 2013). Table 8, Housing Tenure and Vacancy, below, outlines the tenure and vacancy rates for housing within the County.



Table 8: Housing Tenure and Vacancy

Tenure and	Unincorpo	rated County	Total	County
Vacancy Status	Number	Percentage	Number	Percentage
Occupied	10,436	73%	49,126	88%
Owner-Occupied	6,708	64%	27,465	56%
Renter-Occupied	3,728	36%	21,661	44%
Vacant	3,899	27%	6,941	12%
For Rent	356	9%	1,762	19%
For Sale	275	7%	1,019	12%
Rented or sold, not occupied	137	4%	381	7%
Seasonal or Recreational Use	1,805	46%	2,046	32%
Migrant worker housing	14	<1%	14	<1%
Other	1,312	34%	1,719	30%
Total housing Units	14,335	100%	56,067	100%

According to the County of Imperial General Plan Housing Element (Imperial 2013), the County had a quantified objective of 1,455 new units, and a Regional Housing needs Allocation of 13,427 for the planning period. However, the County was able to issue permits for 337 new homes between 2008 and 2012. This reflects an excess capacity for planned population growth in the Project area that was not utilized.

3.15.2 Environmental Impact Analysis

a) Would the project 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)?

Finding: Less Than Significant Impact

As discussed above, the proposed Project would require up to 200 employees during peak construction activities and would employ approximately 20 staff during operations and maintenance activities. Construction activities are expected to take approximately 10 years to complete. Therefore, it is assumed that the construction workers would be likely to settle or relocate near the proposed Project site.

According to the United States Census, (Census, 2018b) Seeley (the closest townsite to the proposed Project) has approximately 595 total housing units, with 139 vacant housing units, a 23.4% vacancy rate. The same survey (Census, 2018a) determined that Heber, the second closest townsite, has approximately 1,317 total housing units, with 188 vacant housing units, a 14.3% vacancy rate. Additionally, as shown above, the greater unincorporated County of Imperial has approximately 3,899 vacant housing units, a 27% vacancy rate.



Therefore, there are approximately 327 vacant housing units in the nearby vicinity of the proposed Project, and approximately ten times that available in the unincorporated County. Additionally, it is assumed that some portion of the Project's construction workforce would be existing nearby residents to the proposed Project, further reducing the Projects potential effect on local population growth. If the entire construction workforce was drawn from outside the area or the County, it could be easily accommodated with the existing vacant housing unit supply and would not require the construction of new housing units to accommodate the Project. Additionally, the Project area has an excess of planned housing and population growth in the area, with a goal of 1,455 new units during the most recent General Plan cycle, and only 335 new units constructed. Even if new housing was constructed for Project staff, it would not exceed the regional planned limits.

The Project would install new roads and improve existing infrastructure to improve access to the Site. However, access would be only to the site, and would not include access improvements to the surrounding area which would stimulate population growth. Therefore, the Project would have a less than significant impact on local population growth, and no further analysis of this topic is required in the EIR.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Finding: No Impact

The proposed Project site contains no housing units of any kind. No portion of the proposed Project would remove any available housing units or displace any numbers of existing people or housing. Therefore, no construction of replacement housing elsewhere would be required, and no impact would occur. No further analysis is required in the EIR.



3.16 PUBLIC SERVICES

PUBLIC SERVICES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact		
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:						
i) Fire protection?						
ii) Police protection?						
iii) Schools?						
iv) Parks?			\boxtimes			
v) Other Public Facilities?						

3.16.1 Environmental Setting

Fire Protection

Imperial County Fire Department and Office of Emergency Services (ICFD/OES) provides fire protection service to the Project site. There are eight stations in the County manned with firefighters located in the communities of Heber, Seeley, Ocotillo, Palo Verde, Niland, Winterhaven, and the Cities of El Centro and Imperial. The closest fire station to the Project site is Station 2, located at 1078 Dogwood Road, in Heber, which is approximately 12 miles east of the Project site.

The proposed Project is located within the Federal Responsibility Area (FRA) according to the Department of Forest and Fire Protection (CALFIRE) State Responsibility Area (SRA) Map (CalFire 2007). Fire protection, medical emergency services, technical rescue, hazardous material incident responses, and aircraft rescue firefighting services are provided by the Imperial County Fire Department/Office of Emergency Services (ICFD/OES) to the unincorporated areas and townships of the County (ICFD/OES 2020).

Police Protection

The Imperial County Sheriff's Office (ICSO) provides police services to the unincorporated areas of the County (ICSO 2020a). ICSO patrol is divided between the North County, South County, and Palo Verde Patrols (ICSO 2020b). South County division patrols the area of the proposed Project site, operating out of Sheriff's Office at 328 Applestill Road, in El Centro, approximately 12 miles east of the Project site.



Schools

The Imperial County Office of Education (ICOE) provides all educational services to the County. The County has twenty-one different school districts. The nearest school to the proposed Project is Seeley Elementary School, located approximately 4.7 miles to the northeast.

Parks

The proposed Project would utilize a small portion of BLM land approximately 0.35 mile to the southwest of the Project site (Imperial 2020). This land is not a part of the Jacumba Wilderness area and is designated as a recreational use (BLM 2020), which is located over 25 miles west of the Project site. The nearest recreational use area for public use is the Rio Bend RV and Golf Resort, which is located approximately 2.95 miles to the northwest of the proposed Project.

Other Public Facilities - Libraries

The proposed Project could utilize library resources in the local community. The closest library to the Project site is the Imperial County Free Library, located at 1132 Heber Avenue, in Heber, which is over 12 miles east of the Project site.

3.16.2 Environmental Impact Analysis

- a) 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:
 - i. Fire Protection?

Finding: Less than Significant Impact

Fire protection service to the Project site is provided by Imperial County Fire Department, and the closest station is Station 2, located in Heber, approximately 12 miles east of the Project site. The station is staffed with a Captain, Firefighter and Reserve Firefighter and also has office space for the Office of Emergency Services and for other shared County services, including the Sheriff and the Emergency Operations Center (ICFD/OES 2012). Every station as a Type I fire engine as its primary apparatus, but the Station 2 is also equipped with a ladder truck, a Type III engine and has a Hazardous Materials unit. For unincorporated County areas, including rural zones, emergency response times averaged 17 minutes (ICFD/OES 2012). The County forecasts for increased demand in fire and emergency medical services is commensurate with population and business growth trends, and the anticipated increase in demand is considered modest through 2035 (ICFD/OES 2012).

Increased demand in fire protection and emergency services are usually tied to an increase in residential population. As there are no residential uses proposed as part of the Project, fire and emergency service demand is anticipated to be relatively modest. During Project construction, a maximum of 200 employees



may be working on the Project site at one time, with the need for approximately 20 employees anticipated on-site during Project operation and maintenance after Project buildout. This relatively small number of permanent employees would not result in a significant increase in the need for fire protection and emergency services, based on County forecasts. The proposed Project would include a fire protection system for all battery systems on site. The fire protection system will be design in accordance with California Fire Code 2016 and will take into consideration the recommendations of NFPA 855. Fire prevention methods would also be used to reduce potential risks, including voltage, current, and temperature alarms. In areas where equipment is located within buildings, automated fire sprinklers systems would be installed in accordance with California Fire Code. On the Project site, a fire loop system and fire hydrants will be accessible for general fire suppression. The unoccupied enclosures to contain both lithium-ion and flow batteries will have automated sprinkler systems design to California Fire Code Section 903 standards.

Separate methods of failure detection will be implemented such as alarms from the Battery Management System (BMS) including voltage, current, and temperature. Other preventative methods for fire protection include off gas detection, ventilation, overcurrent protection, battery controls with designated parameters, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms will be installed for operations personnel as well as emergency response teams. An Incidence Response Plan will be implemented in accordance with the technology (Lithium-ion or flow battery) installed during each phase. An additional fire protection and prevention plan proposed for the Project is the purchase or proportionate share to purchase a Type 1 Fire Engine meeting all NFPA standards for structural firefighting for the Imperial County Fire Department. Should an accident or fire occur requiring fire protection services beyond the proposed fire protection and prevention methods, the County Fire Department would be able to provide emergency services. Furthermore, the County requires the payment of impact fees for all new development projects, and Fire Impact Fees would be imposed pursuant to County Ordinance 1418, Section 2 (2006). Fees for non-residential uses would be assessed based on the project size and demand for services. With the payment of required fees and incorporation of on-site fire protection measures, the proposed Project would not substantially increase the need for fire protection, and this impact would be less than significant impact. No further analysis of this topic is required in the EIR.

ii. Police Services?

Finding: Less than Significant

The proposed Project does not include a residential element. Therefore, it would not result in a substantial addition of population to the ICSO area and would not require new or altered police facilities. Based on the large size of the patrol area, emergency response times can vary in the County, with rural locations taking a longer time to access. Nevertheless, there would be a modest increase in demand for police services over existing conditions. The proposed Project would employ the following staff: one plant manager, one O&M manager, a facility manager, and staff technicians with at least one additional technician for every 250 MW generation. In total, approximately 20 employees would be required to operate the proposed Project. An eight-foot barbed wired-topped fence would be installed on the outside perimeter of the proposed Project site. The substations proposed on the Project site would also have fences surrounding the perimeters. At the front gate, a camera-equipped call button would be monitored from the Project O&M building. At various points throughout the site, security cameras would be installed to monitor all areas of



the Project site. During the construction of each phase, an on-site security guard would be present between dusk and dawn and during the hours of non-active construction.

New development projects in the County would be required to pay an impact fee, which is imposed to County Ordinance 1418 Section 2 (2006). Similar to fire protection services, development fees for non-residential uses would be assessed based on the project size and demand for services. With the payment of fees and on-site security features, the proposed Project would not cause a substantial increase in the demand for police protection services. Therefore, impacts would be less than significant, and no further analysis of this topic is required in the EIR.

iii. Schools?

<u>Finding:</u> Less Than Significant Impact

The proposed Project is limited to a utility-scale battery energy storage complex that does not include a population element that would increase the demand for school facilities. Permanent employees (approximately 20) at the Project site would most likely come from the surrounding communities with children already attending neighborhood schools. Furthermore, 20 employees would not generate a significant amount of school aged children. The proposed Project would not result in a significant enrollment demand to surrounding schools. Therefore, the proposed Project would have a less than significant impact to schools, and no further analysis of this topic is required in the EIR.

iv. Parks?

Finding: Less Than Significant Impact

The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, such as parks. There would be no increase in residential population size; however, Project employees and visitors may elect to use recreational facilities and outdoor areas on the Project vicinity. Considering the relatively small number of employees that would be employed by the Project, the increase in demand for parks as a result of the proposed Project would be minimal. Therefore, impacts to parks would be less than significant, and no further analysis of this topic is required in the EIR.

v. Other Public Facilities - Libraries?

Finding: Less Than Significant Impact

The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, such as libraries. An increase in demand for library use is mostly associated with an increase in residential population, and the Project does not include any residential uses. Project employees and visitors may elect to visit a public library, and they go to the County Free Library in Heber without significantly impacting its ability to serve the community. Therefore, impacts to libraries would be less than significant, and no further analysis of this topic is required in the EIR.



3.17 RECREATION

	RECREATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

3.17.1 Environmental Setting

The multitude of geographical features and characteristics of the Imperial County allows for an abundancy of a variety of recreational opportunities. Parks within the unincorporated of the County, such as Mount Signal, are classified by the following park types: Limited Facility Park, Neighborhood Park, Community Park, Regional Park, and State and Federal Parks.

Limited Facility Parks have minimal amenities. These parks serve one primary function with some possible accessory uses. This type of park may be of any size and is usually located in the open desert areas of the County. Including marinas, boat launching areas, and trailheads, the County has three Limited Facility Parks. These parks are the Palo Verde Park, Osborne Park, and Niland Marina (Imperial 2008b). Neighborhood Parks are usually small and located with within the boundaries of an unincorporated community. Usually within walking distance, Neighborhood Parks are within residential district and easily accessible by pedestrians (Imperial 2008b). Also referred to as Pocket Parks, Neighborhood Parks typically consist of playground or other active uses, landscaped areas for passive uses, and areas for leisure use such as walking and sitting. Within the unincorporated areas of the County, two privately maintained, Neighborhood Parks are located in Heber and one located in Salton City, Martin Flora Park (Imperial 2008b). Community Parks are larger than Neighborhood Parks and are shared by the entire community. Distinguished by its major active recreational use, Community Parks often have a variety of athletic fields or courts. Numerous on-site facilities are present including, but not limited to; on-site parking facilities, large picnic areas, baseball fields, and basketball courts (Imperial 2008b). Community Parks are accessible by pedestrians or by vehicles. The County has four Community Parks: one in Ocotillo, one in Heber, Salton City Park, and Desert Shores Park (Imperial 2008b).

Regional Parks are found outside or inside a community. Access is typically provided by a main road and is shared by the entire population of the County. Like Community Parks, Regional Parks include sports fields and leisure areas, however they are distinguished by the presence of a water feature such as a lake or pond. Regional Parks are typically accessed by vehicle, but pedestrian access is available as well. The County has five Regional Parks: Sunbeam Lake, Wiest Lake, Heber Dunes, Red Hill Marina, and Pioneer's County Park (Imperial 2008b).



The final park types as set forth in the Parks and Recreation Element of the County's General Plan is state and federal Parks. These parks are maintained by the state or federal government. Typically, on large pieces of land (>100 acres), these parks have designated wildlife preserves and areas for human use (Imperial 2008b). State and federal parks welcome visitors inside and outside the County. Designated humans use of state and federal parks include hiking trails, camping areas, and off highway vehicle (OHV) areas. Access to these areas is typically provided by vehicle. The following is a list of state and federal parks in the County:

- Salton Sea State Recreation Area, located on the northeastern shore of the Salton Sea off SR-111.
- Pichaco State Recreation Area, located along the Colorado River north of Winterhaven,
- Anza Borrego Desert State Park and Ocotillo State Vehicular Recreation Area, adjoining parks located in the western open desert area of the County,
- Imperial Sand Dunes Recreation and Wilderness Area, located in about 40 miles of the open desert in the eastern portion of the County

The proposed Project would utilize a small portion of BLM land approximately 0.35 mile to the southwest of the Project site. This land is not a part of the Jacumba Wilderness area and is designated as recreational use (BLM 2020). The nearest recreational area for public use is the Rio Bend RV and Golf Resort, which is located approximately 2.95 miles to the northwest of the proposed Project.

3.17.2 Environmental Impact Analysis

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?

Finding: Less than Significant Impact

The proposed Project would utilize a population of approximately 270 construction personnel to complete the required tasks. The proposed Project is limited to a battery energy storage facility and does not include a component that would result in population growth of increased demand for recreational facilities. The proposed Project is not anticipated to increase the use of existing neighborhood, community, regional, state or federal parks and facilities nor would substantial deterioration of the parks or facilities be accelerated. Therefore, a less than significant impact would occur, and no further analysis of this topic is required in the EIR.

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

Finding: No Impact

The proposed Project is limited to a battery energy storage facility and does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impacts would occur, and no further analysis of this topic is required in the EIR.



3.18 TRANSPORTATION

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

3.18.1 Environmental Setting

The network of highways and transportation circulation is planned to accommodate a pattern of concentrated and coordinated growth, providing both regional and local interconnection systems between communities and their neighboring areas. The County has established the following policies to aid guidance for future county plans:

- Coordinate the transportation and circulation with planned land uses;
- Promote the safe and efficient transport of goods and the safe and effective movement of all segments of the population;
- Make efficient use of existing transportation, transmission, and other infrastructure facilities, and
- Protect environmental quality and promote the wise and equitable use of economic and natural resources (Imperial 2008a).

The Imperial County Roadway Classification system classifies roadways using a functional classification process which entails the grouping of roads and highways into classes or systems according to the type of service they are intended to provide. Having a road classification system is necessary in order to determine how different travel can be channelized within the County in an organized system (Imperial 2008a). The different, classified roadway systems in the County include Expressway, Prime Arterial, Minor Arterial, Major Collector, Minor/Local Collector, Residential Street, Major Industrial Collector, and Industrial Local Street. Table 9 describes the Level of Service (LOS) for the previously mentioned roadway classifications.



Table 9: Imperial County Standard Street Classification Average Daily Vehicle Trips

Road	Level of Service (LOS)					
Class	Α	В	С	D	E	
Expressway	30,000	42,000	60,000	70,000	80,000	
Prime Arterial	22,200	37,000	44,600	50,000	57,000	
Minor Arterial	14,800	24,700	29,600	33,400	37,000	
Major Collector	13,700	22,800	27,400	30,800	34,200	
Minor Collector	1,900	4,100	7,100	10,900	16,200	
Local County	*	*	<1,500	*	*	
Major Industrial	5,000	10,000	14,000	17,000	20,000	
Industrial Local	2,500	5,000	7,000	8,500	10,000	

Source: Imperial 2008a

Materials and construction personnel will utilize various routes of transportation to and from the Project site. As described in Section 2.0, Project Description, to access the southern portion of the Project site, travel would have to occur along SR-98, and then proceeding 5.2 miles north to the Project site. To access the northern portion of the Project site, travel would occur along I-8 and the proceeding 4.6 miles to the south. SR-98 is classified as an expressway while Drew Road is classified as Minor Collector roadway and Wixom Road is unclassified (Imperial 2008a).

As a part of the pre-application material prepared by the Applicant, a Transportation Impact Analysis (TIA) was prepared for the proposed Project by Linscott, Law & Greenspan, Engineers on July 22, 2019. THe TIA was conducted in accordance of Objective 1.2 of the Circulation and Scenic Highway Element of the County's General Plan (Imperial 2008a). This analysis used a LOS range from A to F, with LOS A representing the best and LOS F representing the worst operating conditions, to denote the different operating conditions which occur on the given roadway segments under various traffic volume loads. In March 2019, traffic counts were conducted during peak hours of 7:00 AM to 9:00 AM and 4:00PM to 6:00 PM.

The proposed Project would generate traffic during the initial construction period and during the utility-scale energy storage facility. During the initial construction period which would consist of the of the construction of the access road and the bridge across the Westside Main Canal, a total of approximately 8 workers per day would require travel to the Project site. During the secondary construction phase, it is approximated a maximum of 200 workers and 30 trucks per day will require travel to the Project site. With the addition of



^{*} Levels of Service are not applied to the residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of Service normally apply to roads carrying through traffic between major trip generators and attractors.

Project-related travel, the average daily trips (ADT) for Drew Road increase from existing operations at LOS A and 541 ADT, to LOS B and 1,113 ADT. For Wixom Road, existing operations increase from LOS A and 89 ADT, to LOS A and 643 ADT. The TIA concluded, based on the significance criteria of the County and Caltrans, that both roadway segments are calculated to operate as LOS B or better (Linscott et. al 2019).

3.18.2 Environmental Impact Analysis

a) Would the project conflict with a program plan, ordinance, or policy addressing the circulation systems, including transit, roadway, bicycle and pedestrian facilities?

Finding: Less than Significant

As described above, a TIA was prepared in accordance with Objective 1.2 of the County's Circulation and Scenic Highways Element of the General Plan. Traffic in the areas of Wixom Road and Drew Road are expected to increase by with the addition of construction-related traffic during the proposed Project time frame. Although an increase is expected, the increase in Project-related traffic is still considered lower than the County's thresholds of significance as operating at LOS B or better. Therefore, a less than significant impact would occur, and no further analysis of this topic is required in the EIR.

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

Finding: Less Than Significant Impact

During the construction phase, at peak construction (battery installation and connection phase), the proposed Project is anticipated to generate a total of 30 trip ends per day. It is estimated that the impacts of this operational traffic would be very small (up to 20 employees). The Project is not expected to create significant impacts at study intersections or study segments. All study intersections and segments were found to operate at LOS B or better for all the traffic scenarios analyzed. Therefore, impacts would be less than significant, and no further analysis of this topic is required in the EIR.

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

Finding: No Impact

Based on the proposed Project's location in a rural portion of the County with low traffic volumes, the Project would not increase hazards due to a geometric design or an incompatible use with surrounding agricultural land. Therefore, no impact would occur in association with hazards due to a design feature or incompatible uses, and no further analysis of this topic is required in the EIR.



d) Would the project result in inadequate emergency access?

Finding: Less than Significant Impact

The proposed Project is the construction of a utility-scale battery storage facility. Prior to Project operation, vehicular access would need to be established. A proposed bridge over the Westside Main Canal would provide access to the Project site from the north. Access roads are to be paved on the north and south sides of the Canal providing access. Approximately 60 feet of frontage road on the north Project fence and south of the IID maintenance road would be used for public access to the site. However, until the bridge construction is complete, temporary access is proposed from south of the Project site at SR-98 to Drew Road, or from north of the Project site at I-8 to Wixom Road. Temporary and permanent access ensures that adequate access will consistently be provided during construction and operation of the proposed Project. Therefore, impacts are considered less than significant, and no further analysis of this topic is required in the EIR.



3.19 TRIBAL CULTURAL RESOURCES

		TRIBAL CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact	
a)	a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:						
	i.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register 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 of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?					

3.19.1 Environmental Setting

The County will use the CEQA process to conserve tribal cultural resources and conform to Senate Bill 18 "Consultation with Tribal Governments" and Assembly Bill (AB) 52 "Consultation with Tribal Governments." Public awareness of cultural heritage will be stressed. All information and artifacts recovered in this process will be stored in an appropriate institution and made available for public exhibit and scientific review.

3.19.2 Environmental Impact Analysis

- a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the CRHR, 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 of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?



<u>Finding</u>: Potentially Significant Impact

The County, as the CEQA Lead Agency, will consult with appropriate tribes with the potential for interest in the region. Based on this consultation, it will be identified if the proposed Project site is located in an area having the potential for tribal cultural resources. Senate Bill 18 states: "Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe."

The County will conduct outreach to Native American Tribes and receive requests for consultation through its AB 52 and SB 19 Native American outreach efforts. Therefore, until this process is initiated, the proposed Project may have potentially significant impacts. The results of the consultation effort will be described in the EIR. As a result, this environmental resource area will be further analyzed in the EIR.



3.20 UTILITIES AND SERVICE SYSTEMS

	UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	\boxtimes			
b)	Have sufficient water supply 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 tor may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
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?				

3.20.1 Environmental Setting

3.20.1.1 Wastewater

Wastewater service to the proposed Project is currently not available. Capacity for the Project would be provided via a new septic leach field located near the O&M building.

3.20.1.2 Electric Power

IID is also the electric power service provider to the proposed Project. As discussed above in Section 2.5, the Project would interconnect with the IID Campo Verde 230 kV transmission line via a new collector substation to be installed as part of the Project. The Project's effects on energy resources is discussed further in Section 3.7, Energy. If energy services to the Project were disrupted, backup power facilities (onsite solar and backup diesel generation) would be used to maintain the battery's safe operating temperatures.

3.20.1.3 Solid Waste

Solid waste disposal service to the proposed Project is provided by the Imperial County Department of Public Works (ICDPW). ICDPW operates nine separate landfills located throughout the County, as listed in



Table 10, Solid Waste Service. The closest landfill to the proposed Project site is Imperial Landfill, which is expected to service the proposed Project.

Table 10: Solid Waste Service

Landfill	Address	Distance	Units	Remaining Capacity	Remaining Capacity Date	Maximum Capacity
Imperial	1705 W Worthington Rd Imperial CA, 92251	8.04 miles	1	180,000 Cubic Yards	10/1/2012	1,936,000 cubic yards
Calexico	133 W Hwy 98 Calexico, CA 92231	10.6 miles	1	180,000 Cubic Yards	10/1/2012	1,936,000 cubic yards
Ocotillo*	1802 Shell Canyon Rd Ocotillo, CA 92259	16.75 miles	1	Closed	01/31/2004	
Holtville*	2678 Whitlock Road Holtville, CA 92250	28.41 miles	1	Closed	04/01/2007	
Niland	8450 Cuff Road Niland, CA 92257	37.74 miles	1	296,702 Cubic Yards	9/18/2017	318,637
Hot Spa	10466 Spa Road Niland, CA 92257	46.02 miles	1	55,767 Cubic Yards	2/11/2016	233,150
Salton City	935 W Highway 86 Salton City, CA 92275	51.94 miles	1	1,264,170 Cubic Yards	9/30/2018	65,100,000 Cubic Yards
Picacho*	1409 Picacho Road Bard, CA 92222	64.14 miles	1	Closed	11/30/2011	
Palo Verde*	589 Stallard Road Palo Verde CA, 92266	72.02 miles	1	Closed	10/1/2006	

*Closed and no longer receiving waste

Source: ICDPW 2020

3.20.1.4 Water

Potable water service to the Project site would be provided by the IID. IID manages over 3,000 miles of canals and drains, serving over one million acres within the County. IID services as a raw water wholesaler, selling untreated Colorado River Water to seven cities and two special districts, who then threat it and



distribute it to their users. As the IID water is untreated, the Project would include the installation and operation of an on-site water treatment plant to ensure that water was of sufficient quality for operations and personnel safety.

Water service to the proposed Project site would be provided via a new connection to the Canal. The Applicant requested a formal Will Serve letter from the IID Water Manager, in February 2020. The Applicant has requested a Water Supply Assessment, pursuant to SB 610, to identify the water supply and water quality needs for the proposed Project.

3.20.1.5 Stormwater Drainage

As discussed above in Chapter 2, the proposed Project would include the installation of stormwater retention basins at strategic locations throughout the site. The retention basins would be sized in accordance with the County's Design Guidelines. This requires the basins to be able to retain at least 3 inches of rainfall across the entire Project site. The current basin design has a maximum depth of 5 feet with 4:1 side slopes and provides a retention volume of approximately 40.8 AF. The basins will be excavated out of and constructed using native soil. Retention basins may be added with each phase, such that the site might have different drainage areas contributing to each basin.

3.20.1.6 Natural Gas Facilities

Southern California Gas Company (SoCalGas) provides natural gas service to the County. There is no natural gas connection to the site, and none would be required for the Project. The proposed Project would not utilize any natural gas, and as a result, no new or expanded natural as facilities or infrastructure are needed to serve the Project.

3.20.1.7 Telecommunications Facilities

The proposed Project would install fiber optic telecommunications cables to connect the proposed substation to the IV Substation, utilizing existing transmission lines. The length of this proposed fiber optic telecommunications cable route is approximately one-third of a mile.

3.20.2 Environmental Impact Analysis

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Finding: Potentially Significant

The proposed Project would require and result in the relocation and construction of new and expanded water, wastewater, stormwater drainage, telecommunications, and electrical power facilities. The Project would not require the use of natural gas. The construction of these facilities has the potential to cause significant environmental effects; therefore, these impacts will be analyzed further in the EIR



b) Would the project have sufficient water supply available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Finding: Potentially Significant Impact

During construction, the Project proposes at least two temporary connections to the Canal for construction. Permanent water to serve the Project's water/fire suppression will come from the Canal. Following construction, service water will be supplied either by an on-site water treatment system drawing water from the Westside Main Canal or from deliveries from water suppliers. This service water is to be used for operations using on-site aboveground storage. The proposed Project has the potential to not have a sufficient water supply; therefore, these impacts will be analyzed further in the EIR.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Finding: No Impact

Wastewater generated during construction would be limited to that generated by construction personnel and would be accommodated by temporary portable toilets brought to staging areas for construction crews. These portable toilets would be maintained by a licensed sanitation contractor. The licensed contractor would dispose of the waste at an off-site location and in compliance with standards established by the Regional Water Quality Control Board. The wastewater disposal would utilize existing disposal facilities and infrastructure with available processing capacity.

Long-term O&M would not generate substantial amounts of wastewater. As discussed above in Chapter 2, the proposed Project does not have or require a connection to a wastewater treatment provider. The Project would install a septic leach field located near the O&M building and would seek the appropriate ministerial permits from the Countyl for its construction. Therefore, the Project would not generate wastewater that could otherwise occupy capacity in addition to the providers existing commitments, and the Project's projected demand would be met via project design features. Therefore, no impact would occur, and no further analysis of this topic is required in the EIR.

d) Would the project 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?

Finding: Less Than Significant Impact

Construction of the proposed Project would result in the temporary generation of various waste materials, including wood, metal, soil, and vegetation. Sanitation waste (i.e., human-generated waste) would be disposed of in accordance with sanitation waste management practices. Any soil excavated could be distributed at construction areas, used to backfill excavations, or used for access roads near or within the rights-of-way for the gen-tie and communication lines. Any excess soil would be disposed of off-site at an appropriately licensed facility, such as the Imperial Landfill. Although waste from construction activities



would be sent to one or more landfills in the area, the amount is not anticipated to be enough to affect the permitted capacity of a landfill. The Imperial Landfill would be the closest disposal facility to the site, and currently, the remaining capacity of the landfill is approximately 91 percent (CalRecycle 2020d).

O&M activities would consist of routine maintenance and emergency work at the Project site. These activities would not generate solid waste in an amount that would significantly affect the permitted capacity of landfills in the area. Since local landfills are capable of serving Project construction, they would be able to accommodate the Project's solid waste disposal needs during operation. It is anticipated that during decommissioning, the proposed Project would either be recycled or be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs. Therefore, impacts would be less than significant, and no further analysis of this topic is required in the EIR.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Finding: Less Than Significant Impact

The Integrated Waste Management Act of 1989 (AB 939) requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. The County of Imperial has established recycling and resource recovery programs in accordance with the requirements of AB 939. During construction, soil from drilling or excavation would be screened and separated for use as backfill to the maximum extent possible. Other waste, such as packing crates, spare bolts, and other construction debris, would be hauled off-site for recycling when possible.

O&M activities associated with the proposed Project would not generate a significant amount of solid waste and would not affect the permitted capacity of landfills in the area. Impacts during decommissioning would be the same as impacts described during construction. The proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, impacts would be less than significant, and no further analysis of this topic is required in the EIR.



3.21 WILDFIRE

	WILDFIRE Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
If Id	ocated in or near state responsibility areas or lands classif	ied as very higl	n fire hazard severi	ty zones;	
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
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 (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
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?				\boxtimes

3.21.1 Environmental Setting

The proposed Project is located within the unincorporated Imperial County in an area mapped as a Local Responsibility Area (LRA) by CAL FIRE (Cal Fire, 2007a; 2007b). The lands adjacent to and surrounding the proposed Project are also mapped as LRAs or Federal Responsibility Areas (FRA's). Additionally, the proposed Project is not located in lands mapped as VHFHSZ. The nearest location mapped VHFHSZ is approximately 16.5 miles to the west of the proposed Project (CAL FIRE 2007b).

3.21.2 Environmental Impact Analysis

- a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Would the project 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) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?



d) Would the project 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?

a-d) Finding: No Impact

In response to items 3.21.2 a) through d), the proposed Project does not meet the criteria for impact analysis under the above significance criteria.

Projects are subject to wildfire analysis when one of four conditions are fulfilled:

- 1. The Project is located in a State Responsibility Area.
- 2. The Project is located near a State Responsibility Area
- 3. The Project is located on lands classified as Very High Fire Hazard Severity Zones (VHFHSZ).
- 4. The Project is located near lands classified as VHFHSZ.

The proposed Project does not fulfil any of these four conditions. As discussed above, and illustrated in CalFire 2007a and 2007b, the proposed Project site is located within areas mapped either as LRA or FRA, with the nearest SRA lands located approximately 16.5 miles to the west of the Project. Additionally, the Project is not located on or near any lands classified as VHFHSZ. Therefore, under these significance thresholds, the proposed Project would not result in an impact adopted emergency response or evacuation plans, exacerbate wildfire risks, or expose people or structures to significant risks as a result of runoff, instability, or drainage changes. Therefore, no impact would occur, and no further analysis is required in the EIR.



3.22 MANDATORY FINDINGS OF SIGNIFICANCE

	MANDATORY FINDINGS OF SIGNIFICANCE Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	\boxtimes			
b)	Have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	\boxtimes			
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

3.22.1 Environmental Impact Analysis

a) Would the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Finding: Potentially Significant Impact

As discussed above, the Project is not anticipated to significantly impact cultural resources, and therefore, it would not eliminate any important examples of the major periods of California history or prehistory. However, the proposed Project has the potential to significantly impact biological resources, including fish and wildlife species habitats, as well as plant and animal communities. As impacts to biological resources are potentially significant, this topic will be analyzed further in the EIR.



b) Would the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?

Finding: Potentially Significant Impact

The proposed Project, in conjunction with other past, present, and reasonably foreseeable future related projects, has the potential to result in significant cumulative impacts when the independent impacts of the proposed Project and the impacts of related projects combine to create impacts greater than those of the proposed Project alone.

A list of the related projects or growth projections will be developed for the EIR. The potential for the proposed Project in conjunction with the related projects and their cumulative contributions to environmental impacts will be evaluated in the EIR.

The cumulative impacts addressed in the EIR will be the same as the individual resource areas which will be evaluated in the EIR, which will include the following:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Geology and Soils
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology
- Land Use
- Tribal Cultural Resources
- Utilities and Service Systems

The extent and significance of potential cumulative impacts resulting from the combined effects of the proposed Project plus other past, present and reasonably foreseeable future projects will be evaluated in the EIR.

The proposed Project would not result in a cumulatively considerable contribution or result in a less than cumulatively considerable contribution to the environmental resource areas to the following topics, which will not be further evaluated in the EIR:

- Cultural Resources
- Energy
- Mineral Resources
- Noise
- Population and Housing

- Public Services
- Recreation
- Transportation
- Wildfire



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

Finding: Potentially Significant Impact

Potentially significant impacts to the following resources may have the potential to cause substantial adverse effects on human beings:

- Aesthetics
- Air Quality
- Biological Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Agriculture and Forestry Resources
- Hydrology
- Land Use
- Tribal Cultural Resources
- Utilities and Service Systems

Potential impacts to each of these resources will be analyzed further in the EIR.



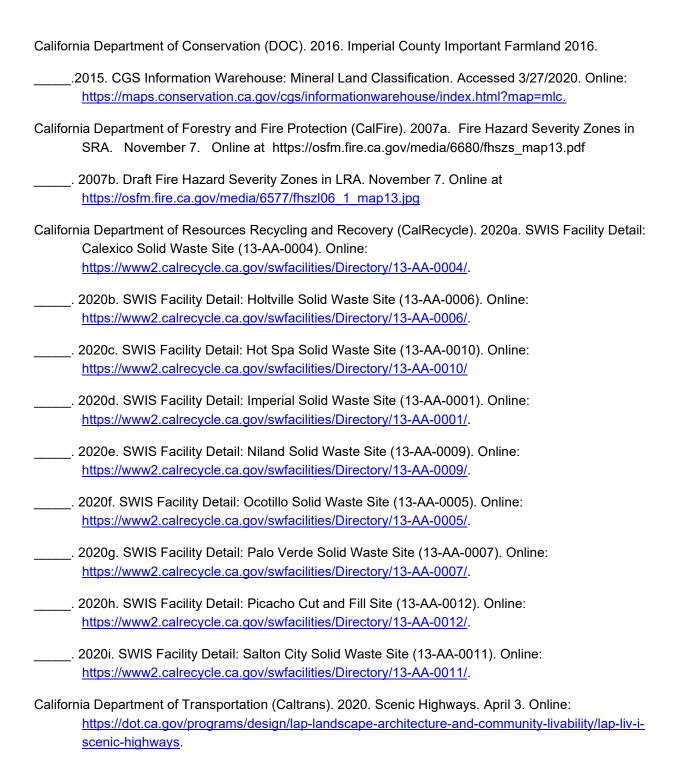
4.0 REPORT PREPARATION

4.1 LIST OF PREPARERS

Preparers	
Kevin Kohan	Senior Environmental Planner
Patrick Meddaugh	Associate Environmental Scientist, CEP-IT
Christine Abraham	Principal Environmental Planner
Lindsay McDonough	Environmental Planner
Emily Medler	Environmental Scientist
Gilberto Ruiz	Principal Environmental Planner
Crystal Guan	Engineer



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