PROJECT REPORT

TO: ENVIRONMENTAL EVALUATION COMMITTEE

AGENDA DATE: November 14, 2019

FROM: PLANNING & DEVELOPMENT SERVICES DEPT. **AGENDA TIME** 1:30 PM/No. 1

PROJECT TYPE: **Information Item Only** – Wister Solar Energy Facility Project; ORNI 21, LLC GPA#19-0001/ZC#19-0001/CUP#18-0040/V#19-0003 SUPERVISOR DIST #4

LOCATION: Project site is generally located approximately 3 miles north of the Townsite of Niland. APN #003-240-001-000

PARCEL SIZE: approx. 640 acres

GENERAL PLAN (existing) Recreational Open Space GENERAL PLAN (proposed) _____

ZONE (existing) S2G ZONE (proposed) S2RE

GENERAL PLAN FINDINGS ☐ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: TBD

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 11/14/2019

INITIAL STUDY: 18-0026

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☒ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☒ NONE	☐ ATTACHED
AG / APCD	☒ NONE	☐ ATTACHED
E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☒ NONE	☐ ATTACHED
OTHER		

REQUESTED ACTION:

See Attached

Imperial County Planning & Development Services
(Jim Minnick, Director)
801 MAIN ST., EL CENTRO, CA.., 92243 442-265-1736

Initial Study and NOP

Wister Solar Energy Facility Project

Imperial County, CA

November 2019

[redacted]

Reviewed by:

County of Imperial

Planning & Development Services Department

801 Main Street

El Centro, CA 92243

Prepared by:

HDR Engineering, Inc.

591 Camino de la Reina, Suite 300

San Diego, CA 92108

[redacted]

This page is intentionally blank.

Contents

This page is intentionally blank.

Introduction

A. Purpose

This document is a ☐ policy-level; ☒ project-level Initial Study for evaluation of potential environmental impacts resulting with the proposed Wister Solar Energy Facility Project.

B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's Rules and Regulations 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.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not 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 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.); the State CEQA Guidelines & County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA; 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's CEQA Regulations, Guidelines for the Implementation of 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.

C. Intended Uses of Initial Study and Notice of Preparation

This Initial Study and Notice of Preparation are informational documents which are intended to inform County of Imperial 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 Initial Study and Notice of Preparation, prepared for the project will be circulated for a period of no less than 35 days for public and agency review and comments.

D. Contents of Initial Study and Notice of Preparation

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

E. Scope of Environmental Analysis

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. No Impact: A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.
2. Less Than Significant Impact: The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. Less Than Significant With Mitigation Incorporated: This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact."
4. Potentially Significant Impact: The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. Policy-Level or Project-Level Environmental Analysis

This Initial Study will be conducted under a ☐ policy-level, ☒project-level analysis.

Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures, and therefore, will not be identified in this document.

G. Tiered Documents and Incorporation by Reference

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. **Tiered Documents**

   As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

   "Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

   Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

   "Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development

projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. **Incorporation by Reference**

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]).

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR is available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243, Ph. (442) 265-1736.
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the 'County of Imperial General Plan EIR is SCH #93011023.

The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f])

Environmental Checklist Form

1. **Project Title:** Wister Solar Energy Facility Project

2. **Lead Agency name and address:** Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243

3. **Contact person and phone number:** Patricia Valenzuela, Planner IV, 442-265-1749

4. **Project location:** The Wister Solar Energy Facility Project consists of four primary components: 1) solar generation equipment and associated facilities (herein referred to as "solar energy facility"); 2) gen-tie line that would connect the proposed on-site substation to the Point of Interconnection (POI) at the existing Imperial Irrigation District's (IID) 92 kilovolt (kV) "K" line; 3) fiberoptic cable; and, 4) upgrades to off-site IID facilities (92-kV line from New Mecca to the North Shore substation, and Niland substation). These components are collectively referred to as the "proposed project" or "project."

   - ***Solar Energy Facility and Gen-Tie Line.*** The project site is located approximately three miles north of Niland, a census-designated place, in the unincorporated area of Imperial County (Figure 1). The project site is located on one parcel of land identified as Assessor's Parcel Number 003-240-001 (Figure 2). The parcel is approximately 640 acres and is currently zoned Open Space/Preservation with a geothermal overlay (S-2-G). The proposed project would be located on approximately 100 acres, in the northwest portion of the 640-acre parcel. The project site is located east of the intersection of Wilkins Road and an unnamed county road. The project footprint (where proposed project components are to be located) is generally located east of Wilkins Road, north of the East Highline Canal, and west of Gas Line Road.

   - ***Fiberoptic Cable.*** The proposed project includes approximately two miles of fiberoptic line from the proposed on-site substation to the existing Niland Substation, located at 402 Beal Road in Niland.

   - ***Off-Site IID Facilities.*** The 92-kV line from New Mecca to the North Shore substation is located north of the Salton Sea in southeastern Riverside County. The North Shore Substation is located at the northeast corner of Club View Drive and Windlass Drive in the census-designated place of North Shore. The New Mecca Substation is located at the northeast corner of Hammond Road and Johnson Street in the unincorporated community of Mecca. The Niland substation is located at 402 Beal Road in Niland.

5. **Project sponsor's name and address:** ORNI 21, LLC, 6140 Plumas Street, Reno, Nevada 89519

6. **General Plan designation:** Recreation

7. **Zoning:** Open Space/Preservation with a geothermal overlay (S-2-G)

8. **Description of project:** The proposed Wister Solar Energy Facility Project involves the construction and operation of a 20 Megawatt (MW) photovoltaic (PV) solar energy facility on approximately 100 acres of privately-owned land north of Niland. The proposed project would be comprised of solar PV panels on single-axis horizontal trackers, an on-site substation and inverters, transformers, and underground electrical cables. The proposed

project also includes approximately two miles of fiberoptic line from the proposed on-site substation to the existing Niland Substation to connect the proposed Wister Substation to the region's telecommunications system.

The power produced by the proposed project would be conveyed to the local power grid via an on-site 92-kV substation, which will be tied directly to IID's 92-kV transmission line. A gen-tie line would connect the Wister substation to the POI at the existing IID 92-kV "K" line. The project applicant has secured a Power Purchase Agreement with San Diego Gas and Electric for the sale of power from the project.

In order to support the proposed project, IID will need to upgrade ± 5 miles of the existing 92-kV line from New Mecca to the North Shore substation. This upgrade would consist of removal of the existing wood poles and installing new wood poles within the same disturbed right of way. In addition, the existing 795 all-aluminum conductor (AAC) conductor would be upgraded to 1033 AAC conductor, and new insulators, fittings, and hardware would be installed on the upgraded poles. IID would upgrade relay protection, control, Supervisory Control and Data Acquisition, and telecommunication capabilities for the 92-kV gen-tie and terminals at the New Mecca and Niland substations in support of the project.

9. **Surrounding land uses and setting: Briefly describe the project's surroundings:** The project site is generally surrounded to the north, east, and south by vacant land. A private road and the East Highline Canal border the project site to the south. Existing transmission lines border the project site to the east. An agricultural field lies to the northwest of the project site.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**

    - Department of Public Works – Ministerial permits (building, grading, encroachment)
    - Imperial County Air Pollution Control District – Fugitive dust control plan, Authority to construct
    - California Regional Water Quality Control Board – Notice of Intent for General Construction Permit

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    Yes, the Torrez Martinez Desert Cahuilla Indians and Quechan Indian Tribe. These tribes were sent an AB 52 and SB 18 consultation request letter.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

Environmental Evaluation Committee Determination

After Review of the Initial Study, the Environmental Evaluation Committee (EEC) has:

☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND GAME DE MINIMIS IMPACT FINDING:

☐Yes ☐No

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☐	☐	☐
ENVIRONMENTAL HEALTH	☐	☐	☐
OFFICE EMERGENCY SERVICES	☐	☐	☐
APCD	☐	☐	☐
AG	☐	☐	☐
SHERIFF DEPARTMENT	☐	☐	☐
ICPDS	☐	☐	☐

Signature

Date:

Project Summary

Project Location

The Wister Solar Energy Facility Project consists of four primary components: 1) solar generation equipment and associated facilities (herein referred to as "solar energy facility"); 2) gen-tie line that would connect the proposed on-site substation to the POI at the existing IID's 92-kV "K" line; 3) fiberoptic cable; and, 4) upgrades to off-site IID facilities (92-kV line from New Mecca to the North Shore substation, and Niland substation). These components are collectively referred to as the "proposed project" or "project."

- **Solar Energy Facility and Gen-Tie Line.** The project site is located approximately three miles north of Niland, a census-designated place, in the unincorporated area of Imperial County (Figure 1). The project site is located on one parcel of land identified as Assessor's Parcel Number 003-240-001 (Figure 2). The parcel is approximately 640 acres and is currently zoned Open Space/Preservation with a geothermal overlay (S-2-G). The proposed project would be located on approximately 100 acres, in the northwest portion of the 640-acre parcel. The project site is located east of the intersection of Wilkins Road and an unnamed county road. The project footprint (where proposed project components are to be located) is generally located east of Wilkins Road, north of the East Highline Canal, and west of Gas Line Road.
- **Fiberoptic Cable.** The proposed project includes approximately two miles of fiberoptic line from the proposed on-site substation to the existing Niland Substation, located at 402 Beal Road in Niland.
- **Off-Site IID Facilities.** The 92-kV line from New Mecca to the North Shore substation is located north of the Salton Sea in southeastern Riverside County. The North Shore Substation is located at the northeast corner of Club View Drive and Windlass Drive in the census-designated place of North Shore. The New Mecca Substation is located at the northeast corner of Hammond Road and Johnson Street in the unincorporated community of Mecca. The Niland substation is located at 402 Beal Road in Niland.

Project Summary

The proposed Wister Solar Energy Facility Project involves the construction and operation of a 20 MW PV solar energy facility on approximately 100 acres of privately-owned land north of Niland. The proposed project would be comprised of solar PV panels on single-axis horizontal trackers, an on-site substation and inverters, transformers, and underground electrical cables. The proposed project also includes approximately two miles of fiberoptic line from the proposed on-site substation to the existing Niland Substation to connect the proposed Wister Substation to the region's telecommunications system.

The power produced by the proposed project would be conveyed to the local power grid via an on-site 92-kV substation, which will be tied directly to IID's 92-kV transmission line. A gen-tie line would connect the Wister substation to the POI at the existing IID 92-kV "K" line. The project applicant has secured a Power Purchase Agreement with San Diego Gas and Electric for the sale of power from the project.

In order to support the proposed project, IID will need to upgrade ± 5 miles of the existing 92-kV line from New Mecca to the North Shore substation. This upgrade would consist of removal of the existing wood poles and installing new wood poles within the same disturbed right of way. In addition, the existing 795 AAC conductor would be upgraded to 1033 AAC conductor, and new insulators, fittings, and hardware would be installed on the upgraded poles. IID would upgrade relay protection, control, Supervisory Control and Data Acquisition, and telecommunication capabilities for the 92-kV gen-tie and terminals at the New Mecca and Niland substations in support of the project.

Environmental Setting

The project site is generally surrounded to the north, east, and south by vacant land. A private road and the East Highline Canal border the project site to the south. Existing transmission lines border the project site to the east. An agricultural field lies to the northwest of the project site.

General Plan Consistency

The proposed project is located within the unincorporated area of Imperial County. The existing General Plan land use designation is "Recreation." The project site is currently zoned Open Space/Preservation with a geothermal overlay (S-2-G). Construction of a solar facility would be allowed within the existing zoning under a Conditional Use Permit.

Figure 1. Regional Location

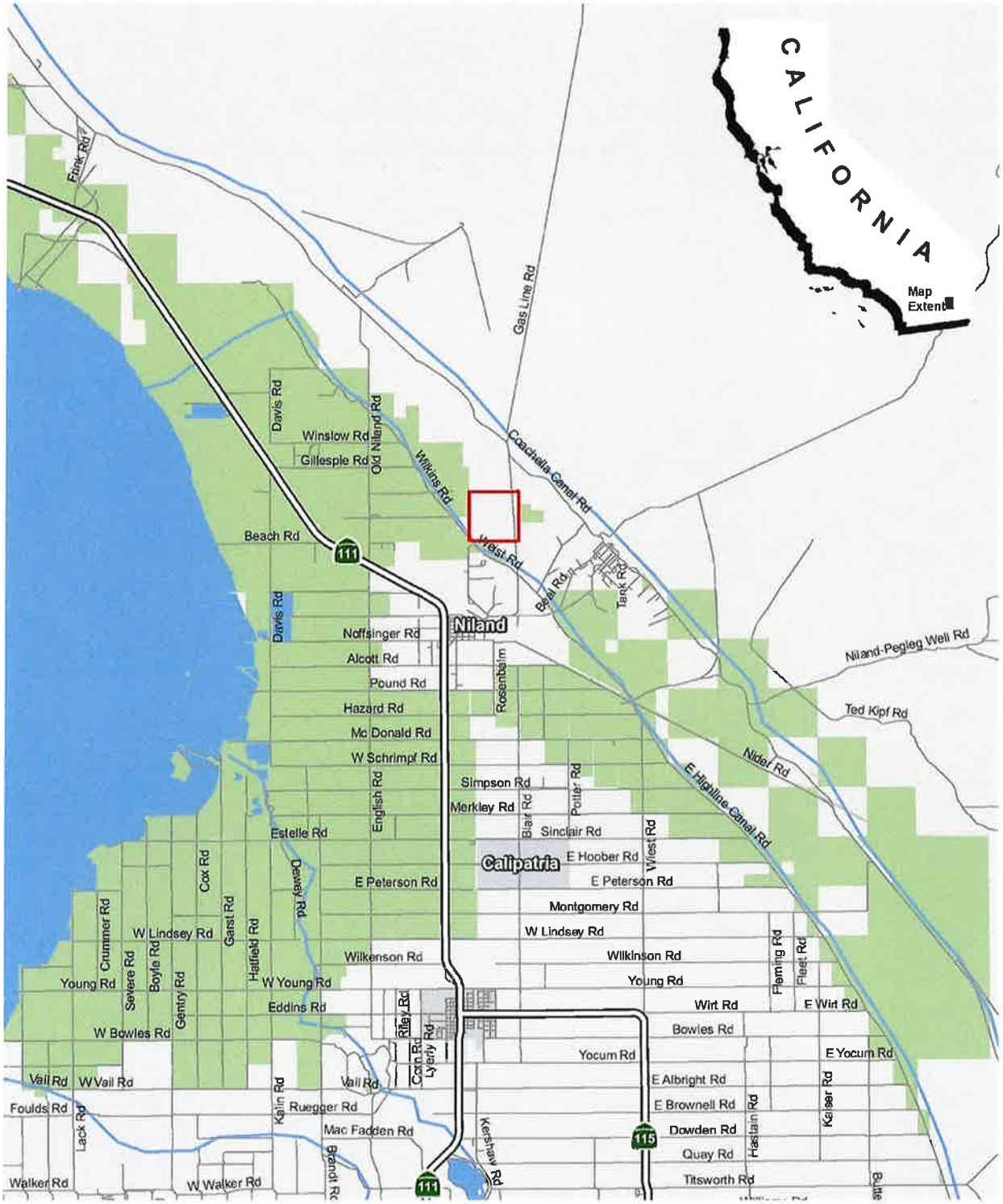


Figure 2. Project Site

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

I. Aesthetics

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, 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 publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Impact Analysis

a) **No Impact.** The project site is not located within an area that has been formally designated as a federal, state, or county scenic vista. No scenic vistas or areas with high visual quality would be disrupted. Thus, no impact is identified for this issue area.

b) **No Impact.** According to the Caltrans California Scenic Highway Mapping System (Caltrans 2011), the project site is not located within a state scenic highway corridor, nor are there any state scenic highways located in proximity to the project site.

c) **Potentially Significant Impact.** Although the project is not located near a scenic highway or designated scenic vista, the proposed project may result in a change to the look and rural character of the area. A potentially significant impact is identified, and this issue will be addressed in the EIR.

d) **Potentially Significant Impact.** The proposed project would not include any source of substantial nighttime lighting. Any lighting required for safety and security within the project site would be shielded and oriented downward. The project is located in a rural undeveloped area of Imperial County. There are no established residential neighborhoods immediately adjacent to the project site. The Chocolate Mountains are located to the north and east of the project site. The Chocolate Mountains are used by the United States Marine Corps for training purposes. Although the solar panels will be constructed of low reflective materials, the potential for glare to impact United States Marine Corps aircraft will be analyzed further in the EIR. Therefore, a potentially significant impact is identified for this issue area.

II. Agriculture and Forestry Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** According to the farmland maps prepared by the California Department of Conservation (2016), the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed project would not convert Important Farmland. Therefore, no impact is identified for this issue area.

b) **No Impact.** The project site is currently designated by the General Plan as "Recreation" and is zoned Open Space/Preservation with a geothermal overlay (S-2-G). According to the 2016/2017 Imperial County Williamson Act Map produced by the California Department of Conservation's Division of Land Resource

Protection, the project site is not located on Williamson Act contracted land. The proposed project has no potential to conflict with existing zoning for agricultural use or a Williamson Act contract. Therefore, no impact is identified for this issue area.

c) **No Impact.** There are no existing forest lands, timberlands, or timberland zoned "Timberland Production" either on site or in the immediate vicinity that would conflict with existing zoning or cause rezoning. Therefore, no impact is identified for this issue area.

d) **No Impact.** There are no existing forest lands either on site or in the immediate vicinity of the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact is identified for this issue area.

e) **No Impact.** As discussed in Response II. a) above, the project site does not contain any lands mapped by the California Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is not used for agricultural production. Implementation of the proposed project would not convert any farmland to non-agricultural uses. Therefore, no impact is identified for this issue area.

III. Air Quality

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is 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?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** The project site is located within the jurisdiction of Imperial County Air Pollution Control District in the Salton Sea Air Basin. Construction of the project would create temporary emissions of dust, fumes, equipment exhaust, and other air contaminants that may conflict with the Imperial County Air Pollution Control District's rules and regulations. No station source emissions are proposed from the project; however, temporary construction emissions have the potential to result in a significant air quality impact.

b) **Potentially Significant Impact.** Currently, the Salton Sea Air Basin is either in attainment or unclassified for all federal and state air pollutant standards, with the exception of O_3 (8-hour) and PM_{10} (total suspended particulate matter less than 10 microns in diameter). Air pollutants transported into the Salton Sea Air Basin from the adjacent South Coast Air Basin (Los Angeles County, San Bernardino County, Orange County, and Riverside County) and Mexicali (Mexico) substantially contribute to the non-attainment conditions in the Salton Sea Air Basin. A potentially significant impact is identified for this issue area. An air quality impact study that will address the proposed project's potential air quality impacts will be prepared and included in the EIR analysis.

c) **Potentially Significant Impact.** The project site is located in a rural agricultural area of Imperial County. Sensitive receptors located within one mile of the project site consist of a few scattered rural homes along Wilkins Road. This issue will be addressed in the air quality impact study and EIR analysis.

d) **No Impact**. Land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, food processing facilities, chemical manufacturing plants, rendering plants, paint/coating operations, and concentrated agricultural feeding operations and dairies. The construction and operation of a solar facility is not an odor producer and the project site is not located near an odor producer. No impact is identified for this issue area.

IV. Biological Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) 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 Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** The project site has the potential to support native habitats and/or sensitive species. Burrowing owls and burrows are commonly found along canals and drains. Although there are no IID canals located within the project site, access roads, canals, and other drainages are located in the project vicinity. Flat-tailed horned lizard may also have the potential to occur on the project site. Thus, 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 included in the EIR analysis.

b) **Potentially Significant Impact.** Blue palo verde – ironwood woodland occurs in the northwest portion of the project site. This vegetation community is considered a sensitive natural community by the California Department of Fish and Wildlife (CDFW). The proposed project could potentially result in direct or indirect impacts to this vegetation community. Thus, 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 included in the EIR analysis.

c) **Potentially Significant Impact.** The project site contains braided drainage channels that could potentially be considered jurisdictional waters by CDFW and United States Army Corps of Engineers (USACE). A jurisdictional waters/wetlands delineation report will be prepared and included in the EIR analysis.

d) **Potentially Significant Impact.** Refer to Response IV. a) above.

e) **Potentially Significant Impact.** Refer to Response IV. a) above.

f) **No Impact.** The project site is not located in a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact is identified for this issue area.

V. Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The project parcel is currently vacant land. Road construction, off-road activity and the construction of the Coachella Canal have disturbed the project parcel to varying degrees. Thus, the presence of significant or undamaged cultural resources on the site is unlikely; however, cultural resources have been identified in proximity to the site. Although the proposed project is not expected to cause a substantial adverse change in the significance of a historical resource or archaeological resource, this issue will be analyzed further in the EIR. Therefore, a potentially significant impact is identified for this issue area. A cultural resources report that will address the proposed project's potential impacts on historic and prehistoric resources will be prepared and included in the EIR analysis.

b) **Potentially Significant Impact.** Refer to Response V. a) above.

c) **Potentially Significant Impact.** Although unlikely, there is a potential for unknown human remains to be unearthed during earthwork activities. This issue is potentially significant and will be discussed in the EIR.

VI. Energy

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Impact Analysis

a) **Less than Significant Impact.** The use of energy associated with the project include both construction and operational activities. Construction activities consume energy through the use of heavy construction equipment and truck and worker traffic. The proposed project will use energy-conserving construction equipment, including standard mitigation measures for construction combustion equipment recommended in the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook. The use of better engine technology, in conjunction with the ICAPCD's standard mitigation measures will reduce the amount of energy used for the project.

Implementation and operation of the proposed project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. The project would generate renewable energy resources and is considered a beneficial effect.

Based on these considerations, the proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. This is considered a less than significant impact.

b) **No Impact.** The project will help California meet its Renewable Portfolio Standard of 50 percent of retail electricity sales from renewable sources by the end of 2030.The electricity generation process associated with the project would utilize solar technology to convert sunlight directly into electricity. Solar PV technology is consistent with the definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-state renewable electricity generation facility" in Section 25741 of the California Public Resource Code. The proposed project would not conflict with or obstruct a state or local plan for renewable energy of energy efficiency. No Impact is identified for this issue area.

VII. Geology and Soils

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☒	☐	☐	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

Impact Analysis

ai) **No Impact.** The project site is not located within a State of California, Alquist-Priolo Earthquake Fault Zone. Therefore, no impact is identified for this issue area.

aii) **Potentially Significant Impact.** The project site is located within a seismically-active zone in Southern California and considered likely to be subjected to moderate to strong ground motion from earthquakes in the region. The project site could be affected by the occurrence of seismic activity to some degree but no more than the surrounding properties. A potentially significant impact has been identified for this issue, and it will be evaluated in the EIR.

aiii) **Less than Significant Impact.** Liquefaction occurs when granular soil below the water table is subjected to vibratory motions, such as produced by earthquakes. With strong ground shaking, an increase in pore water pressure develops as the soil tends to reduce in volume. If the increase in pore water pressure is sufficient to reduce the vertical effective stress (suspending the soil particles in water), the soil strength decreases, and the soil behaves as a liquid (similar to quicksand). Liquefaction can produce excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations.

Four conditions are generally required for liquefaction to occur:
1) The soil must be saturated (relatively shallow groundwater).
2) The soil must be loosely packed (low to medium relative density).
3) The soil must be relatively cohesionless (not clayey).
4) Groundshaking of sufficient intensity must occur to function as a trigger mechanism.

The project site is not located within a current, mapped California Liquefaction Hazard Zone. In addition, groundwater in the site vicinity is expected to be approximately greater than 49 feet below the ground surface. Based on the near surface soil conditions and depth to groundwater, the potential for liquefaction is low. This is considered a less than significant impact.

aiv) **No Impact.** According to Figure 2: Landslide Activity in the Seismic and Public Safety Element of the General Plan, the project site is not located in an area that is prone to landslide hazards. Furthermore, the project site and surrounding area is relatively flat. Therefore, no impact is identified for this issue area.

b) **Less than Significant Impact.** Soil erosion can result during construction as grading and construction can loosen surface soils and make soils susceptible to wind and water movement across the surface. Impacts are not considered significant because erosion would be controlled on-site in accordance with Imperial County standards including preparation, review, and approval of a grading plan by the Imperial County Engineer. Implementation of Imperial County standards would reduce the potential impacts to below a level of significance.

c) **Less than Significant Impact.** As discussed in Response VII. aiv) above, the project site and surrounding area is relatively flat and is not located in an area that is prone to landslide hazards.

Due to the low potential for liquefaction, the depth of groundwater, and the fact that the project site is not located near free faces or bodies of water, the potential for lateral spreading is considered low.

The project site is not located within a mapped area of known land subsidence. Due to the depth of groundwater and the fact that the project site is not located in a mapped subsidence area, the potential for subsidence is considered low.

As discussed in Response VII. aiii) above, the potential for liquefaction is low.

Based on these considerations, the project site is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project. This is considered a less than significant impact.

d) **Less than Significant Impact.** The soils on the project site are mostly sandy soils whose expansion potential is considered low. This is considered a less than significant impact.

e) **No Impact.** The proposed project would not require an operations and maintenance building. The proposed solar facility would be remotely operated, controlled and monitored and with no requirement for daily on-site employees. Therefore, no impact is identified for this issue area.

f) **Potentially Significant Impact.** Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as mass excavation cut into geological deposits (formations) with buried fossils. It is not known if any paleontological resources are located on the project site. The project's potential to impact paleontological resources will be addressed in the EIR.

VIII. Greenhouse Gas Emissions

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to generate greenhouse gas emissions during construction, in addition to construction worker trips to and from the project site. A potentially significant impact is identified and will be evaluated in the EIR. In the long-term, the project is expected to provide a benefit with respect to reduction of greenhouse gas emissions. An air quality/ greenhouse gas emissions study will be prepared for the proposed project, and this issue will be addressed in the EIR.

b) **Less than Significant Impact.** The proposed project would help the state meet this goal by generating up to 20 MW of power to California's current renewable portfolio. Therefore, in this regard, the project would help the state meet its goals under AB 32. Neither the County of Imperial or ICAPCD have any specific plans, policies, nor regulations adopted for reducing the emissions of GHGs; however, since the long-term operational GHG emissions are minimal and the construction emissions are short-term, the project would not conflict with any applicable plan, policy, or regulation adopted for reducing the emissions of GHGs. Implementation of the proposed project would result in a less than significant impact associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHG.

IX. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Impact Analysis

a) **Less than Significant Impact.** Construction of the project will involve the limited use of hazardous materials, such as fuels and greases to fuel and service construction equipment. No extremely hazardous substances are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction. No operations and maintenance facilities, or habitable structures are proposed on-site. Operation of the project will be conducted remotely. Regular, routine maintenance of the project may result in the potential to handle hazardous materials. However, the hazardous materials handled on-site would be limited to small amounts of everyday use cleaners and common chemicals used for maintenance. The applicant will be required to comply with State laws and County Ordinance restrictions, which regulate and

control hazardous materials handled on-site. Such hazardous wastes would be transported off-site for disposal according to applicable State and County restrictions and laws governing the disposal of hazardous waste during construction and operation of the project. Therefore, this is considered a less than significant impact.

b) **Less than Significant Impact.** Refer to response X. a) above.

c) **No Impact.** The project site is not located within 0.25 mile of an existing or proposed school. No impact is identified for this issue area.

d) **No Impact.** Based on a review of the Cortese List conducted in October 2019, the project site is not listed as a hazardous materials site. No impact is identified for this issue area.

e) **No Impact.** The project site is not located within two miles of a public airport or public use airport. Therefore, the proposed project would not result in airport hazards for people residing or working in the project area.

f) **Less than Significant Impact.** The proposed project is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project applicant will be required, through the conditions of approval, to prepare a street improvement plan for the project that will include emergency access points and safe vehicular travel. In addition, local building codes would be followed to minimize flood, seismic, and fire hazard. Therefore, the proposed project would result in a less than significant impact associated with the possible impediment to emergency plans.

g) **Less than Significant Impact.** The project site is located in the unincorporated area of Imperial County According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low. This is considered a less than significant impact.

X. Hydrology and Water Quality

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
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?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to create urban non-point source discharge (e.g., synthetic/organic chemicals). Potentially significant water quality impacts have been identified and will be addressed in the EIR.

b) **Less than Significant Impact.** During construction, potable water would be brought to the site for drinking and domestic needs, while construction water would be brought to the site for soil conditioning and dust

suppression. During operations, potable water would be trucked onto the project site. Because the solar panels will be pole-mounted above ground, they are not considered "hardscape", such as roads, building foundations, or parking areas, as they do not require a substantial amount of impervious material. The panels and their mounting foundation would not impede groundwater recharge. Impacts would be less than significant.

ci) **Less than Significant Impact.** The proposed project would not substantially alter the existing drainage pattern of the site. It is anticipated that the proposed drainage patterns would be similar to the existing site conditions. The project applicant would be required to implement on-site erosion control measures in accordance with County standards, which require the preparation, review, and approval of a grading plan by the County Engineer. The proposed project would not result in substantial erosion or siltation on- or off-site. This is considered a less than significant impact.

cii) **Less than Significant Impact.** The proposed project is not anticipated to generate a significant increase in the amount of runoff water from water use involving solar panel washing. Water will continue to percolate through the ground, as a majority of the surfaces on the project site will remain pervious. The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. This is considered a less than significant impact.

ciii) **Less than Significant Impact.** The proposed project is not anticipated to generate a significant increase in the amount of runoff water from water use involving solar panel washing. Water will continue to percolate through the ground, as a majority of the surfaces on the project site will remain pervious. The proposed project would not 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. This is considered a less than significant impact.

civ) **No Impact.** According to the Federal Emergency Management Agency Flood Insurance Rate Map (Panel 06025C0425C), the project site is located in Zone X, which is an area determined to be outside of the 0.2 percent annual chance of a flood. The project does not propose the placement of structures within a 100-year flood hazard area. Therefore, the proposed project would not impede or redirect flood flows and no impact is identified for this issue area.

d) **No Impact.** The project site is not located near any large bodies of water. The Salton Sea is located approximately 10 miles west of the project site. Furthermore, the project site is over 100 miles inland from the Pacific Ocean. In addition, the project site is relatively flat. Therefore, there is no potential for the project site to be inundated by seiches or tsunamis.

e) **Potentially Significant Impact.** Refer to Response X. a) above.

XI. Land Use and Planning

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

Impact Analysis

a) **No Impact.** The project site is located in a sparsely populated portion of Imperial County. There are no established residential communities located within or in the vicinity of the project site. Therefore, implementation of the proposed project would not divide an established community and no impact would occur.

b) **Potentially Significant Impact.** Implementation of the project would require the approval of a CUP by the County to allow for the construction and operation of the proposed solar energy facility project. The project site is located on one privately-owned legal parcel zoned Open Space/Preservation (S-2-G). Pursuant to Title 9, Division 5, Chapter 19, the following uses are permitted in the S-2 zone subject to approval of a CUP from Imperial County: Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters. Such uses shall include but be limited to the following:

- Electrical generation plants
- Facilities for the transmission of electrical energy (100-200 kV)
- Electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)

The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. As shown on Figure 1, the project site is located outside of the Renewable Energy Overlay Zone. Therefore, the project requires a General Plan Amendment and Zone Change to include/classify the project site into the RE Overlay Zone. The proposed General Plan Amendment and Zone Change may result in a conflict with an applicable land plan, policy, or regulation. A potentially significant impact has been identified for this issue, and this issue will be addressed in the EIR.

A variance is required to exceed the height limit for transmission towers within the S-2 zone. The existing S-2 zone allows a maximum height limit of 40 feet; whereas implementation of the project may involve the construction of transmission towers of up to 70 feet in height. This issue will be addressed in the EIR.

XII. Mineral Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is not used for mineral resource production. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan, no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource.

b) **No Impact.** Refer to Response XIII. a) above.

XIII. Noise

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?	☐	☐	☐	☒

Impact Analysis

a) **Less than Significant Impact.** The Imperial County Title 9 Land Use Ordinance, Division 7, Chapter 2, Section 90702.00 - Sound level limits, establishes one-hour average sound level limits for the County's land use zones. Agricultural/industrial operations are required to comply with the noise levels prescribed under the general industrial zones. Therefore, the project is required to maintain noise levels below 75 decibels (dB) (averaged over one hour) during any time of day. The project would be expected to comply with the Noise Element of the General Plan which states that construction noise, from a single piece of equipment or a combination of equipment, shall not exceed 75 dB, when averaged over an eight hour period, and measured at the nearest sensitive receptor. Construction equipment operation is also limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m.

b) **Less than Significant Impact.** Groundborne vibration and groundborne noise could originate from earth movement during the construction phase of the proposed project. However, significant vibration is typically associated with activities such as blasting or the use of pile drivers, neither of which would be required during project construction. The project would be expected to comply with all applicable requirements for long-term operation, as well as with measures to reduce excessive groundborne vibration and noise to ensure that the project would not expose persons or structures to excessive groundborne vibration. No further analysis is warranted.

c) **No Impact.** The project site is not located within two miles of a public airport or private airstrip. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels. No impact is identified for this issue area.

XIV. Population and Housing

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** Development of housing is not proposed as part of the project. No full-time employees are required to operate the project. The project facility will be monitored remotely. It is anticipated that maintenance of the facility will require minimal site presence to perform periodic visual inspections and minor repairs. On intermittent occasions, the presence of additional workers may be required for repairs or replacement of equipment and panel cleaning; however, due to the nature of the facility, such actions will likely occur infrequently. Therefore, the proposed project would not result in a substantial growth in the area, as the number of employees required to operate and maintain the facility is minimal. No impact is identified for population and housing.

b) **No Impact.** No housing exists within the project site and no people reside within the project site. Therefore, the proposed project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. No impact is identified for this issue area.

XV. Public Services

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
ii. Police Protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Impact Analysis

ai) **Less than Significant Impact.** Fire protection and emergency medical services in the area are provided by the Imperial County Fire Department. The project site is located in the unincorporated area of Imperial County According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low. Both the access and service roads (along the perimeter of the project facility) would have turnaround areas to allow clearance for fire trucks per fire department standards (70 feet by 70 feet, and 20-foot-wide access road). Based on these considerations, the project would not result in a need for fire facility expansion and a less than significant impact is identified for this issue area.

aii) **Less than Significant Impact.** Police protection services in the project area is provided by the Imperial County Sheriff's Department. Although the potential is low, the proposed project may attract vandals or other security risks. The increase in construction related traffic could increase demand on law enforcement services. However, the project site would be fenced with 6-foot high chain link security fence topped with barbed wire and points of ingress/egress would be accessed via locked gates. In addition, periodic on-site personnel visitations for security would occur during operations and maintenance of the proposed project, thereby minimizing the need for police surveillance. This is considered a less than significant impact.

aiii) **No Impact.** The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Construction of the proposed project would not result in an increase in student population within the Imperial County's School District since it is anticipated that construction workers would commute in during construction operations. The proposed project would have no impact on Imperial County schools. No further analysis is warranted.

aiv) **No Impact.** No full-time employees are required to operate the project. The project facility will be monitored remotely. It is anticipated that maintenance of the facility will require minimal site presence to perform periodic visual inspections and minor repairs. Therefore, substantial permanent increases in population that would adversely affect local parks is not expected. The project is not expected to have an impact on parks. Therefore, no further analysis of these issue areas is warranted.

av) **No Impact.** No full-time employees are required to operate the project. The project facility will be monitored remotely. It is anticipated that maintenance of the facility will require minimal site presence to perform periodic visual inspections and minor repairs. Therefore, substantial permanent increases in population that would adversely affect libraries and other public facilities (such as post offices) are not expected. The project

is not expected to have an impact on other public facilities such as post offices, and libraries. Therefore, no further analysis of these issue areas is warranted.

XVI. Recreation

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is not used for formal recreational purposes. Also, the proposed project would not generate new employment on a long-term basis. As such, the project would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in the use of parks. Additionally, the project does not include or require the expansion of recreational facilities. No impact will occur and no further analysis is warranted.

b) **No Impact.** Refer to Response XVII. a) above.

XVII. Transportation

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

Impact Analysis

a) **Potentially Significant Impact.** Construction of the project would result in a small increase of traffic consisting of construction trucks and construction employee vehicular trips to the area, which may result in a potentially significant impact. This issue will be addressed in the EIR.

b) **No Impact.** This threshold is not applicable until 2020. No impact would occur and no further analysis is warranted.

c) **No Impact.** To accommodate emergency access, PV panels would be spaced to maintain proper clearance. A 20-foot wide access road would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. The internal access road would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. These access roads would not increase hazards because of design features or incompatible uses and no impact is identified. Furthermore, a haul truck route study will be required which will determine the appropriate construction route.

d) **Less than Significant Impact.** To accommodate emergency access, PV panels would be spaced to maintain proper clearance. A 20-foot wide access road would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. The internal access road would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. The access and service roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards (70 feet by 70 feet, and 20-foot-wide access road). Based on this context, impacts are considered less than significant.

XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) 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)?	☒	☐	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

Impact Analysis

a-b) **Potentially Significant Impact.** Assembly Bill 52 was passed in 2014 and took effect July 1, 2015. It established a new category of environmental resources that must be considered under CEQA called tribal cultural resources (Public Resources Code 21074) and established a process for consulting with Native American tribes and groups regarding those resources. Assembly Bill 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

Imperial County will consult with appropriate tribes with the potential for interest in the region. This issue will be further analyzed in the EIR.

XIX. Utilities and Service Systems

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

Impact Analysis

a) **Less than Significant Impact.** The proposed project would generate a minimal volume of wastewater during construction. During construction activities, wastewater would be contained within portable toilet facilities and disposed of at an approved site. No habitable structures are proposed on the project site (such as O&M buildings); therefore, there would be no wastewater generation from the proposed project. The proposed project would not require or result in the relocation or construction of new or expanded wastewater facilities.

The proposed project does not require expanded or new storm drainage facilities because the proposed solar facility would not generate a significant increase in the amount of impervious surfaces that would increase runoff during storm events. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project site would remain pervious. The proposed project would not require or result in the relocation or construction of new or expanded storm water facilities.

The proposed project is not anticipated to result in a significant increase in water demand/use; however, water will be needed for solar panel washing and dust suppression. Water would be trucked to the project site from a local water source (East Highline Canal). Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water facilities.

The proposed project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities.

Based on these considerations, a less than significant impact is identified for this issue area.

b) **Potentially Significant Impact.** Approximately 20,000 to 30,000 gallons of water per day would initially be required for grading, dropping to much less for the remainder of the project construction. Construction water needs would be limited to earthwork, soil conditioning, dust suppression, and compaction efforts. Estimated annual water consumption for operation and maintenance of the proposed project, including periodic PV module washing, would be approximately 0.81-acre feet annually (af/y), which would be trucked to the project site. Although the proposed project is not anticipated to result in a significant increase in water demand/use, this issue will be addressed in the EIR.

c) **Less than Significant Impact.** Refer to Response XIX. a) above.

d) **Less than Significant Impact.** Solid waste generation would be minor for the construction and operation of the project. Solid waste will be disposed of using a locally-licensed waste hauling service, most likely Allied Waste. Trash would likely be hauled to the Niland Solid Waste Site (13-AA-0009) located in Niland. The Niland Solid Waste Site has approximately 318,669 cubic yards of remaining capacity and is estimated to remain in operation through 2056 (CalRecycle n.d.). Therefore, there is ample landfill capacity in the County to receive the minor amount of solid waste generated by construction and operation of the project.

Additionally, because the proposed project would generate solid waste during construction and operation, the project will be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste and Recycling Access Act of 1991. Also, conditions of the CUP will contain provisions for recycling and diversion of Imperial County construction waste policies. A less than significant impact is identified for this issue area.

e) **Less than Significant Impact.** Refer to Response XIX. d) above.

XX. Wildfire

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (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) 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?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** According to the Draft Fire Hazard Severity Zone Map for Imperial County prepared by the California Department of Forestry and Fire Protection, the project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact is identified for this issue area.

b) **No Impact.** The project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). Therefore, the proposed project would not exacerbate wildfire risks. No impact is identified for this issue area.

c) **No Impact.** The project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). The proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that would may result in temporary or ongoing impacts to the environment. No impact is identified for this issue area.

d) **No Impact.** The project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact is identified for this issue area.

XXI. Mandatory Findings of Significance

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively 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)?	☒	☐	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to result in significant environmental effects on biological resources and cultural resources, which could directly or indirectly cause adverse effects on the environment. These issues will be further evaluated in the EIR.

b) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: aesthetics, air quality, sensitive biological resources, cultural resources, paleontological resources, geology/soils, greenhouse gas emissions, hydrology and water quality, transportation/circulation impacts, and water supply. The proposed project has the potential to result in cumulative impacts with regards to the identified issue areas. Cumulative impacts will be discussed and further analyzed in the EIR.

c) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: air quality and geology/soils. These potential environmental effects could cause substantial adverse effects on human beings. These issues will be further evaluated in the EIR.

FIRST ADMINISTRATIVE DRAFT EIR
PROJECT DESCRIPTION

3 Project Description

Chapter 3 provides a description of the Wister Solar Energy Project. This chapter also defines the goals and objectives of the proposed project, provides details regarding the individual components that together comprise the project, and identifies the discretionary approvals required for project implementation.

The proposed project consists of four primary components: 1) solar generation equipment and associated facilities (herein referred to as "solar energy facility"); 2) gen-tie line that would connect the proposed on-site substation to the Point of Interconnection (POI) at the existing Imperial Irrigation District's (IID) 92-kilovolt (kV) "K" line; 3) fiberoptic cable; and, 4) upgrades to off-site IID facilities.

3.1 Project Location

3.1.1 Solar Energy Facility and Gen-Tie Line

The project site is located approximately three miles north of Niland, a census-designated place, in the unincorporated area of Imperial County (Figure 3-1). The project site is located on one parcel of land identified as Assessor's Parcel Number 003-240-001 (Figure 3-2). The parcel is approximately 640 acres and is currently zoned Open Space/Preservation with a geothermal overlay (S-2-G). The proposed project would be located on approximately 100 acres within the northwest portion of the 640-acre parcel. The project site is located east of the intersection of Wilkins Road and an unnamed county road. The project footprint (physical area where proposed project components are to be located) is generally located east of Wilkins Road, north of the East Highline Canal, and west of Gas Line Road.

3.1.2 Fiberoptic Cable

The proposed project includes approximately two miles of fiberoptic line from the proposed on-site substation to the existing Niland Substation, located at 402 Beal Road in Niland.

3.1.3 Off-Site IID Facilities

In order to support the proposed project, IID will need to upgrade ± 5 miles of the existing 92-kV line from New Mecca to the North Shore Substation. These facilities are located north of the Salton Sea in southeastern Riverside County. The North Shore Substation is located at the northeast corner of Club View Drive and Windlass Drive in the census-designated place of North Shore. The New Mecca Substation is located at the northeast corner of Hammond Road and Johnson Street in the unincorporated community of Mecca.

IID would also need to upgrade relay protection, control, Supervisory Control and Data Acquisition (SCADA), and telecommunication capabilities for the 92-kV gen-tie and terminals at the New Mecca and Niland substations in support of the project. The Niland substation is located at 402 Beal Road in Niland.

3.1.4 Renewable Energy Overlay Zone

In 2016, the County adopted the Imperial County Renewable Energy and Transmission Element, which includes a RE Zone (RE Overlay Map). This General Plan element was created as part of the California Energy Commission Renewable Energy Grant Program to amend and update the County's General Plan to facilitate future development of renewable energy projects.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved Conditional Use Permit (CUP). The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

The County's General Plan and Land Use Ordinance allows for renewable energy projects proposed on land classified as a non-RE Overlay zone if the renewable energy project: 1) would be located adjacent to an existing RE Overlay Zone; 2) is not located in a sensitive area; 3) is located in proximity to renewable energy infrastructure; and, 4) and would not result in any significant environmental impacts.

As shown on Figure 3-1, the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment and Zone Change to add the project area to the County's RE Overlay Zone. No land use amendment is requested, and the underlying "Recreation" General Plan designation would remain.

Figure 3-1. Regional Location

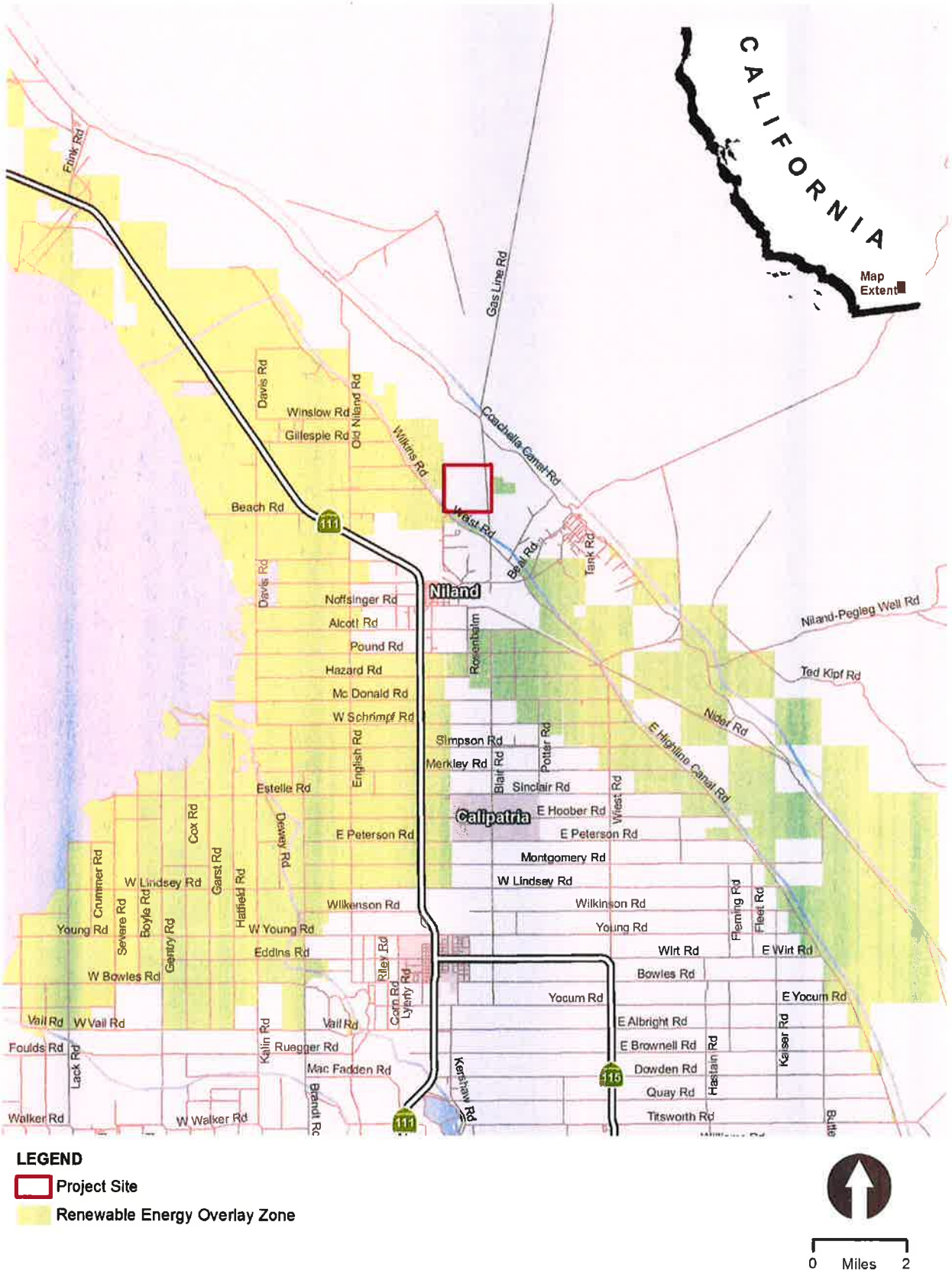
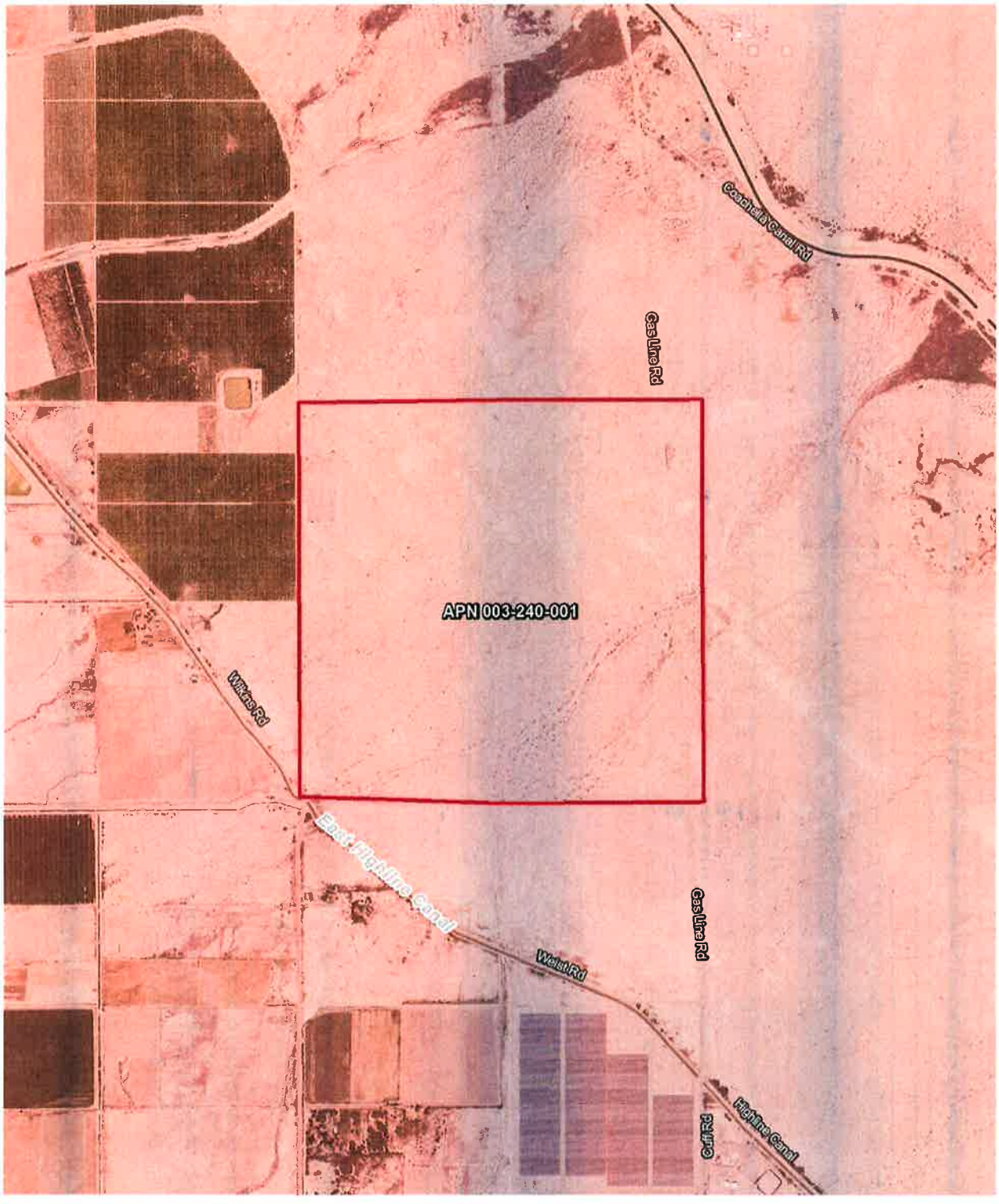


Figure 3-2. Project Site



3.2 Project Objectives

- Construct, operate and maintain an efficient, economic, reliable, safe and environmentally sound solar-powered electricity generating facility.
- Help meet California's Renewable Portfolio Standard (RPS) requirements, which require that by 2030, California's electric utilities are to obtain 50 percent of the electricity they supply from renewable sources.
- Generate renewable solar-generated electricity from proven technology, at a competitive cost, with low environmental impact, and deliver it to the local markets as soon as possible.
- Develop, construct, own and operate the Wister Solar Energy Facility, and ultimately sell its electricity and all renewable and environmental attributes to an electric utility purchaser under a long-term contract to meet California's RPS goals.
- Utilize a location that is in close proximity to an existing switching station and powerlines.
- Minimize and mitigate any potential impact to sensitive environmental resources within the project area.

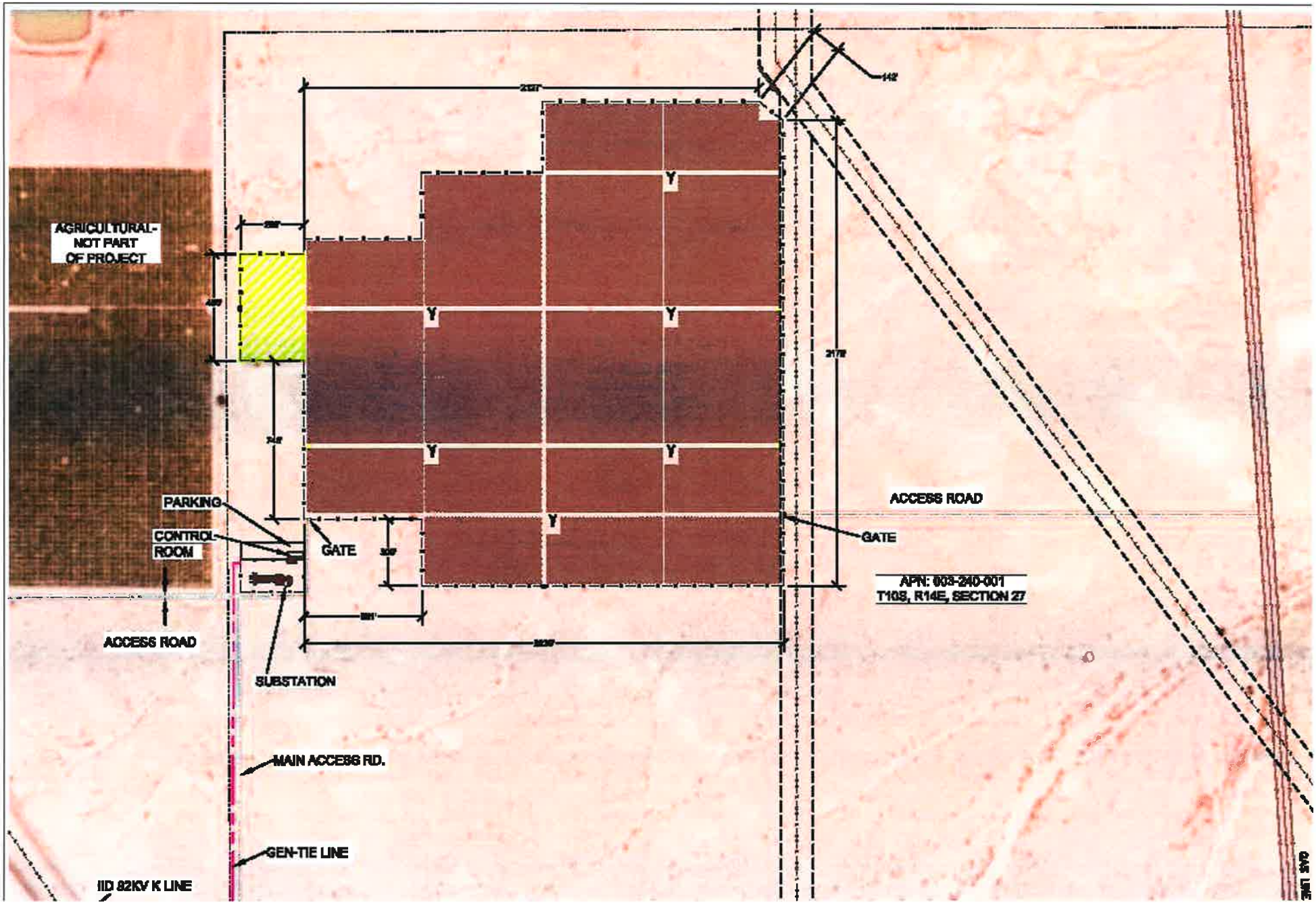
3.3 Project Characteristics

The proposed Wister Solar Energy Facility Project involves the construction and operation of a 20 Megawatt (MW) photovoltaic (PV) solar energy facility on approximately 100 acres of privately-owned land north of Niland. The proposed project would be comprised of solar PV panels on single-axis horizontal trackers, an on-site substation and inverters, transformers, and underground electrical cables. Figure 3-3 depicts the proposed site plan.

The power produced by the proposed project would be conveyed to the local power grid via an on-site 92-kV substation, which will be tied directly to the Imperial Irrigation District's 92-kV transmission line. A gen-tie line would connect the Wister substation to the POI at the existing IID 92-kV "K" line.

The project applicant has secured a Power Purchase Agreement (PPA) with San Diego Gas and Electric for the sale of power from the project.

Figure 3-3. Preliminary Site Plan



3.3.1 Photovoltaic Panels/Solar Arrays

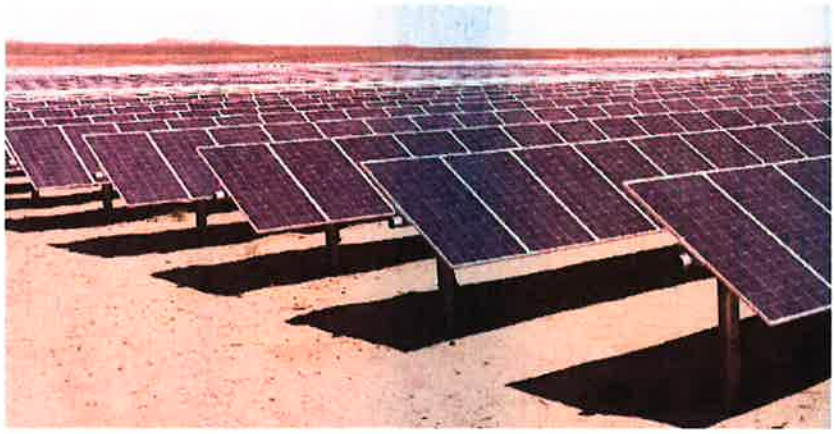
PV solar cells convert sunlight directly into direct current (DC) electricity. The process of converting light (photons) to electricity (voltage) in a solid state process is called the photovoltaic effect. A number of individual PV cells are electrically arranged and connected into solar PV modules, sometimes referred to as solar panels.

The solar PV generating facility would consist of 3.5 foot by 4.8-foot PV modules (or panels) on single-axis horizontal trackers in blocks that each hold 2,520 PV panels. Figure 3-4 provides a representative example of single-axis horizontal trackers. The panels would be oriented from east to west for maximum exposure and the foundation would be designed based on soil conditions, with driven piles as the preferred method. The PV modules would be 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.

PV modules would be organized into electrical groups referred to as "blocks." The proposed project would consist of 12 blocks. Every two blocks will be collected to an inverter and would typically encompass approximately 8 acres, including a pad for one transformer and one inverter. Approximately 96 acres of ground disturbance, including acreage for 12 blocks, is required for the proposed project. The proposed project would include design elements to reduce the potential glare impacts on adjacent sensitive receptors (e.g. local residents, aircraft, traveling public on adjacent County roads).

The electrical output from the PV modules would be low voltage DC power that would be collected and routed to a series of inverters and their associated pad-mounted transformers. Each array would have one inverter and one transformer, which are collectively known as a Power Conversion Station (PCS). The inverters would convert the DC power generated by the panels to AC power and the pad mounted transformers step up the voltage to a nominal level. The outputs from the transformers are grouped together in PV combining switchgear, which in turn supplies the switchyard, where the power is stepped up to 92-kV for interconnection with the transmission system.

Figure 3-4. Representative Example of Typical Single-Axis Tracking Solar Panels



3.3.2 Substation

The proposed Wister Substation would be a new 92/12-kV unstaffed, automated, low-profile substation. The dimensions of the fenced substation would be approximately 300 feet by 175 feet. The enclosed substation footprint would encompass approximately 1.2 acres of the approximately 640-acre project parcel. As shown on Figure 3-3, the proposed Wister Substation site would be located at the northwest quarter of the parcel, immediately southwest of the solar field. The California Building Code and the Institute of Electrical and Electronics Engineers (IEEE) 693, Recommended Practices for Seismic Design of Substations, will be followed for the substation's design, structures, and equipment. A representative example of a substation is presented on Figure 3-5.

Figure 3-5. Representative Example of Typical Substation Design

3.3.3 Fiberoptic Cable

A proposed fiberoptic line from the proposed Wister Substation would be connected with the existing Niland Substation approximately two miles to the south, which would then be added to connect the proposed Wister Substation to the region's telecommunications system. Overall, this would provide Supervisory Control and Data Acquisition (SCADA), protective relaying, data transmission, and telephone services for the proposed Wister Substation and associated facilities. New telecommunications equipment would be installed at the proposed Wister Substation within the Mechanical and Electrical Equipment Room (MEER). The proposed fiber optic telecommunications cable would utilize existing transmission lines to connect to the Niland Substation. The length of the proposed fiber optic telecommunications cable route would be approximately two miles.

3.3.4 Gen-Tie Line

As shown on Figure 3-3, a proposed gen-tie line would connect the Wister substation to the POI at the existing IID 92-kV "K" line. The proposed gen-tie line would originate at the proposed Wister

substation and would terminate at the POI, at a distance of approximately 2,500 feet to the south-southwest. Steel poles, standing at a maximum height of 70 feet tall, will be spaced approximately every 300 feet along the route, and would support the 92-kV conductor and fiberoptic cable to the POI. Construction of the 2,500-foot gen-tie line to the POI would utilize overland travel along the entire route.

3.3.5 Auxiliary Facilities

This section describes the auxiliary facilities that would be constructed and operated in conjunction with the solar facility.

Site Security and Fencing

The project site would be fenced with a 6-foot high chain link security fence topped with barbed wire. Points of ingress/egress would be accessed via locked gates.

Lighting System

Minimal lighting would be required for operations and would be limited to safety and security functions. All lighting would be directed downward and shielded to confine direct rays to the project site and muted to the maximum extent consistent with safety and operational necessity (Title 9, Division 17, Chapter 2: Specific Standards for all Renewable Energy Projects, of the County's Zoning Ordinance).

Access

A total of three access roads will service the proposed project. Access to the project site from the east would be located off Gas Line Road. Access to the project site from the west would include two routes: one route north from the southwest corner of the parcel off Wilkins Road (main access road), and another route off Wilkins Road just south of the existing orchard to the west of the project. These two access roads from the west would both lead to the same gate at the project site. All access roads would be constructed with an all-weather surface, to meet the County Fire Department's standards, and lead to a locked gate that can be opened by any emergency responders. Figure 3-3 illustrates the project site layout and access points.

An all-weather surface access road, to meet the County's standards, would surround the perimeter of the site, as well as around solar blocks no greater than 500 by 500 feet.

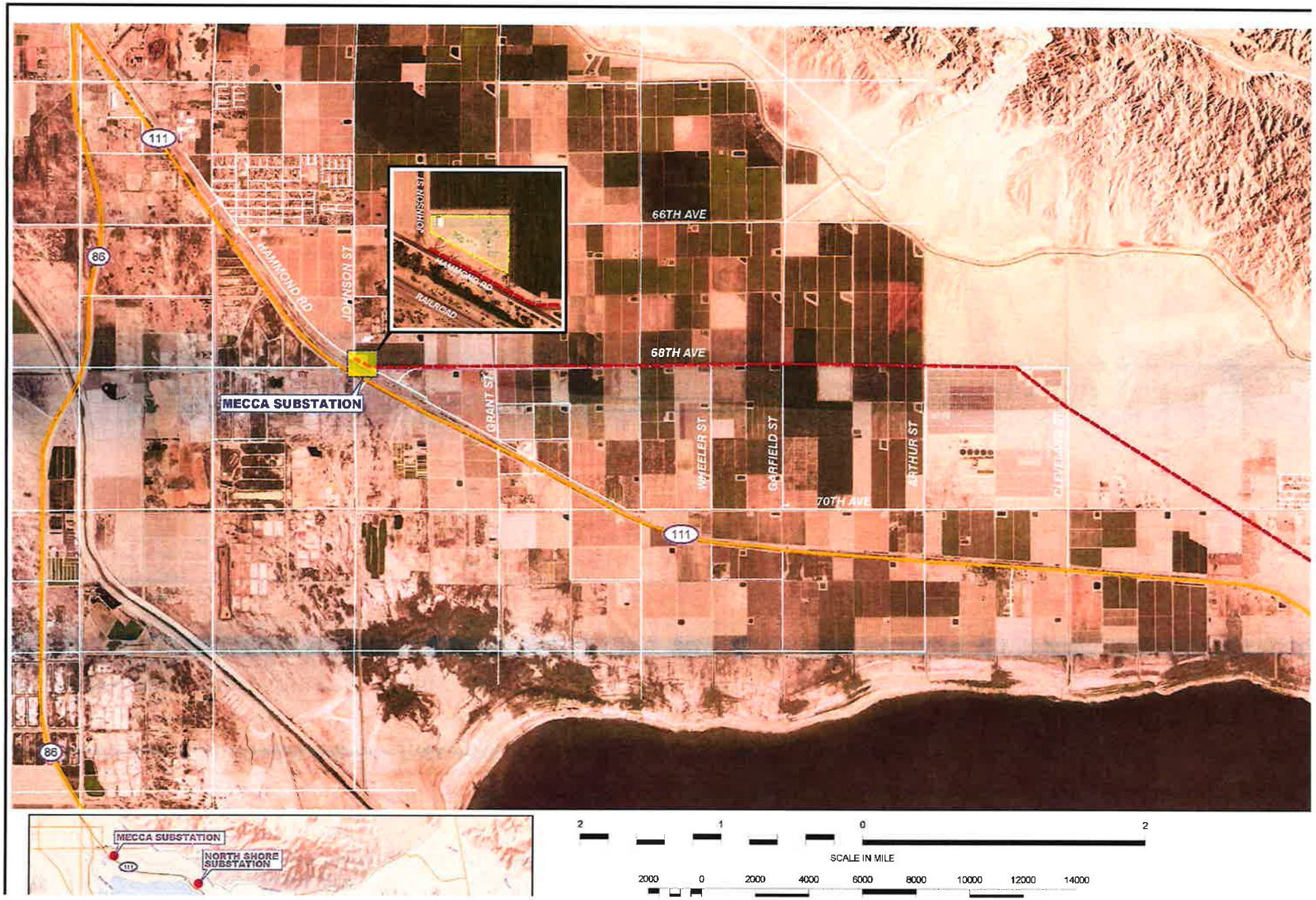
3.3.6 Upgrade of Existing IID 92-kV Line

In order to support the proposed project, IID will need to upgrade ± 5 miles of the existing 92-kV line from New Mecca to the North Shore substation (Figure 3-6). This upgrade would consist of removal of the existing wood poles (Class C1) and installing new wood poles (Class H2) within the same disturbed right of way. In addition, the existing 795 AAC conductor would be upgraded to 1033 AAC conductor, and new insulators, fittings, and hardware would be installed on the upgraded poles.

3.3.7 New Mecca and Niland Substation Upgrades

IID would upgrade relay protection, control, SCADA, and telecommunication capabilities for the 92-kV gen-tie and terminals at the New Mecca and Niland substations in support of the project.

Figure 3-6. Upgrade of IID's Existing 92-kV Line



3.4 Project Construction

3.4.1 Construction Sequence

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 2,500-kW power-block. The activation of the power-blocks is turned over to interconnection following the installation of transformer and interconnection equipment upgrades. This in-service timing is critical because PV panels can produce power as soon as they are exposed to sunlight, and because the large number of blocks and the amount of time needed to commission each block requires commissioning to be integrated closely with construction on a block-by-block basis.

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, permission in writing will be sought at the time. Construction of the proposed project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. Overall, construction would consist of three major phases over a period of approximately 6-9 months:

1. Site Preparation, which includes clearing grubbing, grading, service roads, fences, drainage, and concrete pads; (1 month)
2. PV system installation and testing, which includes installation of mounting posts, assembling the structural components, mounting the PV modules, wiring; (7 months) and
3. Site clean-up and restoration. (1 month)

Construction activities would be conducted in a manner consistent with Imperial County Codified Ordinance. Noise generating sources in Imperial County are regulated under the County of Imperial Codified Ordinances, Title 9, Division 7 (Noise Abatement and Control). Noise limits are established in Chapter 2 of this ordinance. Under Section 90702.00 of this rule, average hourly noise in residential areas is limited to 50 to 55 dB(A) from 7 AM to 10 PM, and to 45 to 50 dB(A) from 10 PM to 7 AM.

3.4.2 Workforce

The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel and construction management personnel. The average number of construction workers would be approximately 50-60 people per day.

3.4.3 Materials

The proposed project would require general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as the materials necessary to construct the proposed PV arrays. Most construction waste is expected to be non-hazardous and to consist primarily of cardboard, wood pallets, copper wire, scrap steel, common trash and wood wire spools. Although field equipment used during construction activities could contain various hazardous materials (i.e., hydraulic oil, diesel fuel,

grease, lubricants, solvents, adhesives, paints, etc.), these materials are not considered to be acutely hazardous and would be used in accordance with the manufacturer's specifications and all applicable regulations.

Each PV module would be constructed out of poly-crystalline silicon semiconductor material encapsulated in glass. Construction of the PV arrays will include installation of support beams, module rail assemblies, PV modules, inverters, transformers, and underground electrical cables. Concrete will be required for the footings, foundations, pads for transformers, and substation equipment. Concrete will be purchased from a local supplier and transported to the proposed project site by truck. The PCS housing the inverters will have a precast concrete base. Final concrete specifications will be determined during detailed design engineering in accordance with applicable building codes.

Table 3-1. Example Construction Equipment

Equipment	Use
1-ton crew trucks	Transport construction personnel
2-ton flatbed trucks; flatbed boom trucks	Haul and unload materials
Mechanic truck	Service and repair equipment
Aerial bucket trucks	Access poles, string conductor, and other uses
Shop vans	Store tools
Bulldozers	Grade pole sites; reclamation
Truck-mounted diggers or backhoes	Excavate
Small mobile cranes (12 tons)	Load and unload materials
Large mobile cranes (75 tons)	Erect structures
Transport	Haul poles and equipment
Drill rigs with augers	Excavate and install fences
Semi tractor-trailers	Haul structures and equipment
Splice trailers	Store splicing supplies
Air compressor	Operate air tools
Air tampers	Compact soil around structure foundations
Concrete trucks	Pour concrete
Dump trucks	Haul excavated materials/import backfill
Fuel and equipment fluid trucks	Refuel and maintain vehicles
Water trucks	Supress dust and fire

3.4.4 Site Preparation

Project construction would include the renovation of existing dirt roads to all-weather surfaces (to meet the County standards) from Wilkins Road just south of the orchard, and a new road would be graded west from Gas Line Road and a new road graded north from the southwest corner of the parcel off Wilkins Road. Construction of the proposed project would begin with clearing of existing brush and installation of fencing around the project boundary. A 20' road of engineering-approved aggregate will surround the site within the fencing.

Material and equipment staging areas would be established on-site within an approximate 4-acre area. The staging area would include an air-conditioned temporary construction office, a first-aid station and other temporary facilities including, but not limited to, sanitary facilities, worker parking, truck loading and unloading, and a designated area for assembling the support structures for the placement of PV modules. The location of the staging area would change as construction progresses throughout the project site. The project construction contractor would then survey, clear and grade road corridors in order to bring equipment, materials, and workers to the various areas under construction within the project site. Road corridors buried electrical lines, PV array locations and locations of other facilities may be flagged and staked in order to guide construction activities. In addition, water truck reloading stations would be established for dust control.

3.4.5 Start-up

PV system installation would include earthwork, grading and erosion control, as well as erection of the PV modules, mounting posts and associated electrical equipment. The PV modules require a moderately flat surface for installation and therefore some earthwork, including grading, fill, compaction and erosion control, may be required to accommodate the placement of PV arrays, concrete for foundations, access roads and/or drainage features. Construction of the PV arrays would be expected to take place at a rate of approximately 0.10 MW per day. Construction of the PV arrays would include installation of the mounting posts, module assemblies, PV modules, inverters, transformers and buried electrical conductors. The module assemblies would then be cut off at the appropriate heights since the center posts must be completely level. Field welding would be required to attach the module assemblies to the top of the mounting posts. Finally, the PV panels would be attached to the module assemblies. Heavy equipment lifters (e.g., forklift) would be required to get the module assemblies in position, while welding and cutting equipment would be necessary to cut off the posts at the appropriate height.

3.4.6 Construction Water Requirements

Approximately 20,000 to 30,000 gallons of water per day would initially be required for grading, dropping to much less for the remainder of the project construction. Construction water needs would be limited to earthwork, soil conditioning, dust suppression, and compaction efforts. During construction, water would be pulled from the East Highline Canal at the canal gate in the southwest corner of the project parcel.

3.4.7 Dust Suppression

The project would comply with all applicable air pollution control regulations. During the construction phase of the project, standard dust control measures would be used to mitigate emissions of fugitive dust. These may include watering or applying dust palliatives with low environmental toxicity to suppress dust during construction.

3.4.8 Clean-up and Demobilization

After construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted.

Waste materials and debris from construction areas would be collected, hauled away, and disposed of at approved landfill sites. Cleared vegetation would be shredded and distributed over the

disturbed site as mulch and erosion control or disposed of offsite, depending on agency agreements. Rocks removed during foundation excavation would be redistributed over the disturbed site to resemble adjacent site conditions. Interim reclamation would include re-contouring of impacted areas to match the surrounding terrain, and cleaning trash out of gullies. Equipment used could include a blader, front-end loader, tractor, and a dozer with a ripper.

A covered portable dumpster would be kept on site to contain any trash that can be blown away. After completion of the proposed project, the project engineer would complete a final walk-through and note any waste material left on site and any ruts or terrain damage or vegetation disturbance that has not been repaired.

3.5 Operations and Maintenance

Once fully constructed, the proposed project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and employees would only be on-site four times per year to wash the panels. As the project's PV arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event.

Estimated annual water consumption for operation and maintenance of the proposed project, including periodic PV module washing, would be approximately 0.81-acre feet annually (af/y). Water would be pulled from the East Highline Canal at the canal gate in the southwest corner of the project parcel and trucked into the project site.

3.6 Facility Decommissioning

Solar equipment has a lifespan of approximately 20 to 25 years. At the end of the project's operation term, the applicant may determine that the project should be decommissioned and deconstructed. Should the project be decommissioned, concrete footings, foundations, and pads would be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured.

3.7 Required Project Approvals

3.7.1 Imperial County

The County would be required to approve the following pursuant to CEQA:

1. **Approval of Conditional Use Permit.** Implementation of the project would require the approval of a CUP by the County to allow for the construction and operation of the proposed solar energy facility project. The project site is located on one privately-owned legal parcel zoned Open Space/Preservation with a geothermal overlay (S-2-G). Pursuant to Title 9, Division 5, Chapter 19, the following uses are permitted in the S-2 zone subject to approval of a CUP from Imperial County: Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to approved exclusively by an agency, or agencies of the State or Federal government, and provided

such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters. Such uses shall include but be limited to the following:

- Electrical generation plants
- Facilities for the transmission of electrical energy (100-200 kV)
- Electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)

2. **General Plan Amendment.** An amendment to the County's General Plan, Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. The project site is located outside of the RE Overlay Zone; therefore, the applicant is requesting a General Plan Amendment to include/classify the project site into the RE Overlay Zone. No change in the underlying general plan land use is proposed.
3. **Zone Change.** The project site is not located in the RE Overlay Zone; therefore, the applicant is requesting a zone change to include/classify the project site into the RE Overlay Zone.
4. **Variance.** A variance is required to exceed the height limit for transmission towers within the S-2 zone. The existing S-2 zone allows a maximum height limit of 40 feet; whereas implementation of the project may involve the construction of transmission towers of up to 70 feet in height. Therefore, a variance for any structure exceeding the existing maximum height limit of 40 feet would be required.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on the project.

Subsequent ministerial approvals may include, but are not limited to:

- Grading and clearing permits
- Building permits
- Reclamation plan
- Encroachment permits
- Transportation permit(s)

3.7.2 Discretionary Actions and Approvals by Other Agencies

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

- California Regional Water Quality Control Board – Notice of Intent for General Construction Permit, Clean Water Act 401 Water Quality Certification
- Imperial County Air Pollution Control District – Fugitive Dust Control Plan, Rule 801 Compliance

- California Department of Fish and Wildlife Service (Trustee Agency) – Endangered Species Act Compliance, Section 1600 Streambed Alteration Agreement
- U.S. Fish and Wildlife Service – Endangered Species Act Compliance
- U.S. Army Corps of Engineers – Section 404 of the Clean Water Act Permit

3.7.3 Potential Actions/Approvals by Other Agencies

The proposed off-site improvements (pole replacement and the fiber optic cable) may require actions or approvals by the following agencies:

- Imperial Irrigation District – for any approvals related to the fiber optic cable and IID 92-kV line upgrades
- County of Riverside – for any approvals that may be triggered by work necessary for the installation of that portion of the IID 92-kV line and substation upgrades located within County of Riverside jurisdiction

APPLICATION PACKAGE

CHANGE OF ZONE

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black & blue) SPACES -- Please type or print -

1. PROPERTY OWNER'S NAME Ormat Technologies (ORNI 21 LLC)		EMAIL ADDRESS borcutt@ormat.com	
2. MAILING ADDRESS (Street / P O Box, City, State) 6140 Plumas St. Reno, NV		ZIP CODE 89519	PHONE NUMBER (775) 356-9029 x 32258
3. ENGINEER'S NAME TBD	CA. LICENSE NO.	EMAIL ADDRESS TBD	
4. MAILING ADDRESS (Street / P O Box, City, State) TBD		ZIP CODE TBD	PHONE NUMBER TBD

5. ASSESSOR'S PARCEL NO. 003-240-001	ZONING (existing) S-2-G	ZONING (proposed) S-2-REG
6. PROPERTY (site) ADDRESS T10S, R14E, Section 27		SIZE OF PROPERTY (in acres or square foot) 640
7. GENERAL LOCATION (i.e. city, town, cross street) North of Niland, at the corner of Wilkins and Weist Roads.		
8. LEGAL DESCRIPTION Township 10 South, Range 14 East, Section 27, a 640 acre section owned by Ormat at the intersection of Wilkins and Weist Road, north of Niland, CA.		

8. DESCRIBE CURRENT USE ON / OF PROPERTY (list and describe in detail)

The property is currently vacant land and is located adjacent to agricultural lands. The property is intersected by transmission lines.

PLEASE STATE REASON FOR PROPOSED USE (be specific)

Ormat Technologies proposes to construct and operate a 40 MW photo voltaic solar farm on 290 acres of the 640 acre property, which is located just outside of Imperial County's current Renewable Energy Overlay.

10. DESCRIBE SURROUNDING PROPERTY USES

The adjacent land uses are a combination of agriculture (to the west and south) and open space (to the north and east). The East Highland Canal touches the property's southwest corner.

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Connie Stechman — 2-21-19
Print Name — Date

Connie Stechman
Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. PRELIMINARY TITLE REPORT (6 months or newer)
C. FEE $23,500.00
D. OTHER

APPLICATION RECEIVED BY:		DATE	2/27/19
APPLICATION DEEMED COMPLETE BY:		DATE	
APPLICATION REJECTED BY:		DATE	
TENTATIVE HEARING BY:		DATE	
L ACTION: ☐ APPROVED ☐ DENIED		DATE	

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐ _____
☐ _____

ZC # 19-0001

GPA 19-0001

Stantec

Stantec Consulting Services Inc.
290 Conejo Ridge Avenue, Thousand Oaks, CA 91361-4972

July 22, 2019

Attention: Patricia Valenzuela
Imperial County Planning and Development Services
801 Main Street
El Centro, CA 92243

Reference: Orni 21, LLC Request for General Plan Amendment

Orni 21, LLC hereby requests from the County of Imperial a General Plan Amendment for the construction and operation of a solar facility, pursuant to a Conditional Use Permit (CUP). The Wister Solar Energy Facility (the Project) will use photovoltaic (PV) technology in the construction and operation of a 20 Megawatt (MW) solar farm on approximately 100-acres within the 640-acre Section (T10S, R14E, Section 27) owned by ORNI 21, LLC. The Project is located within Assessor's Parcel No. 003-240-001 and is currently zoned Open Space/Preservation (S-2). The proposed site is located east of the intersection of Wilkins and an unnamed private road, about 3 miles north of the unincorporated town of Niland.

Regards,

Kevin Kohan
Senior Environmental Planner
Phone: 805-719-9391
Kevin.Kohan@stantec.com

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1.	PROPERTY OWNER'S NAME ORNI 21, LLC	EMAIL ADDRESS borcutt@ormat.com	
2.	MAILING ADDRESS (Street / P O Box, City, State) 6140 Plumas Street, Reno, NV	ZIP CODE 89519-6075	PHONE NUMBER (775) 356-9029 Ext. 32258
3.	APPLICANT'S NAME ORNI 33, LLC	EMAIL ADDRESS borcutt@ormat.com	
4.	MAILING ADDRESS (Street / P O Box, City, State) 6140 Plumas Street, Reno, NV	ZIP CODE 89519-6075	PHONE NUMBER (775) 356-9029 Ext. 32258
4.	ENGINEER'S NAME CA. LICENSE NO. Eric Hafner (FastGrid Energy)	EMAIL ADDRESS eric.hafner@fastgridenergy.com	
5.	MAILING ADDRESS (Street / P O Box, City, State) 225 E. Germann Road, Suite 140, Gilbert, AZ	ZIP CODE 85297	PHONE NUMBER (602) 290-2149

6.	ASSESSOR'S PARCEL NO. 003-240-001	SIZE OF PROPERTY (In acres or square foot) 640 Acres	ZONING (existing) S-2-G
7.	PROPERTY (site) ADDRESS 8601 Wilkins Road, Niland, CA 92257 (T10S, R14E, Section 27)		
8.	GENERAL LOCATION (i.e. city, town, cross street) North of Niland		
9.	LEGAL DESCRIPTION Section 27, Township 10 South, Range 14 East, San Bernardino Base and Meridian, in an unincorporated area of the County of Imperial, State of California, according to the Official Plat therof.		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail)
20 MW solar farm on approximately 100 acres of a 640 acre parcel north of Niland, California, sited in a manner to avoid potentially significant environmental impacts, especially those related to the local hydrology.

11. DESCRIBE CURRENT USE OF PROPERTY: vacant
12. DESCRIBE PROPOSED SEWER SYSTEM: TBD
13. DESCRIBE PROPOSED WATER SYSTEM: TBD
14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM: TBD

15. IS PROPOSED USE A BUSINESS? ☐ Yes ☒ No
IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Connie Stechmann — Print Name
Connie Stechmann — Signature
7-22-19 — Date

Print Name
Signature
Date

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY:		DATE	
APPLICATION DEEMED COMPLETE BY:		DATE	
APPLICATION REJECTED BY:		DATE	
TENTATIVE HEARING BY:		DATE	
FINAL ACTION: ☐ APPROVED ☐ DENIED		DATE	

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐ _____
☐ _____

CUP # _____

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to ORNI 33, LLC (Lessee, Tenant, Contractor-Specify) to apply for this

Conditional Use Permit (CUP) (State permit type clearly i.e. building, land used) on the described property located at address

8601 Wilkins Road, Niland, CA 92257 Further identified by Assessor's Parcel Number

(APN) 003-240-001 is hereby granted.

Connie Stechman
OWNER (SIGNATURE)

Connie Stechman, Secretary, ORNI 21, LLC
OWNER (TYPED OR PRINT)

6140 Plumas Reno, NV 89519
OWNER'S ADDRESS

7/29/19
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA Nevada
COUNTY OF Imperial Washoe } S.S.

On July 29, 2019 before me, Casey Fleischer, personally appeared Connie Stechman, Secretary, ORNI 21, LLC, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CASEY FLEISCHER
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 02-78271-2 - Expires January 17, 2021

ATTENTION NOTARY: **Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.**

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

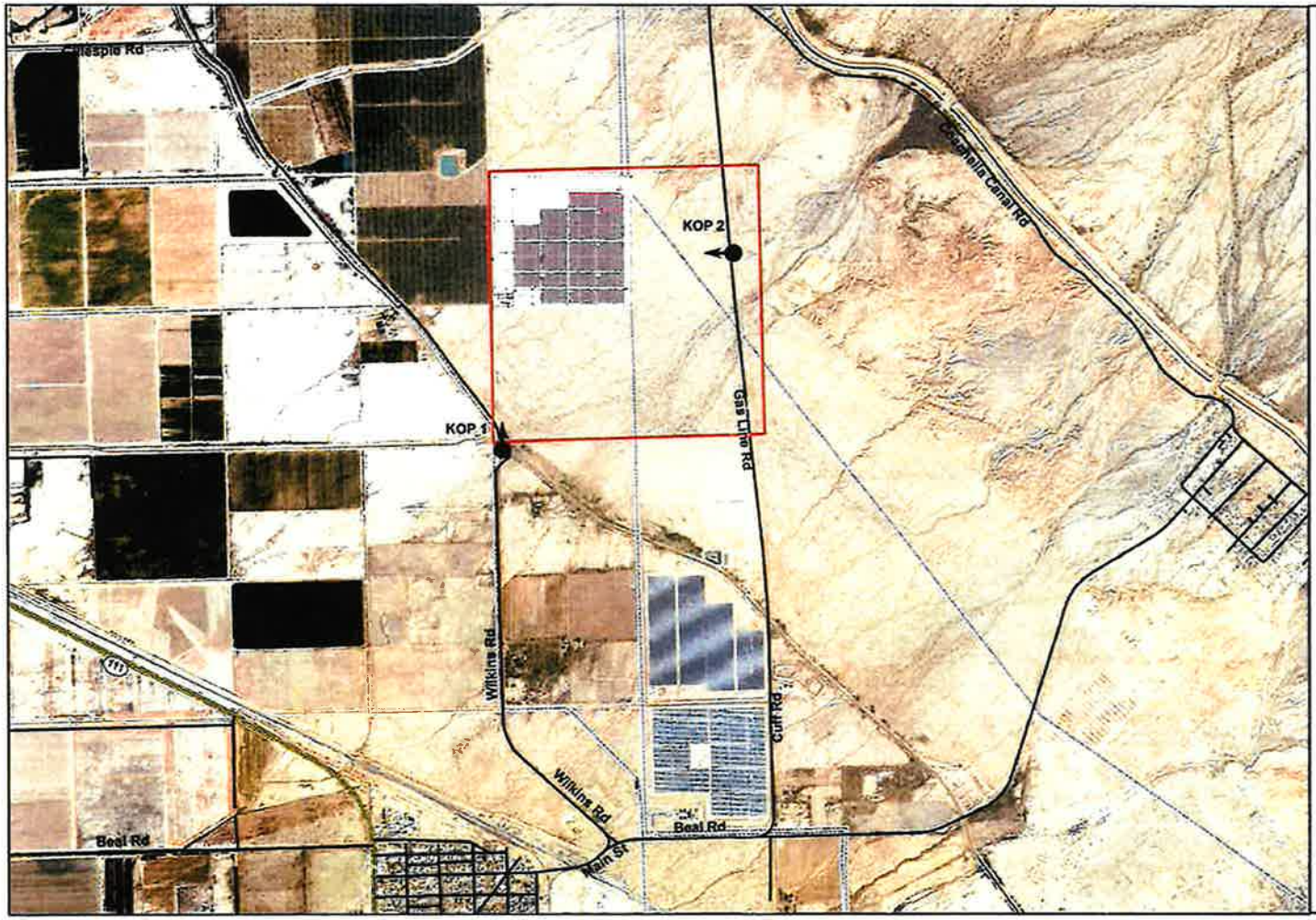


Figure No.

2

Title

Project Site and Key Observation Points

Client/Project

Ormat Nevada, Inc.
Wister Solar Project

Project Location

Imperial County, CA

Key Observation Points
Project Boundaries
Roads
State Highways
Transmission Lines

Stantec

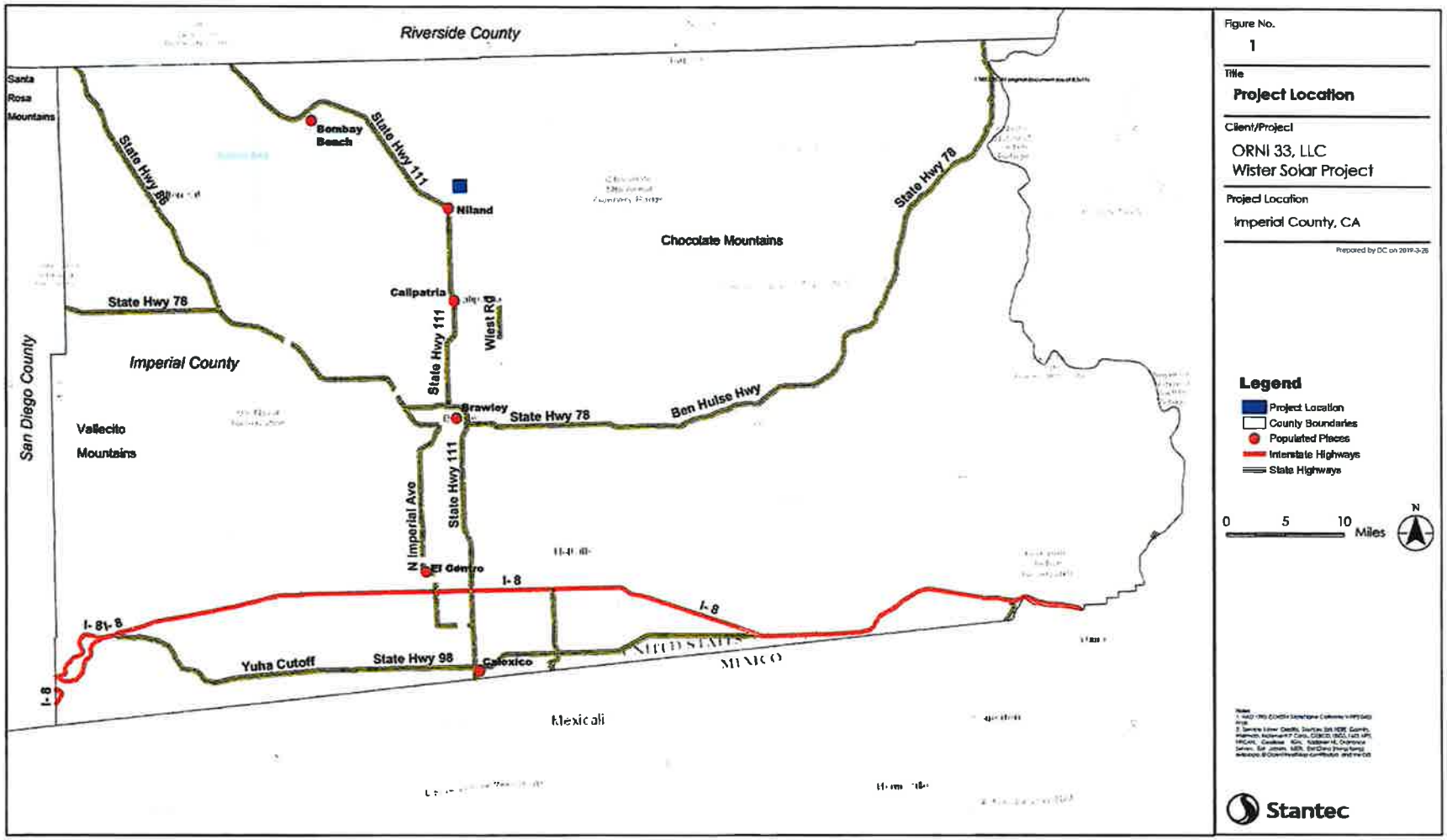


Figure No.
1

Title
Project Location

Client/Project
ORNI 33, LLC
Wister Solar Project

Project Location
Imperial County, CA

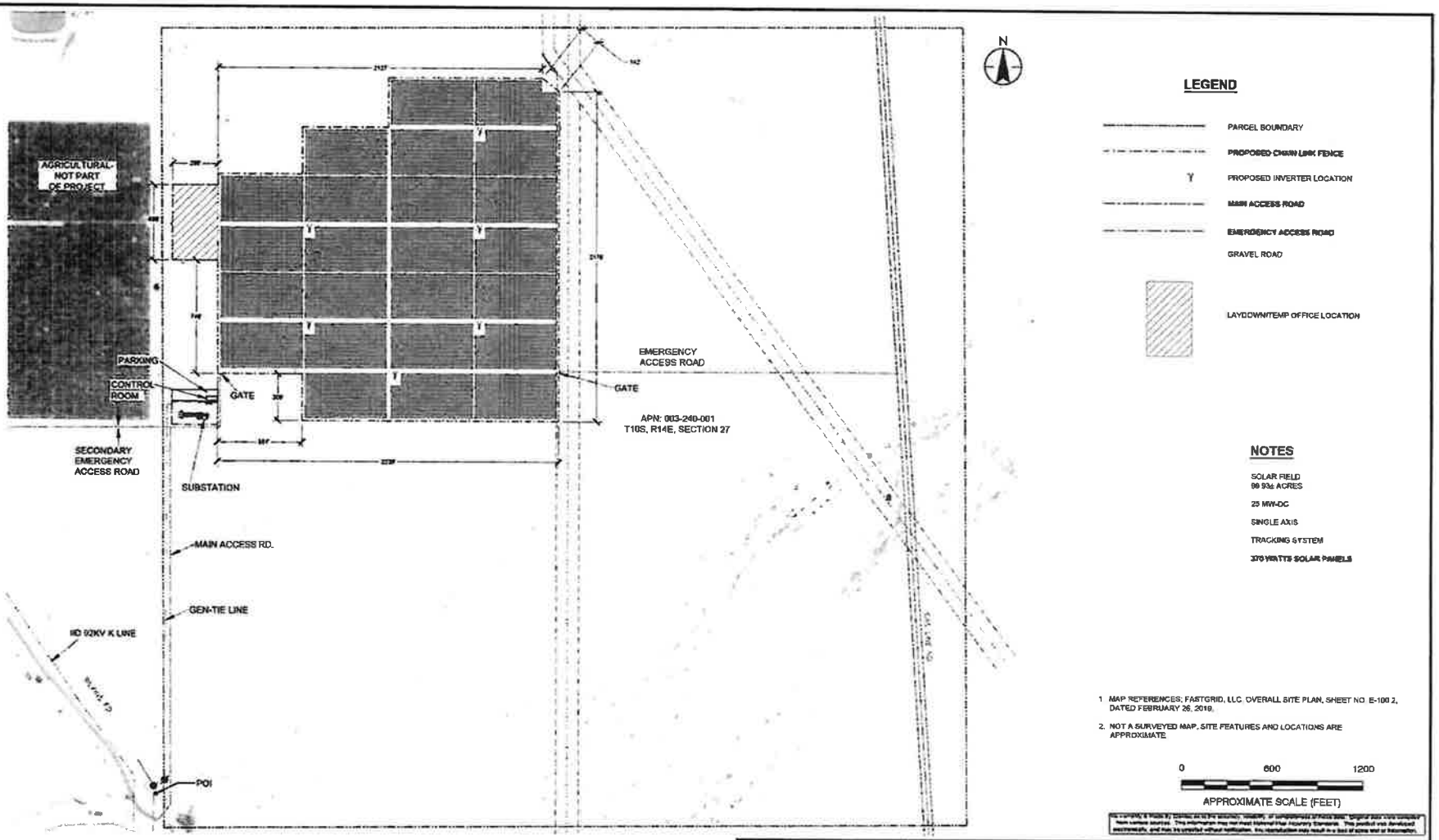
Prepared by DC on 2019-3-26

Legend
- Project Location
- County Boundaries
- Populated Places
- Interstate Highways
- State Highways

0 5 10 Miles

N

Stantec



Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361
PHONE (805) 220-1288 FAX (805) 220-1277

FOR: Omi Wister PV Solar Power Plant Wilkins Road, North of Niland, CA

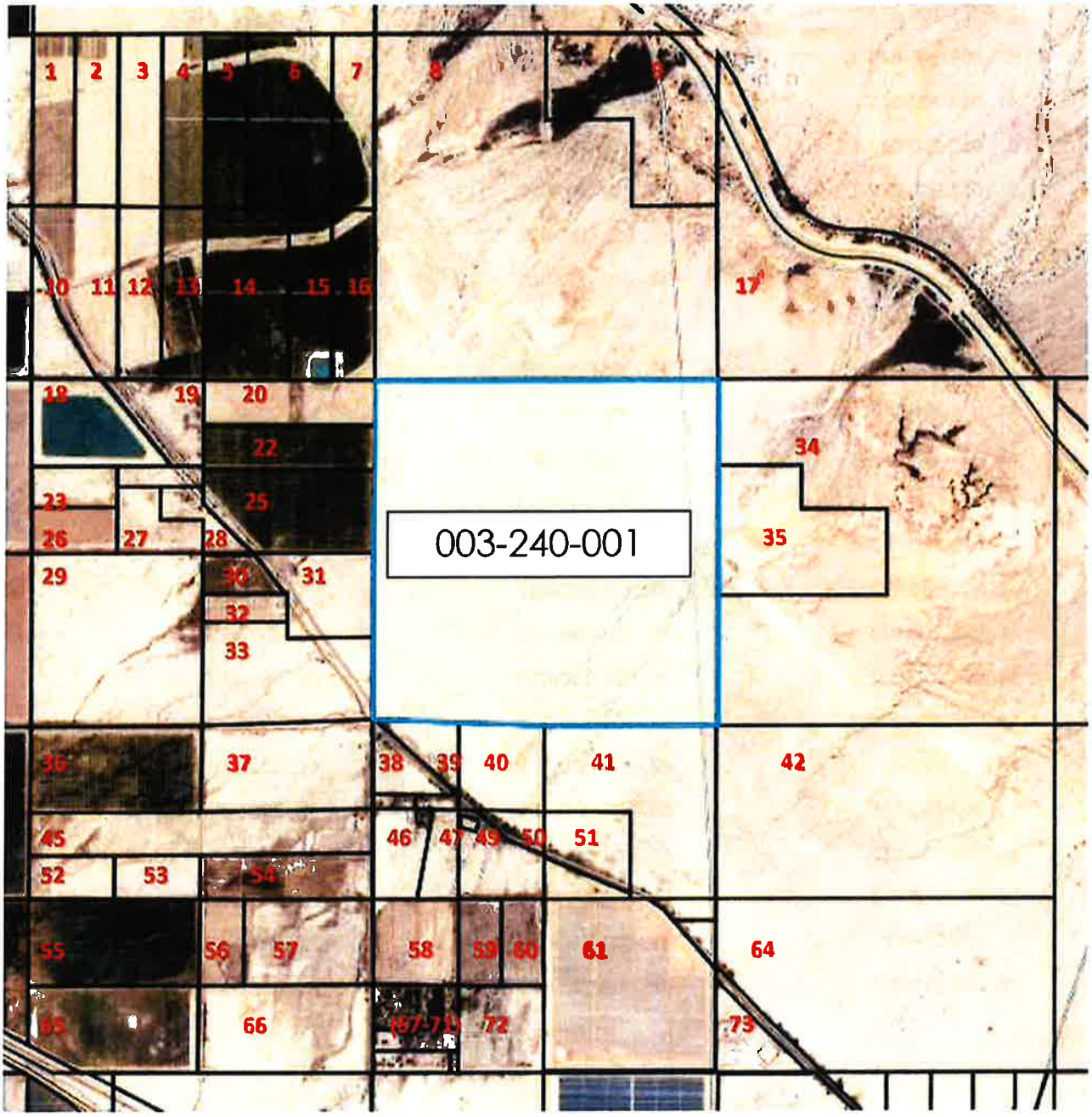
CONCEPTUAL SITE PLAN

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804156	R. Ocampo	D. Christie	K. Kisher	07/26/19

FILEPATH:U:\ga_cad\Other_offices_projects\Projects 2019\Thousand Oaks\Wister Solar\Wister Solar Project - Site 07-26-19 (1).dwg\ROCAMPO\Jul 31, 2019 at 8:58\Layout: SITE

Assessor Parcel Map Numbers within One Mile of Project Site



1. 003-200-072
2. 003-200-073
3. 003-200-074
4. 003-200-075
5. 003-200-069
6. 003-200-070
7. 003-200-071
8. 003-210-010
9. 003-210-011
10. 003-200-009
11. 003-200-066
12. 003-200-067
13. 003-200-068
14. 003-200-076
15. 003-200-077
16. 003-200-078
17. 003-210-007
18. 003-230-007
19. 003-230-012
20. 003-230-069
21. 003-230-070
22. 003-230-008
23. 003-230-011
24. 003-230-071
25. 003-230-009
26. 003-230-057
27. 003-230-059
28. 003-230-019
29. 003-230-015
30. 003-230-017
31. 003-230-016
32. 003-230-018
33. 003-240-050
34. 003-240-049
35. 003-240-049
36. 003-230-061
37. 003-240-035
38. 003-240-013
39. 003-240-012
40. 003-240-027
41. 003-240-006
42. 003-230-044
43. 003-240-048
44. 003-240-036
45. 003-240-015
46. 003-240-016
47. 003-240-047
48. 003-240-046
49. 003-240-017
50. 003-240-028
51. 003-240-029
52. 003-230-063
53. 003-230-064
54. 003-230-050
55. 003-230-046
56. 003-230-047
57. 003-230-048
58. 003-240-022
59. 003-240-021
60. 003-240-019
61. 003-240-009
62. 003-240-039
63. 003-240-040
64. 003-240-007
65. 003-230-040
66. 003-230-041
67. 003-240-043
68. 003-240-044
69. 003-240-020
70. 003-240-024
71. 003-240-041
72. 003-240-042
73. 003-240-008

Stantec

ORNI 21, LLC

Wister Solar Energy Facility

Project Description

July 2019

Prepared for:

ORNI 21, LLC
6140 Plumas Street
Reno, NV 89519

Prepared by:

Stantec Consulting Services
290 Conejo Ridge Ave.
Thousand Oaks, CA 91361

ORNI 21, LLC WISTER SOLAR ENERGY FACILITY

This document entitled ORNI 21, LLC Wister Solar Energy Facility was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of ORNI 21, LLC (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by David Christie
(signature)
David Christie, Urban Planner

Reviewed by Kevin Kohan
(signature)
Kevin Kohan, Senior Environmental Planner

Table of Contents

1.0 INTRODUCTION

ORNI 21, LLC (ORNI) is proposing to build, operate and maintain a solar power plant on private lands owned by ORNI in unincorporated Imperial County (refer to Figure 1). The Wister Solar Energy Facility (the Project) will use photovoltaic (PV) technology and would include the construction and operation of a 20 Megawatt (MW) solar farm on approximately 100 acres within the 640-acre Section (T10S, R14E, Section 27) owned by ORNI 21, LLC. The Project is located within Assessor's Parcel No. 003-240-001 and is currently zoned Open Space/Preservation (S-2). The proposed Project site is located about three miles north of the unincorporated town of Niland.

ORNI is developing the Wister Solar Energy Facility in order to reasonably maximize the Project's generating capacity, taking into account land and environmental constraints. ORNI intends to begin construction on the Project upon acquisition of all County entitlements and environmental clearance. Assuming one year to complete all permits, construction would begin the first quarter of 2020.

A Power Purchase Agreement (PPA) for 20 MW to San Diego Gas & Electric (SDG&E) has been secured by ORNI and encompasses the Project. Approximately 100 acres of total ground disturbance is anticipated for the Project including the proposed substation and utility building.

2.0 BACKGROUND

According to the County of Imperial Land Use Ordinance, a Zone Change and General Plan Amendment is required in order to construct and operate a solar facility, pursuant to a Conditional Use Permit (CUP). As shown in Figure 1, the Project consists of one parcel located within unincorporated Imperial County. The proposed Project site is currently vacant. No Williamson Act contract encumbers the Project site. Power generated at the Project would be low voltage direct current (DC) power that would be collected and routed to a series of inverters and their associated pad-mounted transformers. Each 2.5 MW array would have (1) one 2.5 MW inverter and (1) one 2.5 MW transformer, which are collectively known as a Power Conversion Station (PCS). The inverters would convert the DC power generated by the panels to alternating current (AC) power and the pad mounted transformers would step up the voltage to a nominal 12.47 kV voltage level. The proposed substation would connect to an existing Imperial Irrigation District 92 kV "K" Line. The power would then be sold to the wholesale market or retail electric providers in furtherance of the goals of the California Renewable Energy Portfolio Standards and other similar renewable programs in the Pacific Southwest power market.

2.1 OBJECTIVES

ORNI's objectives for the proposed Project are to:

- Construct, operate and maintain an efficient economic, reliable, safe and environmentally sound solar-powered electricity generating facility.
- Help meet California's Renewable Portfolio Standard (RPS) requirements, which require that by 2030, California's electric utilities are to obtain 50 percent of the electricity they supply from renewable sources.
- Generate renewable solar-generated electricity from proven technology, at a competitive cost, with low environmental impact, and deliver it to markets as soon as possible.
- Develop, construct, own and operate the Wister Solar Energy Facility, and ultimately sell its electricity and all renewable and environmental attributes to an electric utility purchaser under a long-term contract to meet California's RPS goals.
- Utilize a location that is in close proximity to an existing switching station and powerlines.
- Minimize and mitigate any potential impact to sensitive environmental resources within the Project area.

2.2 SOLAR PHOTOVOLTAIC TECHNOLOGY

Solar cells, also called photovoltaic (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. For large electric utility or industrial applications, hundreds of solar arrays are interconnected to form a large utility-scale PV system.

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. Insolation is a measure of solar radiation energy received on a given surface area in a given time. The name comes from a portmanteau of the word's incident solar radiation. It is commonly expressed as average irradiance in watts per square meter (W/m2) or kilowatt-hours per square meter per day ($kW \cdot h/(m_2 \cdot day)$ (or hours/day). In the case of PV's, it is commonly measured as $kWh/(kW_p \cdot y)$ (kilowatt hours per year per kilowatt peak rating).

2.3 LOCATION

The undeveloped Project site is located in Imperial Valley and is regionally bounded by Mexico on the south, the Algodones Sand Hills on the east, the Salton Sea on the north, San Diego County on the northwest, and the alluvial fans bordering the Coyote Mountains and the Yuha Desert to the southwest. The Project site is under the jurisdiction of the Imperial County General Plan, located within a portion of Meridian San Bernardino, Section 27, Township 10S, Range 14E. The Project site is located within Assessor's Parcel No. 003-240-001 and is currently zoned Open Space/Preservation Zone (S-2). The entire Project site is contained within a 640-acre lot. The proposed Project site is located approximately three miles north of the unincorporated town of Niland. The Project site (development footprint where proposed Project components are to be located) is generally located east of Wilkins Road, north of the East Highline Canal, and west of Gas Line Road in the northwest quarter of Section 27, Township 10 South, Range 14 East (San Bernardino Baseline and Meridian).

The Project site's proposed main access would be located near the intersection of Wilkins road and an unnamed private road, just north of the East Highline Canal. This main access road would be located on the west side of the Gen-Tie Line, trending north to the substation from Wilkins Road. Primary emergency access would be located east of the Project site, accessible via Gas Line Road just north of the access road

to the Niland Solid Waste Site. Secondary emergency access would be from the west, just south of an existing agricultural orchard, and would enter the Project site at the same location as the main access road. All access roads leading to the Project would be all-weather and composed of gravel.

A substation located on the Project site would connect to an existing 92KV transmission lines along Wilkins Road, via an approximate 2,500-foot transmission line. An optical ground wire (OPGW) would connect the proposed substation to the Niland substation along existing power lines.

2.4 REGIONAL SETTING

The surrounding area is predominantly located on a plain that slopes gently downward from the northeast to the southwest. Small rivulets run across the proposed Project site. The site is vacant with minimal vegetation. The site is mostly surrounded by vacant land. An agricultural field lies to the west and shares a border with the Project site, and an irrigation canal intersects with the southwest corner of the Project parcel. Transmission lines border the Project site to the east and are the most visible structures in the area.

2.4.1 Agriculture

The proposed Project would be developed close to productive agricultural and developed lands. Much of the land base in the vicinity 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.

2.4.2 Air Quality

The Project site is located in the Salton Sea Air Basin (SSAB) under the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD). The SSAB, which contains part of Riverside County and all of Imperial County, is governed largely by the large-scale sinking and warming of air within the semi-permanent subtropical high-pressure center over the Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms, except in winter when the high is weakest and farthest south. When the fringes of mid-latitude storms pass through the Imperial Valley in winter, the coastal mountains create a strong "rain shadow" effect that makes Imperial Valley the second driest location in the U.S. The flat terrain near the Salton Sea, intense heat from the sun during the day, and strong radiational cooling at night create deep convective thermals during the daytime and equally strong surface-based temperature inversions at night. The temperature inversions and light nighttime winds trap any local air pollution emissions near the ground. The area is subject to frequent hazy conditions at sunrise, followed by rapid daytime dissipation as winds pick up and the temperature warms.

Currently, the SSAB is either in attainment or unclassified for all federal and state air pollutant standards with the exception of 8-hour ozone, Particulate Matter (PM10), and PM2.5. Imperial County is classified as a "serious" nonattainment area for PM10 for the National Ambient Air Quality Standards (NAAQS). On November 13, 2009, EPA published Air Quality Designations for the 2006 24-Hour Fine Particle (PM2.5) NAAQS wherein Imperial County was listed as designated nonattainment for the 2006 24-hour PM2.5 NAAQS. However, the nonattainment designation for Imperial County is only for the urban area within the County and it has been determined that the proposed Project is located within the nonattainment boundaries for PM2.5. On April 10, 2014, the CARB gave final approval to the 2013 Amendments to Area Designations for California Ambient Air Quality Standards (CAAQS). For the state PM2.5 standard, effective July 1, 2014, the City of Calexico will be designated nonattainment, while the rest of the SSAB will be designated attainment.

Greenhouse Gas (GHG) are gases that trap heat in the atmosphere. These emissions occur from natural processes as well as human activities. GHGs present in the Project site primarily include Carbon Dioxide (CO2) and Nitrous Oxide (N2O) from farm equipment and local traffic. Please see supplemental Air Quality Study prepared by Stantec for more information.

2.4.3 Biological Resources

Approximately 500,000 acres of the Colorado Desert in Imperial County has been converted to agricultural use and this 640-acre parcel is immediately adjacent to that conversion area. The plant community would largely be considered *Larrea tridentata* Shrubland Alliance (creosote bush scrub) within the Project Area. The Project site is not active used as agricultural lands but is located immediately adjacent to agricultural crops. Ruderal vegetation is found within the Imperial Irrigation District (IID) canal and drains located immediately adjacent to the Project site. Non-native plants such as salt cedar and Russian thistle were found on site. Presence of these weedy plants on the Project site could be attributed to the site's proximity to agricultural activities. Sensitive habitats are those that are designated either rare within the region by governmental agencies or known to support sensitive animal or plant species and/or they serve as "corridors" for wildlife within the region. Although the burrowing owl (species of special concern) is abundant in the area, its presence is due to manmade features such as the irrigation canals, ditches and drains and the cultivation of agricultural crops within the region and none "native" factors. This would also apply to the mountain plover and several species of raptors. As the Project site is located immediately adjacent to agricultural activities, sensitive species found within the agricultural areas could be incidentally attracted to this site. Please see attached Biological Study prepared by Stantec for more information.

2.4.4 Cultural Resources

A sensitivity map for cultural resources, prepared by Mr. Jay Von Werlhof in 1990, and presented in the County of Imperial General Plan, indicated that areas along the base of East Mesa to the East Highline Canal are very sensitive for cultural resources. However, the current Project site includes areas that have all been previously developed and are now considered to have little likelihood of significant cultural resources. The proposed Project would not require large grading activities that would alter significant amount of soil nor affect any sensitive cultural resources during construction.

An intensive cultural resources survey was conducted across the entire 640-acre parcel in 2010 by Tierra Environmental Services. This survey utilized parallel transects with spacing between 10 to 15-meter intervals. A total eighteen cultural resources were located during the survey, of which two CRHR possibly eligible sites were identified as within the current Project footprint. These sites are short trail segments, and the proposed Project will plan to avoid these sensitive resources.

2.4.5 Geologic Resources

The proposed Project area is located on what was once the bottom of Lake Cahuilla and near the margins of an ancient shoreline. Within the Project area, the terrain gently slopes down to the southwest, with an elevation of between 20 feet above and 40 feet below mean sea level. The Project consists of Holocene age alluvium. Soils are made up of fine-grained silts and sand. The soils within the Project area belong to

the Niland soil series and include Niland gravelly sand, Niland gravelly sand wet, and Niland Imperial complex wet. Niland series soils are moderately well drained, non-saline to moderately saline, and are located primarily in basins. Niland soils are found in alluvium derived from mixed sources.

2.4.1 Hydrologic Resources

The Project site is located within the Colorado River Basin Region. The Colorado River Basin Region covers approximately 13 million acres (20,000 square miles) in the southeastern portion of California. It includes all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. The Colorado River Basin Region is divided into seven major planning areas on the basis of different economic and hydrologic characteristics.

The Project site is located within the Imperial Valley Planning Area of the Colorado River Basin. The Imperial Valley Planning Area consists of the following hydrological units (HU): Imperial (723.00) comprised of 2,500 square miles in the southern portion of the Colorado River Basin Region, with the majority located in Imperial County; Davies (724.00) and Amos-Ogilby (726.00). The Project site is located within the East Salton Sea Hydrological Area (California RWQCB 2017).

The source of nearly all surface waters in Imperial County is the Colorado River. The water is diverted from the Colorado River at the Palo Verde Weir north of Blythe by the Palo Verde Irrigation District for use in the Palo Verde Valley of northeast Imperial County and southeast Riverside County; and at the Imperial Dam into the All-American Canal by the IID and the Bard Irrigation District for use in the Imperial, Yuma, Bard, and Coachella Valleys. The 82-mile All-American Canal has several main canals that branch off: East Highline, Central Main, and Westside Main (IID n.d. (a)). These three canals supply water service to Imperial Valley and are operated and maintained by IID (IID n.d. (a)). The IID serves irrigation water and electric power to farmers and residents in the lower southeastern portion of California's desert.

2.4.2 Noise

The predominant source of noise in the Project area includes vehicular traffic on local roads and highways, and off-site agricultural operations. The use of heavy-duty equipment such as front-end loaders, tractors, forklifts, and diesel-powered trucks are common noise sources typically associated with agricultural uses. Agricultural operational equipment can reach maximum levels of approximately 84 dBA at 50 feet (Caltrans 2013). With the soft surfaces characterizing the agricultural landscape, these noise levels attenuate to approximately 60 dBA at distances over 800 feet. However, operation of the proposed Project would not exceed noise levels within the area and potential impacts would be less than significant. Overall, there are no sensitive resources near the Project area that would be affected by the proposed Project.

2.5 PROJECT SITE GENERAL PLAN DESIGNATION AND ZONING

The Project site is under the jurisdiction of the Imperial County General Plan, located within a portion of Meridian San Bernardino, Section 27, Township 10S, Range 14E. The Project site is located within Assessor's Parcel No. 003-240-001 and is currently zoned Open Space/Preservation (S-2) and contained within a 640-acre lot.

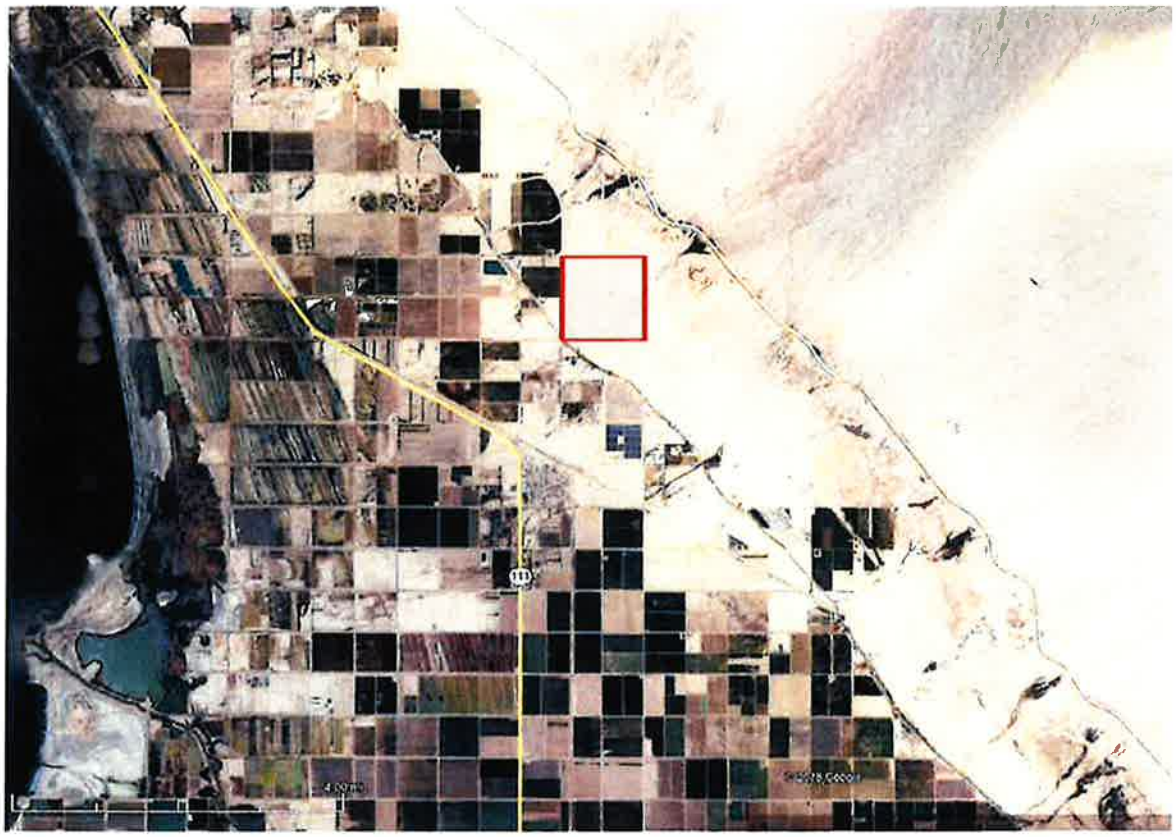
ORNI 21, LLC WISTER SOLAR ENERGY FACILITY

July 2019

Project Vicinity

- **North**
  - Vacant land borders the northern boundary of the Project site.
- **South**
  - A private road and the East Highline Canal border the Project site to the south.
- **East**
  - Transmission lines border the Project site to the east.
- **West**
  - Active agricultural fields border the western boundary of the Project site.

Project Site Aerial



3.0 PROJECT DESCRIPTION

ORNI proposes to construct, operate, and maintain the Wister Solar Project. Approximately 100 acres of total area is required for the Project site, including the proposed substation. 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 that each hold 2,520 PV panels, with 90 modules in each of the 28 rows. 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). The proposed Project would be operated on an "unstaffed" basis and, therefore, would not include construction of a permanent office.

The Project site's proposed main access would be located near the intersection of Wilkins road and an unnamed private road, just north of the East Highline Canal. This main access road would be located on the west side of the Gen-Tie Line, trending north to the substation from Wilkins Road. Primary emergency access would be located east of the Project site, accessible via Gas Line Road just north of the access road to the Niland Solid Waste Site. Secondary emergency access would be from the west, just south of an existing agricultural orchard, and would enter the Project site at the same location as the main access road. All access roads leading to the Project would be composed of gravel.

The emergency access road would be constructed with an all-weather surface, to meet the County Fire Department's standards, and lead to a locked gate that can be opened by any emergency responders. The attached site plan (Figure 3) illustrates the proposed Project site layout and access points.

An all-weather surface access road, to meet the County's standards, would surround the perimeter of the site, as well as around solar blocks no greater than 500 by 500 feet. The proposed Project would be required to conform to all California Public Utilities Commission (CPUC) safety standards. The Project site perimeter would be fenced with a 6-foot high chain link security fence topped with barbed wire, with gates at the main and emergency access points.

3.1 PROJECT CHARACTERISTICS

The net amount of land covered by the PV panels and associated structures would be approximately 100 acres, or 16 percent of the proposed Project's parcel. The power produced by the proposed Project would be conveyed to the local power grid via a 92-kV substation connected to the grid, which will be tied directly to the IID 92 kV transmission line. The proposed Project is intended to operate year-round. Using an array of thin film PV modules to convert solar energy directly to electrical power for export to the electrical grid, the proposed Project would generate electricity during daylight hours when electricity demand is at its peak.

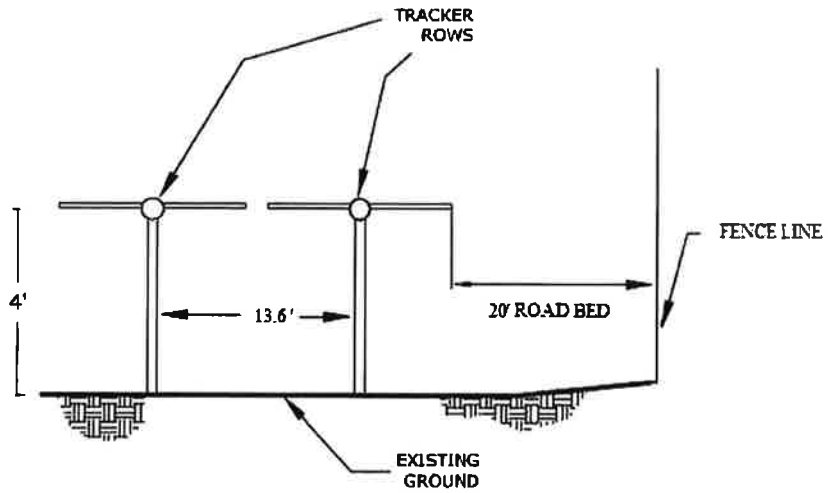
3.2 PROJECT FACILITIES

The solar PV generating facility would consist of 3.5 foot by 4.8-foot PV modules (or panels) on single-axis horizontal trackers in blocks that each hold 2,520 PV panels. The panels would be oriented from east to west for maximum exposure and the foundation would be designed based on soil conditions, with driven piles as the preferred method. 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.

PV modules would be organized into electrical groups referred to as "blocks," where the proposed Project will require 12 blocks. Every two blocks will be collected to an inverter and would typically encompass approximately 8 acres, including a pad for one transformer and one inverter. Approximately 96 acres of ground disturbance, including acreage for 12 blocks, is required the Project. The proposed Project would include design elements to reduce the potential glare impacts on adjacent sensitive receptors, e.g. local residents, aircraft, traveling public on adjacent County roads.

The electrical output from the PV modules would be low voltage DC power that would be collected and routed to a series of inverters and their associated pad-mounted transformers. Each array would have one inverter and one transformer, which are collectively known as a Power Conversion Station (PCS). The inverters would convert the DC power generated by the panels to AC power and the pad mounted transformers step up the voltage to a nominal level. The outputs from the transformers are grouped together in PV combining switchgear, which in turn supplies the switchyard, where the power is stepped up to 92 kV for interconnection with the transmission system. The proposed Project would consist of solar arrays that are located to avoid potential flood plains and undevelopable easements.

Project Boundary Cross-section



3.2.1 Gen-Tie Line

A proposed gen-tie line would connect the Wister substation to the Point of Interconnection (POI) at the existing IID 92kV "K" line. This proposed gen-tie line would originate at the proposed Wister substation and would terminate at the POI, at a distance of approximately 2,500 feet to the south-southwest. Steel poles, standing at a maximum height of 70 feet tall, we be spaced approximately every 300 feet along the route, and would support the 92kV conductor and fiberoptic cable (see below) to the POI. Construction of the 2,500-foot gen-tie line to the POI would utilize overland travel along the entire route.

3.2.2 Fiberoptic Cable

A proposed fiberoptic line from the proposed Wister Substation would be connected with the existing Niland Substation approximately 2 miles to the south, which would then be added to connect the proposed Wister Substation to the region's telecommunications system. Overall, this would provide Supervisory Control and Data Acquisition (SCADA), protective relaying, data transmission, and telephone services for the proposed Wister Substation and associated facilities. New telecommunications equipment would be installed at the proposed Wister Substation within the Mechanical and Electrical Equipment Room (MEER). The proposed fiber optic telecommunications cable, once past the POI, would utilize existing transmission lines to connect to the Niland Substation. The length of this proposed fiber optic telecommunications cable route would be approximately 2 miles.

3.2.3 Substation

The proposed Wister Substation would be a new 92/12 kV unstaffed, automated, low-profile substation. The dimensions of the fenced substation would be approximately 300 feet by 175 feet. The enclosed substation footprint would encompass approximately 1.2 acres of the approximately 640-acre Project parcel. The proposed Wister Substation site would be located at the northwest quarter of the parcel, immediately southwest of the solar field. The California Building Code and the IEEE 693, Recommended Practices for Seismic Design of Substations, will be followed for the substation's design, structures, and equipment.

3.3 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, after the gen-tie line has been completed. The activation of the power-blocks is turned over to interconnection following the installation of transformer and interconnection equipment upgrades. This in- service timing is critical because PV panels can produce power as soon as they are exposed to sunlight, and because the large number of blocks and the amount of time needed to commission each block requires commissioning to be integrated closely with construction on a block-by-block basis.

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, permission in writing will be sought at the time. Construction of the proposed Project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. Overall, construction would consist of three major phases over a period of approximately 6-9 months:

1. Site Preparation, which includes clearing grubbing, grading, service roads, fences, drainage, and concrete pads; (1 month)
2. PV system installation and testing, which includes installation of mounting posts, assembling the structural components, mounting the PV modules, wiring; (7 months) and
3. Site clean-up and restoration. (1 month)

3.4 WORKFORCE

Construction is expected to last approximately 6-9 months. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel and construction management personnel. The average number of construction workers would be approximately 50-60 people per day. 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, permission in writing will be sought at the time. Nonetheless, construction activities would be conducted in a manner consistent with Imperial County Municipal Code. Noise generating sources in Imperial County are regulated under the County of Imperial Codified Ordinances, Title 9, Division 7 (Noise Abatement and Control). Noise limits are established in Chapter 2 of this ordinance. Under Section 90702.00 of this rule, average hourly noise in residential areas is limited to 50 to 55 dB(A) from 7 AM to 10 PM, and to 45 to 50 dB(A) from 10 PM to 7 AM.

3.5 MATERIALS AND PREPARATION

The proposed Project would require general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as the materials necessary to construct the proposed PV arrays. Most construction waste is expected to be non-hazardous and to consist primarily of cardboard, wood pallets, copper wire, scrap steel, common trash and wood wire spools. Although field equipment used during construction activities could contain various hazardous materials (i.e., hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, etc.), these materials are not considered to be acutely hazardous and would be used in accordance with the manufacturer's specifications and all applicable regulations.

Each PV module would be constructed out of poly-crystalline silicon semiconductor material encapsulated in glass. Construction of the PV arrays will include installation of support beams, module rail assemblies, PV modules, inverters, transformers, and underground electrical cables. Concrete will be required for the footings, foundations, pads for transformers, and substation equipment. Concrete will be purchased from a local supplier and transported to the proposed Project site by truck. The PCS housing the inverters will have a precast concrete base. Final concrete specifications will be determined during detailed design engineering in accordance with applicable building codes.

Example Construction Equipment

Equipment	Use
1-ton crew trucks	Transport construction personnel
2-ton flatbed trucks: flatbed boom trucks	Haul and unload materials
Mechanic truck	Service and repair equipment
Aerial bucket trucks	Access poles, string conductor, and other uses
Shop vans	Store tools
Bulldozers	Grade pole sites; reclamation
Truck-mounted diggers or backhoes	Excavate
Small mobile cranes (12 tons)	Load and unload materials
Large mobile cranes (75 tons)	Erect structures
Transport	Haul poles and equipment
Drill rigs with augers	Excavate and install fences
Semi tractor-trailers	Haul structures and equipment
Splice trailers	Store splicing supplies
Air compressor	Operate air tools
Air tampers	Compact soil around structure foundations
Concrete trucks	Pour concrete
Dump trucks	Haul excavated materials/import backfill
Fuel and equipment fluid trucks	Refuel and maintain vehicles
Water trucks	Suppress dust and fire

3.5.1 Site Preparation

Project construction would include the renovation of existing dirt roads to all-weather surfaces (to meet County standards) from Wilkins Road for access to the Project site for the emergency access, and a new road would be graded from Gas Line Road for primary access. Construction of the proposed Project would begin with clearing of existing brush and installation of fencing around the Project boundary.

Fencing will consist of a six-foot chain-link fence topped with barbed wire. A 20' road of engineering-approved aggregate will surround the site within the fencing. Approximately 20,000 – 30,000 gallons of water per day would initially be required for grading, dropping to much less for the remainder of the Project construction. Construction water needs would be limited to earthwork, soil conditioning, dust suppression, and compaction efforts. Water would be trucked to the site from a local water source. Material and equipment staging areas would be established on-site within an approximate 4-acre area. The staging area would include an airconditioned temporary construction office, a first-aid station and other temporary facilities including, but not limited to, sanitary facilities, worker parking, truck loading and unloading, and a designated area for assembling the support structures for the placement of PV modules. The location of the staging area would change as construction progresses throughout the Project site. The Project construction contractor would then survey, clear and grade road corridors in order to bring equipment, materials, and workers to the various areas under construction within the Project site. Road corridors buried electrical lines, PV array locations and locations of other facilities may be flagged and staked in order to guide construction activities. In addition, water truck reloading stations would be established for dust control.

3.5.2 Start-up

PV system installation would include earthwork, grading and erosion control, as well as erection of the PV modules, mounting posts and associated electrical equipment. If previously unrecorded subsurface cultural deposits located within the Project area are discovered during construction, a qualified archaeological monitor would be retained to monitor all ground-disturbing activities in native soils to mitigate against potential impacts.

The PV modules require a moderately flat surface for installation and therefore some earthwork, including grading, fill, compaction and erosion control, may be required to accommodate the placement of PV arrays, concrete for foundations, access roads and/or drainage features. Construction of the PV arrays would be expected to take place at a rate of approximately 0.10 MW per day. Construction of the PV arrays would include installation of the mounting posts, module assemblies, PV modules, inverters, transformers and buried electrical conductors. The module assemblies would then be cut off at the appropriate heights since the center posts must be completely level. Field welding would be required to attach the module assemblies to the top of the mounting posts. Finally, the PV panels would be attached to the module assemblies. Heavy equipment lifters (e.g., forklift) would be required to get the module assemblies in position, while welding and cutting equipment would be necessary to cut off the posts at the appropriate height.

Concrete would be required for the footings, foundations and pads for the transformers and substation equipment. Concrete would be produced at an off-site location by a local provider and transported to the site by truck. The PCS housing the inverters utilize a precast concrete base. Final specifications for concrete would be determined during detailed design engineering, but any related production would meet applicable building codes. Wastes generated during construction would be non-hazardous and may contain any of the following: cardboard, wood pallets, copper wire, scrap steel, common trash and wood wire spools, and as much as possible of the waste that is generated during construction would be recycled. No hazardous waste is expected to be generated during construction of the proposed Project. However, field equipment used during construction would contain various hazardous materials such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints and other petroleum-based products contained in most construction vehicles. The storage, handling, and potential spills of these materials contained within the field equipment would adhere to all applicable local, State, and Federal regulations. Potable water would be brought to the Project site for drinking and domestic needs.

Construction water needs would be limited to earthwork, soil conditioning, dust suppression and compaction efforts. Approximately 20,000 to 30,000 gallons of water per day would be required during construction and would be trucked to the site. A dust palliative with low environmental toxicity would also be used to suppress dust as approved by California Air Resources Board (CARB) and the Imperial County Air Pollution Control District (ICAPCD).

3.5.3 Clean-up and Demobilization

After construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted.

Waste materials and debris from construction areas would be collected, hauled away, and disposed of at approved landfill sites. Cleared vegetation would be shredded and distributed over the disturbed site as mulch and erosion control or disposed of offsite, depending on agency agreements. Rocks removed during foundation excavation would be redistributed over the disturbed site to resemble adjacent site conditions. Interim reclamation would include also re-contouring of impacted areas to match the surrounding terrain, and cleaning trash out of gullies. Equipment used could include a blader, front-end loader, tractor, and a dozer with a ripper.

A covered portable dumpster would be kept on site to contain any trash that can be blown away. After completion of the proposed Project, the project engineer would complete a final walk-through and note any waste material left on site and any ruts or terrain damage or vegetation disturbance that has not been repaired. The construction contractor would be given this list and final payment would not be received until all items are completed.

3.6 SCHEDULING

Construction is anticipated to start in 2020 and would take approximately 6-9 months to complete. Construction would commence only after all required permits and authorizations have been secured.

4.0 OPERATION AND MAINTENANCE ACTIVITIES

Once fully constructed, the proposed Project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and employees would only be on-site up to four times per year to wash the panels. As the Project's PV arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event.

Estimated annual water consumption for operation and maintenance of the proposed Project, including periodic PV module washing, would be approximately 0.81-acre feet annually (af/y), which would be trucked to the Project site as needed.

5.0 DECOMMISSIONING

Solar equipment has a lifespan of approximately 20 to 25 years. At the end of the Project's operation term, the applicant may determine that the Project should be decommissioned and deconstructed. Should the Project be decommissioned, concrete footings, foundations, and pads would be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured.

VARIANCE

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1. PROPERTY OWNER'S NAME: ORNI 21, LLC		EMAIL ADDRESS: borcutt@ormat.com	
2. MAILING ADDRESS (Street / P O Box, City, State): 6140 Plumas Street, Reno, NV		ZIP CODE: 89519-6075	PHONE NUMBER: (775) 356-9029 Ext. 32258
3. ENGINEERS NAME:	CA. LICENSE NO.	EMAIL ADDRESS:	
4. MAILING ADDRESS (Street / P O Box, City, State):		ZIP CODE:	PHONE NUMBER:

5. ASSESSOR'S PARCEL NO.: 003-240-001	ZONING (existing): S-2-G
6. PROPERTY (site) ADDRESS: T10S, R14E, Section 27	SIZE OF PROPERTY (in acres or square foot): 640 acres
7. GENERAL LOCATION (i.e. city, town, cross street): WILKINS RD, NORTH OF NILAND, CALIFORNIA	
8. LEGAL DESCRIPTION: Section 27, Township 10 South, Range 14 East, San Bernardino Base and Meridian, in an unincorporated area of the County of Imperial, State of California, according to the Official Plat thereof.	

8. DESCRIBE VARIANCE REQUESTED (i.e. side yard set-back reduction, etc.)

Height variance requested for the installation of gen-tie poles that will connect the proposed Wister Solar Substation to the existing IID electrical grid. The steel poles will be no higher than 70 feet above ground surface and would be spaced approximately 300 feet apart.

9. DESCRIBE REASON FOR, OR WHY VARIANCE IS NECESSARY :

Electrical engineering on the proposed gen-tie line indicate the current requirement on height restrictions cannot be met in this zoning (Open Space/Preservation) per County requirements. Based on the 92 kV voltage of the proposed line from the new substation to the point of interconnection, new poles would be taller that County requirements.

10. DESCRIBE THE ADJACENT PROPERTY

East	vacant
West	orchard
North	vacant
South	East-Highline Canal

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Connie Stechman — Print Name
10-10-19 — Date
Connie Stechman — Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY:		DATE	
APPLICATION DEEMED COMPLETE BY:		DATE	
APPLICATION REJECTED BY:		DATE	
TENTATIVE HEARING BY:		DATE	
FINAL ACTION: ☐ APPROVED ☐ DENIED		DATE	

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D
☐ O. E. S.
☐ _____
☐ _____

V #