



County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING
STEVEN E. WHITE, DIRECTOR

Planning Commission Staff Report Agenda Item No. 6 November 18, 2021

SUBJECT: Unclassified Conditional Use Permit Application No. 3671 Luna Valley Solar Project and associated Environmental Impact Report No. 7813 (State Clearinghouse No. 2020080488).

Allow the construction, operation, maintenance, and ultimate decommissioning of a photovoltaic (PV) electricity generating facility, which will generate an estimated 200-megawatts (MW) with and estimated 200 megawatts of battery energy storage. The proposed project is comprised of the solar panel array, battery energy storage components, and a 34.5 kilovolt (KV) overhead transmission line with supporting electrical infrastructure.

The proposed project is located on 16 parcels totaling approximately 1,300 acres in unincorporated Fresno County. A new transmission line (gen-tie line) would be constructed to connect the solar and batter storage components the adjacent Pacific Gas and Electric's (PG&E's) Tranquillity Substation (point of interconnect). The anticipated lifetime of the proposed project would be 40 years and would be decommissioned once operations of the facility cease.

LOCATION: The project site is located on the west side of State Route 33 (S. Derrick Avenue), between the W. South Avenue and W Dinuba Avenue; bisected by W. Manning Avenue, and approximately nine miles south of the City of Mendota (APNs: 028-060-34T, 69ST, 70ST, 71ST, 72ST, 028-101-15ST, 17ST, 19ST, 29ST, 58ST, 59ST, 65ST, 69ST, 72ST, 74ST, 77ST) (Sup. Dist. 1).

OWNER: Westlands Water District

APPLICANT: Luna Valley Solar I, LLC

STAFF CONTACT: Jeremy Shaw, Planner
(559) 600-4207

David Randall, Senior Planner
(559) 600-4052

RECOMMENDATION:

1. Move to:
 - Determine that the Final EIR was presented to, reviewed by and considered by the Planning Commission;
 - Determine the certification of the FEIR reflects the Planning Commission's independent judgement;
 - Adopt the CEQA Findings of Fact and certify that the Environmental Impact Report (EIR) No. 7813 prepared for the Luna Valley Solar Facility Project processed under Unclassified Conditional Use Permit No. 3671 as complete and adequate in conformance with the California Environmental Quality Act (CEQA);
2. Move to determine the required Findings can be made and move to approve Unclassified Conditional Use Permit Application No. 3671, subject to the Mitigation Measures, Conditions of Approval and Project Notes listed in Exhibit 1; and
3. Direct the Secretary to prepare a Resolution documenting the Commission's action.

EXHIBITS:

1. Mitigation Monitoring and Reporting Program, Conditions of Approval and Project Notes
2. Location Map
3. Zoning Map
4. Land Use Map
5. Site Plans and Elevation Details
6. Applicant's Operational Statement
7. CEQA Findings of Fact
8. Reclamation Plan
9. Pest Management Plan
10. Draft EIR
11. Compiled EIR Appendices
12. Final EIR No. 7813
13. Public Comment Letter

NOTE: (Items 10-12) The Draft EIR, Appendices, and Final EIR for the Luna Valley Solar Project are available for review at the following link: <http://www.co.fresno.ca.us/EIR>. These documents were previously distributed to members of the Planning Commission as part of Advance Agenda Item Material on August 17, 2021.

SITE DEVELOPMENT AND OPERATIONAL INFORMATION:

Criteria	Existing	Proposed
General Plan Designation	Agriculture	No Change
Zoning	AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)	No Change
Parcel Size	APN 028-060-34T: 160.00 acres APN 028-060-69ST: 253.38 acres APN 028-060-70ST: 78.48 acres APN 028-060-71ST: 78.48 acres APN 028-060-72ST: 57.72 acres APN 028-101-15ST: 20.00 acres APN 028-101-17ST: 15.00 acres APN 028-101-19ST: 40.00 acres APN 028-101-29ST: 5.00 acres APN 028-101-58ST: 37.56 acres APN 028-101-59: 3.60 acres APN 028-101-65ST: 153.35 acres APN 028-101-69ST: 134.77 acres APN 028-101-72ST: 25.00 acres APN 028-101-74ST: 165.55 acres APN 028-101-77ST: 59.33 acres	No Change
Project Site	The site intermittently has been dry farmed for rangeland grasses or has lain fallow for at least the past 10 years.	Construct, operate, maintain, and decommission photovoltaic (PV) electricity generating facility and associated infrastructure.
Structural Improvements	None	The Solar Facility would consist of arrays of solar PV modules (or panels) and support structures. It would include a new on-site substation, inverters, transformers, a 34.5 kV overhead collection system, and an Energy Storage System. Other necessary infrastructure would include a permanent operation and maintenance building, meteorological data system, telecommunications infrastructure, access roads, and security fencing.
Nearest Residence	Approximately 1,500 feet southeast of the Project site	No Change

Criteria	Existing	Proposed
Surrounding Development	Agricultural production scattered rural farm residences, solar energy and transmission-related uses, and an electrical substation.	No Change
Operational Features	N/A	See above "Project site"
Employees	No permanent employees, periodic farm labor employed during intermittent dry farming operations	At peak work force of up to 550 on-site personnel would be expected during Project construction. On a typical day during operation, the number of staff on-site may range from none (it is not necessary for staff to be present during plant operations) to 30 during periodic, routine maintenance events. Decommissioning and site restoration activities are expected to require a similar or smaller workforce than construction.
Customers	N/A	None
Traffic Trips	Negligible trips from dry farming operations.	Construction activities are estimated to generate 1,200 daily one-way trips with slightly less for Decommissioning activities. The Project would not generate a substantial number of trips during its operation and periodic, routine maintenance events.
Lighting	None	Motion-activated security lighting would be used at the on-site storage and operations structures and substations. All lighting would be shielded or downward facing consistent with local design requirements.
Hours of Operation	N/A	The solar modules at the site would operate during daylight hours, 7 days a week, 365 days a year. Operations and maintenance staff typically would work during regular business hours Monday through Friday.

Criteria	Existing	Proposed
		Non-routine (emergency) maintenance or major repairs could require additional workers and may also require work to occur at night when the Project is not generating power to the grid.

ENVIRONMENTAL ANALYSIS:

As stated in CEQA Guidelines §15121(a), an EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. An EIR is not intended to recommend either approval or denial of a project. Rather, an EIR is a document whose primary purpose is to disclose the potential environmental impacts associated with an action or ‘project.’”

In addition, CEQA Guidelines §15151 contains the following standards of adequacy:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

As required by CEQA Guidelines §15120(c), an EIR shall:

- Provide a sufficiently detailed project description;
- Discuss the existing environmental setting;
- Identify and evaluate potential environmental impacts of the project, the cumulative effects of the project, and other existing or proposed activities in the vicinity;
- Describe feasible mitigation measures that could substantially lessen or avoid the project’s significant adverse environmental impacts; and
- Identify and evaluate alternatives to the project that could substantially lessen or avoid any of the project’s significant environmental impacts.

CEQA does not require evaluation of all possible alternatives, only evaluation of “a range of reasonable alternatives” to encourage both meaningful public participation and informed decision making (CEQA Guidelines §15126.6(a)). “The discussion of alternatives need not be exhaustive, and the requirement as to the discussion of alternatives is subject to a construction of reasonableness. The statute does not demand what is not realistically possible given the limitation of time, energy, and funds” (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286; see also CEQA Guidelines §15126.6(f)(3)). In addition, as stated by the court in *Village of Laguna Beach, Inc. v. Board of Supervisors* (1982) (134 Cal.App.3d 1022, 1029), “Absolute perfection is not required; what is required is the

production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”

An Unclassified CUP application for the Project was submitted to Fresno County in March 16, 2020. County staff determined that preparation of an EIR was necessary. The EIR was prepared in compliance with CEQA (Pub. Res. Code §21000 et seq.) and the CEQA Guidelines (14 Cal. Code Regs. §15000 et seq.). Technical analyses were conducted, and public comment was solicited and considered to ensure that potential environmental impacts of the Project have been evaluated and disclosed in the EIR. A summary of the steps of environmental review and public comment process is provided below:

- A Notice of Preparation was prepared for the Project and circulated to all trustee agencies, responsible agencies, and interested parties beginning on August 28, 2020, for a 30-day review period ending on September 28, 2020; it also was posted for the same time period in the Office of the County Clerk.
- A Notice of Completion for the Draft EIR was filed with the State of California Clearinghouse on May 6, 2021.
- A Notice of Availability of the Draft EIR was published in the Business Journal on May 7, 2021; was posted on the County’s website (<http://www.co.fresno.ca.us/EIR>), and notification of the document’s availability was mailed to the Project’s distribution list to inform individuals, organizations, and agencies that previously expressed interest in the Project.
- The Draft EIR was circulated for review and comment during a 45-day period than began on May 7, 2021 and ended on June 21, 2021.
- The Draft EIR was made available for public review at Fresno County Main Library, the Fresno County Library Mendota Branch Library, the Fresno County Library Tranquillity Branch Library, the County Public Works and Planning offices, and on the County’s Internet website.
- Copies of the Draft EIR were provided, upon request, to responsible, trustee, and other federal, state, and local agencies expected or known to have expertise or interest in the resources that the Project may affect.
- Copies of the Draft EIR or notices of the Draft EIR’s availability were sent to organizations and individuals with special expertise on environmental impacts and/or who had previously expressed an interest in this Project or other activities.
- On August 17, 2021, the Final EIR also was provided to agencies, organizations, and members of the public who were included on the Project’s distribution list. Printed copies of the Final EIR also were made available for public review at Fresno County Main Library, the Fresno County Library Mendota Branch, the Fresno County Library Tranquillity Branch, and the Fresno County Department of Public Works and Planning, Development Services office.

The EIR found that the Project would have:

No impact regarding;

- Land Use and Planning
- Mineral Resource
- Public Services
- Recreation

Less-than-significant impact regarding;

- Utilities and Service Systems
- Energy Conservation
- Wildfire
- Noise
- Hydrology and Water Quality

Less-than-significant impact with the implementation of recommended Mitigation Measures regarding;

- Aesthetics,
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Transportation and Traffic
- Tribal Cultural Resources

The Project would have significant and unavoidable impacts regarding;

- Agriculture
- Land Use and Planning

PUBLIC NOTICE:

Notices of this public hearing were sent to 24 property owners within one mile of the subject parcels, exceeding the 300-foot minimum notification requirements prescribed by California Government Code Section 65091 and the County Zoning Ordinance. A total of 78 notices were sent including outside Agencies and other interested parties.

PROCEDURAL CONSIDERATIONS:

An Unclassified Conditional Use Permit (CUP) may be approved only if five findings specified in the Fresno County Zoning Ordinance, Section 873-F are made by the Planning Commission.

The decision of the Planning Commission on an CUP Application is final, unless appealed to the Board of Supervisors within 15 days of the Commission's action.

BACKGROUND INFORMATION:

The Applicant has applied for an Unclassified Conditional Use Permit to construct, operate, maintain, and decommission a photovoltaic (PV) electricity-generating facility and associated infrastructure to be known as the Luna Valley Solar Project. The Project would consist of three major components: The solar facility, energy storage system, and the PG&E infrastructure necessary to interconnect the Project to the grid at the existing PG&E Tranquillity Switching Station.

The Project would generate an estimated 200 megawatts alternating current (MWAC) on approximately 1,300 acres of Westlands Water District (WWD)-owned and Applicant-owned lands in unincorporated Fresno County adjacent to and north of the existing Tranquillity Solar Project. The Project would operate year-round to generate electricity during daylight hours when electricity demand is typically at its peak.

The solar facility would consist of solar PV modules (or panels) and support structures, as well as electrical inverters, combiners, and transformers. Related facilities and infrastructure would include an on-site substation, an aboveground generation-tie (gen-tie) line with four poles each up to 150 feet in height, overhead and underground conduits, on-site medium-voltage (34.5 kilovolt [kV]) collection lines, access roads, perimeter fencing, telecommunications infrastructure, a meteorological data collection system, signage, lighting, stormwater facilities, and an operations and maintenance building supported by a septic system and leach field. A battery energy storage

system also would be provided within the solar facility site. The energy storage system would be located either adjacent to the substation or distributed throughout the solar facility site.

To interconnect the Project, PG&E would extend the footprint of its existing Tranquillity Switching Station by approximately 200 feet to the north, and would construct an approximately 1,300-foot long, 230 kV overhead transmission via new utility poles connecting the existing Tranquillity switching station, to a structure to be built within the project site. Approximately four new utility poles, approximately 200 feet in height would be constructed, owned and operated by the Luna Valley Solar Project, while three to five additional poles would be constructed, owned and operated by PG&E. The PG&E transmission line also would include underground fiber optic line for communications.

If approved, the Project would be implemented in three phases.

Phase (1) Construction, which would require up to 18 months and up to 550 on-site personnel to complete,

Phase (2) Operation and Maintenance, would last for an estimated period of 40 years, any extended operational use would be subject to further discretionary review and approval by the County. There would be on-site personnel consisting of plant operators, maintenance technicians, and security personnel during the Operation and Maintenance phase. On a typical day, the number of staff on site may range from none (it is not necessary for staff to be present during plant operations) up to 30 during periodic, routine maintenance events. Non-routine (emergency) maintenance could require additional workers.

Phase (3) Decommissioning and site reclamation, would begin within 6 months after the project ceases operation. The Project site would be returned to a stable farmland condition comparable to pre-Project conditions in accordance with the Reclamation Plan submitted for the project and specifically in accordance with applicable land use regulations in effect at that time via the implementation of a County-approved final Reclamation Plan.

The Westlands Water District and the Applicant currently own the proposed project site, which has been intermittently dry farmed for rangeland grasses or has lain fallow for at least the past 10 years. Abandoned irrigation and drainage features are present throughout the site, including piping. Three of the parcels are subject to a legal covenant that precludes irrigation. The Project site as a whole is subject to relatively high levels of selenium and a water table that does not provide sufficient drainage for commercially irrigated crops. One currently unused well is located on the Project site.

REQUIRED CUP FINDINGS:

Finding 1: *That the site of the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls and fences, parking, loading, landscaping, and other features required by this Division, to adjust said use with land and uses in the neighborhood*

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
Setbacks	Front: 35 feet Side: 20 feet Rear: 20 feet	Project infrastructure to be set back at least 50 feet from the Project boundary,	Yes

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
		consistent with the County's Solar Facility Guidelines. Structures would meet setbacks for internal property lines. And verified in Site Plan Review.	
Parking	One parking space for every two employees on site; one of which shall be an ADA parking stall (van accessible) located as close as possible to the main entrance of main building	Operations structures would include an adjacent parking area.	Yes
Lot Coverage	No requirement	N/A	N/A
Space Between Buildings	No requirement	N/A	N/A
Wall Requirements	No requirement	N/A	N/A
Septic Replacement Area	100 percent for existing system	Development of any future septic system would be in compliance with the Local Area Management Plan (LAMP)	N/A
Water Well Separation	Building sewer/septic tank: 50 feet; Disposal field: 100 feet; Seepage pit/cesspool: 150 feet	Any new septic facilities would be located away from the existing on site well in excess of required setbacks.	N/A

Reviewing Agency/Department Comments Regarding Site Adequacy:

Development Engineering Section, Development Services and Capital Projects Division:
According to FEMA FIRM Panel 2500H, the project site is not subject to flooding from the 100-year storm.

Westlands Water District: The project site is within District boundaries. The land is dry farmed and does not currently receive an allocation of water from the District's agricultural water service contract. Because the Applicant is proposing a solar facility, the project is eligible to receive

water through the District’s Municipal and Industrial (M&I) supply, and the land will continue to have access to the District’s distribution system

Analysis Finding 1:

The County’s “Solar Facility Guidelines” approved by the Fresno County Board of Supervisors last amended on December 12, 2017, requires a minimum 50-foot buffer from the edges of the project boundaries to the closest structural improvements or equipment, excluding fencing. The 50-foot includes the required yard setbacks. As the project is comprised of 16 separate parcels, unless they are merged structures must also setbacks from those parcel lines. The submitted Project Site Plans demonstrate that the proposed solar panel arrays would generally be set back from the surrounding properties by a minimum of 50 feet.

Adherence to a Site Plan Review (SPR), which has been required as a Condition of Approval, will ensure compliance with the setback requirements and other design standards. Conditions of the SPR may include, but are not limited to, design of parking and circulation areas, access, on-site grading and drainage, fire protection, landscaping, signage and lighting.

Recommended Conditions of Approval:

(For full detailed condition see Mitigation Measures, Design Measures, and recommended Conditions of Approval attached as Exhibit 1.)

Conclusion Finding 1:

Based on the above information, and with adherence to the Conditions of Approval described above and the Mitigation Measures described in the EIR; the 1,300-acre site is adequate in size and shape to be able to conform to County Standards and not adversely impact surrounding properties.

Finding 2: *That the site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use*

		Existing Conditions	Proposed Operation
Private Road	Yes	Two unpaved road alignments border the Project site. S. Ohio Ave. and W. Dinuba Avenue.	Los Angeles Avenue, Ohio Avenue and Dinuba Avenue are private roads, not maintained by the County. S. Derrick Avenue (State Route 33) is not a County maintained road.
Public Road Frontage	Yes	S. Derrick Avenue State Route (SR) 33 is not a County maintained road. W. Manning Avenue is classified as an expressway in the County’s General Plan with right of way	No change

		Existing Conditions	Proposed Operation
		widths of 50 feet north and 30 feet south of the section line, between Los Angeles Avenue to Ohio Avenue; 50 feet north and 50 feet south.	
Direct Access to Public Road	Yes	S. Derrick Avenue State Route (SR) 33 W. Manning Avenue	Access to the Project will be provided at up to three driveways along W. Manning Avenue, which will meet applicable County standards.
Average Daily Traffic (ADT)		S. Derrick Ave. State Route (SR) 33	During peak construction activities up to 3,200 ADT. The Project would not generate a substantial number of trips due to periodic routine operation and maintenance events.
Road Classification		S. Derrick Avenue State Route (SR) 33 Major Highway	No change
Road Width		S. Derrick Avenue State Route (SR) 33: two 12-foot-wide travel lanes and paved shoulders (Varies 70 to 100 feet)	Project required to offer for dedication additional right-of-way to complete the ultimate design width of 55 feet from the centerline.
Road Surface			No change
Traffic Trips		Seasonal agricultural-related trips associated with harvesting during years with sufficient rainfall to support a crop, or trips associated with the transport of machinery for disking in years without sufficient rainfall to support harvesting.	During Construction and Decommissioning activities are estimated to generate up to 1200 one-way daily trips.
Traffic Impact Study (TIS) Prepared	Yes	N/A	A Traffic Technical Report was prepared for this project by ESA. dated July 2017.

	Existing Conditions	Proposed Operation
Road Improvements Required	N/A	<p>Applicant is required to Prepare and a construction traffic control management plan to be approved by the County and Caltrans.</p> <p>Applicant is required to repair County roads which are demonstrably damaged by project traffic.</p>

Reviewing Agency/Department Comments Regarding Adequacy of Streets and Highways:

Development Engineering section of the Department of Public Works and Planning: Los Angeles Avenue, Ohio Avenue and Dinuba Avenue are private roads and are not County maintained. S. Derrick Avenue (State Route 33) is classified as an Expressway in the County’s General Plan, according to Figure TR-1a (Regional Circulation Diagram) and is not a County maintained road.

W. Manning Avenue is classified as an expressway with an existing right-of-way of 50 feet north and 30 feet south of the section line, from Los Angeles Avenue to Ohio Avenue; 50 feet north and 50 feet south of the section line from Ohio Avenue to Santa Barbara Avenue.

W. Manning Avenue between SR 33 and Santa Barbara Avenue has a paved width of 32 feet, a structural section of 0.4 feet asphalt/concrete (AC), 0.5 feet aggregate base (AB), 1.25 feet asphalt concrete (AC).

Department of Transportation (Caltrans): According to the Caltrans Transportation Concept Report (TCR), the segment of State Route (SR) 33 in the vicinity of the project site is currently a two-lane conventional highway and ultimately planned to be a four-lane facility with a total of 110 feet of right-of-way (55) feet from centerline. Caltrans right-of-way maps show this segment of SR 33 has 100 feet of right-of-way, with 50 feet from the centerline.

An irrevocable offer of dedication to Caltrans for five (5) feet of right-of-way west of the centerline, is needed to accommodate the ultimate right-of-way.

No other comments specific to the adequacy of streets and highways were expressed by reviewing Agencies or Departments.

Analysis finding 2:

Access to the Project site would be provided from driveways located along West Manning Avenue. No driveways directly onto SR-33 are proposed. All access points would meet applicable County standards. Project infrastructure also would be set back at least 50 feet from the property line. Internal access roads would be approximately 20 feet wide and composed of native compacted soil or compacted gravel. The final design of access roads and driveways would be subject to Fresno County Fire Department review prior to construction.

Additionally, the Applicant will be required to enter into a secured agreement with the County to ensure that any County roads that are demonstrably damaged by Project related activities, are promptly repaired, and if necessary paved, slurry sealed or reconstructed as per County requirements. The Fresno County General Plan, Transportation and Circulation Element

provides a goal of meeting Level of Service (LOS) D on urban roadways within the spheres of influence of the Cities of Fresno and Clovis, and Level of Service C on all other roadways in the County. Level of Service is a qualitative measurement based on the amount of traffic delay or flow of traffic experienced by the driver, using an A-F scale, with LOS A representing the least amount of delay and LOS F representing the greatest amount of delay. The conclusions of the Traffic Impact Analysis with regard to LOS, were that based upon existing traffic volumes compared to anticipated project construction traffic volumes, two intersections, S. Derrick and W. Manning Avenues, and S. Derrick and W. Panoche Road would result in unacceptable LOS during one month of the sixteen (16)-month construction schedule. Those impacts will be addressed through the implementation of a traffic management plan, which has been included as a mitigation measure.

Mitigation Measure 4.18-1 would reduce the construction and decommissioning impacts on SR-33 and West Manning Avenue to a less-than-significant level. The Project would not generate a substantial amount trips during its operation, and increased Project-related operational traffic would not cause a significant increase in congestion. The project was required to perform a Traffic Impact Analysis in order to evaluate the potential for impacts to local intersections and roadway segments in terms of traffic volume, for construction and operation.

Based on the above information, and with adherence to Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1, the surrounding streets and highways serving the Project site will remain adequate to accommodate the proposed use.

Recommended Conditions of Approval:

Transportation – Mitigation Measure (summarized): The applicant shall submit a Traffic Management Plan for approval to the Fresno County Department of Public Works and Planning, and the California Department of Transportation; and enter into an agreement for Repairs to damaged County Roads.

(For full detailed condition see Mitigation Measures, Design Measures, and recommended Conditions of Approval attached as Exhibit 1.)

Condition of Approval #4 requires the applicant to dedicate 5 feet of right-of-way to accommodate the ultimate configuration of State Route 33.

Conclusion Finding 2:

Based on the above information, and with adherence to the Conditions of Approval described above and the Mitigation Measures described in the EIR; the site is situated on a major highway which is adequate for the traffic generated by the proposed use. Finding 2 can be made.

Finding 3: That the proposed use will have no adverse effect on abutting property and surrounding neighborhood or the permitted use thereof.

	Size:	Use:	Zoning:
North	Approx. 260 acres	Solar Facility	AE-20 (all)
	635 acres	Field Crop	

South	230 acres 180 acres 119 acres 39 acres	Vineyard } Orchard	AE-20 (all)
Southwest	Approx. 200 acres	Electrical Power Transmission Sub Station	AE-20 (all)
East	77 acres 156 acres 158 acres 294 acres	} Orchard Field Crop	AE-20 (all)
West	156.38 acres 312.77 acres 240.82 acres 158.18 acres	Agricultural land Non-irrigated agricultural land owned by Westlands Water District	AE-20 (all)

Reviewing Agency/Department Comments regarding adverse effects on abutting property:

California Department of Fish and Wildlife: Special-status resources may be present in and adjacent to the project area. These potential resources may need to be evaluated and addressed prior to the issuance of any development permits involving ground disturbance, and land use change. CDFW has concerns about impacts to the State threatened Swainson’s Hawk, the State threatened and federally endangered San Joaquin Kit Fox, the State candidate (endangered) Crotch bumble bee, and the State Species of special concern, Burrowing Owl. In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist during the appropriate survey periods.

San Joaquin Valley Unified Air Pollution Control District: In response to the Draft EIR routing, the Air District provided the following comments: Prior to any construction for which permits are required, a finalized Authority to Construct (ATC) must be issued to the project proponent by the District. The proposed project is subject to District Rule 9510 (Indirect Source Review) because it will receive discretionary approval from a public agency and will equal or exceed 9,000 square feet of other space. When a project is subject to Rule 9510, the submission of an Air Impact Assessment (AIA) application is required prior to applying for project level approval. The purpose of District Rule 9510 is to reduce growth of both NOx and PM10 emissions associated with development and transportation projects. The rule encourages clean air design elements to be incorporated into the development project. In case the proposed project clean air design

elements are insufficient to meet targeted emissions reductions, the rule requires required developers to pay a fee use to fund projects to achieve off-site emissions reductions. The District recommends demonstration of compliance with Rule 9510 prior to issuance of any building permits, be made a condition of approval.

Westlands Water District: The district indicated that since the Applicant is proposing a solar development, the Applicant is eligible to receive water through the District's Municipal and Industrial (M&I) supply and the land will continue to have access to the District's distribution system. The Applicant must comply with the District's Backflow Prevention guidelines for this connection to the water system.

The District had no objections to the Project; however, it was noted that prior to initiating construction, the Applicant shall be required to contact Underground Service Alert (811) so District staff can locate and mark its facilities. The District has water distribution Lateral Line PV-9, which originates to the west of the site at the Coalinga Canal and delivery points PV9-1.5E-2.5N, PV9-1.5E-3.0, PV9-1.5E-3.0B, and PV9-1.5E-3.2.

No other comments specific to adverse effects on abutting property and land use compatibility were expressed by reviewing Agencies or Departments. Comments related to regulatory provisions and procedures may be included as project notes.

Analysis Finding 3:

The proposed approximately 200-megawatt solar power generation facility will be located on 16 parcels (1,300 acres) in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. Located approximately 9 miles west of Tranquillity, the Project site has been intermittently dry farmed for rangeland grasses or has lain fallow for at least the past 10 years.

Surrounding land uses in the area consist primarily of agricultural production in field crops and orchards to the north, east, and west of the Project site. Solar energy uses are located south (Tranquillity Solar Project) and east (Adams East Solar Project) of the site. A couple of rural farm residences are located approximately 0.3-mile south of the Project boundary.

The applicant has prepared an Integrated Pest Management Plan (DEIR Appendix B1) and Reclamation Plan (DEIR Appendix B2) in compliance with the Fresno County Solar Facility Guidelines. In addition, the applicant has acknowledged the Fresno County "Right-to-Farm" Ordinance. Recordation of the notice will be included as a condition of approval.

The EIR found that the Project would less than significant impacts regarding degradation of existing visual character or public views of the surrounding area. The Project would not create adverse lighting or glare effects on adjacent properties from the solar panels. Construction-related noise impacts to nearby residences would be reduced to less-than-significant through preparation and implementation of a Construction Noise Reduction Plan. Operational nighttime noise impacts related to the Project substation would be reduced through sound level monitoring and, if necessary, implementation of shielding design measures.

The visual impact of installing solar panels in this area was also considered. In general, this area is not considered to have high visual sensitivity. S. Derrick Avenue (SR 33) is not a scenic Highway. Interstate 5 which is approximately 11 miles to the south west is designated as scenic roadway, however the General Plan Policies relating to scenic roadways relates only to land adjacent to them not at a distance. The view of the proposed facility, if visible from Interstate 5 would not be distinctly different from the existing landscape, and would have the similar row

characters of an orchard. There are no mitigation measures or conditions being proposed related to this issue. The project does not pose a significant source of lighting, mitigation measures related to preventing glare and light shining onto adjacent properties have been included.

To ensure that all project materials are removed from the site following the life of the project and that the installed infrastructure will not become a visual blight on the area. A reclamation plan including the need to provide financial assurances, has been prepared by the Applicant and is a condition of Approval.

Potential impacts to subsurface cultural resources may occur; however, consultation under the provisions of Assembly Bill 52 did not identify any resources or features that should be protected. If such resources are encountered during construction, the developer will stop all work and a qualified archaeologist will inspect the findings and report the results of the inspection to the developer and the County.

Based on the above information and with adherence to Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1, staff believes the proposal will not have an adverse effect upon surrounding properties.

Recommended Conditions of Approval:

(For full detailed conditions see Mitigation Measures, Design Measures, and recommended Conditions of Approval attached as Exhibit 1.)

Conclusion finding 3:

Based on the above information and with adherence to Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1, staff believes the proposal will not have an adverse effect upon surrounding properties. Finding 3 can be made.

Finding 4: *That the proposed development is consistent with the General Plan*

Relevant Policies:	Consistency/Considerations:
<p>Goal LU-A: To promote the long-term conservation of productive and potentially productive agricultural lands and to accommodate agricultural support services and agriculturally related activities that support the viability of agriculture and further the County’s economic development goals.</p>	<p>This policy objective can be balanced with identified project site water limitations and groundwater salinity issues, coupled with impending state limitations on the use of groundwater through the Sustainable Groundwater Management Act and the Groundwater Service Areas which will likely cause large areas of productive land to be fallowed. Additional discussion of on-site farming challenges and SGMA occurs in the following pages.</p>

Relevant Policies:	Consistency/Considerations:
<p>General Plan Policy LU-A.1: The County shall maintain agriculturally designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available.</p>	<p>The proposed project is not an urban growth project. The Agricultural designation remains and agricultural uses may be utilized at the site after the project's life (40 Years).</p>
<p>General Plan Policy LU-A.3: The County may allow by discretionary permit in areas designated Agriculture, special agricultural uses and agriculturally related activities, including value-added processing facilities, and certain non-agricultural uses listed in Table LU-3. Approval of these and similar uses in areas designated Agriculture shall be subject to the following applicable criteria:</p> <ul style="list-style-type: none"> a) The use shall provide a needed service to the surrounding agricultural area which cannot be provided more efficiently within urban areas or which requires location in a non-urban area because of unusual site requirements or operational characteristics; b) The use should not be sited on productive agricultural lands if less productive land is available in the vicinity; c) The operational or physical characteristics of the use shall not have a detrimental impact on water resources or the use or management of surrounding properties within at least one quarter (1/4)-mile radius; d) A probable workforce should be located nearby or be readily available. 	<ul style="list-style-type: none"> a) The proposed use will operate more efficiently in a non-urban area due to the land area required to efficiently produce electricity with solar panels at utility scale, along with the greater availability of large tracts of undeveloped land in non-urban areas. b) The Land is less productive than other sites due to the lack of water resources and groundwater salinity issues. c) The EIR found available water supplies to satisfy the water demands of the Project, while still meeting other existing and planned future uses. d) Based on demographics and experience with similar solar array projects on the west side of the County, most of the construction workforce is expected to come from the Fresno regional area. <p>The project is being considered for a discretionary permit under CUP Application No. 3671. While the use is not specifically listed in Table LU-3 it is an allowable similar use that has been determined to meet the intent and criteria of the policy.</p>
<p>General Plan Policy LU-A.12: County shall seek to protect agricultural activities from encroachment of incompatible land uses.</p>	<p>The project is not incompatible with agricultural uses and would not conflict with or impede surrounding agricultural uses; once the project has ceased operation, the land will be restored as nearly as is feasible to its pre-project condition in accordance with the Reclamation Plan, allowing for continued agricultural use.</p>
<p>General Plan Policy LU-A.13: County shall require buffers between proposed non-</p>	<p>Solar panels are will adhere to a 50-foot setback policy from all adjacent properties and agricultural operations.</p>

Relevant Policies:	Consistency/Considerations:
agricultural uses and adjacent agricultural operations.	
General Plan Policy PF-C.17: County shall undertake a water supply evaluation.	Section 4.11 of the EIR analysis considered ground water, surface water, and water quality issues. The conclusions reached was that the project would have a less than significant impact and that no mitigation is necessary. The operation of the proposed solar facility after construction would consume a significantly smaller volume of water than average agricultural uses.
Policy PF-C.3: To reduce demand on the county’s groundwater resources, the County shall encourage the use of surface water to the maximum extent feasible.	The Westlands Water District has indicated that an adequate allocation of Municipal and Industrial (M&I) surface water, supplied by Westlands Water District is available. A Condition of Approval is included requiring that the project utilize the M & I source to the maximum extent feasible for all non-potable water uses. If surface water is unavailable during various times the proposed project could utilize an existing onsite well for water. Construction water demand is estimated to be approximately 300 acre-feet (97,760,000 gallons), and operations would require approximately three (3) acre-feet (978,000 gallons) per year. Decommissioning water demand would be comparable to construction demand at approximately 300 acre-feet.
General Plan Policy HS-B.1: The County shall review project proposals to identify potential fire hazards and to evaluate the effectiveness of preventive measures to reduce the risk to life and property.	The project was routed to the Fresno County Fire Protection District for review. Their preliminary comments indicate that the developer will be required to obtain Fire District approval prior to construction, in accordance with Fresno County development regulations. There is also a mitigation measure proposed requiring the preparation of Fire Protection Plan.
General Plan Policy HS-E.2: The County shall ensure that new development, including public infrastructure projects does not create safety hazards such as glare from direct or reflective sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.	Section 4.10 of the EIR evaluated hazards and hazardous materials. Only one potential issue was identified and was proposed for mitigation to reduce the potential impacts to less than significant. The material contained within photovoltaic (PV) modules has some elements that could be hazardous if the unit is broken open. Prior to construction a broken (PV)

Relevant Policies:	Consistency/Considerations:
	model detection and removal plan shall be prepared.
General Plan Policy HS-G.1: The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.	Both stationary and mobile noise impacts from construction and operations were analyzed in section 4.12 of the EIR. A proposed mitigation measure requires the developer to use best practices for equipment staging; and to operate in compliance with the Fresno County Noise Ordinance at all times.
General Plan Policy HS-F.1: The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.	Review of this project did not identify any designs or operational standards that would conflict with existing regulations regarding hazardous materials and waste management. Further consideration would be provided during the subsequent required site plan review of final construction plans.
General Plan Policy TRA-A.3: The County shall require that new or modified access to property abutting a roadway and to intersecting roads conform to access specifications in the Circulation Diagram and Standards section.	All proposed points of access to and from the project site are consistent with this policy.

Reviewing agency comments regarding General Plan Consistency:

Department of Agriculture, Agricultural Commissioner: The applicant has provided a weed and pest management plan; a reclamation plan, and a crop history for the last ten years. The applicant has indicated their acceptance to comply with the County’s Right to Farm Ordinance, Fresno County Ordinance Code Sections 17.04.100 and 17.72.075.

Analysis Finding 4:

As discussed in the table above, and further in DEIR Appendix I1, the Project is consistent with the Fresno County General Plan. To briefly summarize, the project:

- Is not urban growth.
- Is not incompatible with or adversely impact the surrounding agriculture uses.
- It does not tax the strained groundwater water resources of the area.
- Does not pose any hazards or blight to the area.
- Has adequate transportation infrastructure to serve the use.

The Solar Facility Guidelines require documentation of historical information on the agricultural use of the property, crop yield information, the source of water, the soil type, information on improvements and site buffering, the submittal of a Reclamation Plan, pest management information, and acknowledgement of the County’s Right-to-Farm Ordinance. The Applicant has provided this information in DEIR Appendix I2. Based on the above information, staff believes the

proposal is consistent with the Fresno County General Plan. The Solar Facilities Guidelines require solar applicants to commit to make all reasonable efforts to establish a point of sale in Fresno County for equipment and construction-related items necessary for the project and to hire employees from the local workforce. They also require the developer to identify the weight of shipments and commit to purchasing products and equipment from local (Fresno County) manufacturing facilities and vendors. They are stated as conditions of approval for the CUP.

Recommended Conditions of Approval:

See Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1.

Conclusion finding 4:

Based on the proposed mitigation measures and unique circumstances of the use it can be determined that the project is consistent the General Plan and that Finding 4 can be made.

Finding 5: That the conditions stated in the resolution are deemed necessary to protect the public health, safety and general welfare.

Reviewing Agency Comments:

Refer to comments under Findings 1 through 4 of this report.

Analysis Finding 5:

Per Section 873-F of the Zoning Ordinance, Finding 5 addresses the question of whether the included Conditions can be deemed necessary to protect the public health, safety and general welfare of the public and other such conditions as will make possible the development of the County in an orderly and efficient manner and in conformity with the intent and purposes set forth in this Division.

The mitigation measures are listed in the Mitigation Monitoring & Reporting Program prepared in conjunction with Environmental Impact Report No. 7813 which was required to be prepared for the project under CEQA. The mitigation measures proposed for this project are required to reduce the identified adverse impacts to a level that can be considered to be “less than significant”. Specific details regarding the need for mitigation measures are discussed in the EIR.

Conditions of approval and project notes for the project are contained in Exhibit 1 along with the environmental mitigation measures and are necessary to make the project consistent with the County’s policies, regulations and standards. The conditions for the project will be implemented and further augmented through the Site Plan Review process required for this project. The Site Plan Review process and requirements are contained in Section 874 of the Fresno County Zoning Ordinance.

The Project Notes listed in Exhibit 1 represent existing regulations to which the Project is subject and are provided to aid the Applicant/Developer during construction and/or operation.

Recommended Conditions of Approval:

See Mitigation Monitoring, Conditions of Approval and Project Notes attached as Exhibit 1.

Conclusion Finding 5:

The required conditions reflect CEQA regulation and the County's policies, regulations and standards necessary to protect the public. Therefore, Finding 5 can be made.

PUBLIC COMMENT:

Staff received one letter from a property owner in the vicinity related to concerns that the proposed perimeter fencing may impede access to the owner's property which is abutted on two sides by the project, during agricultural operations, via existing dirt roads. The applicant indicated that the proposed fencing would be located approximately 100 feet north of the property line shared with the owner, and that on the other property boundary the fencing would be set back at least 30 feet from the property line. Staff provided the information to the property owner, and the owner subsequently responded to the information provided, that there were no further concerns with the project.

OTHER AGENCY COMMENTS:

The County received two agency comments on the Draft EIR: a June 3, 2021, letter from the U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), and a June 21, 2021, letter from the San Joaquin Valley Air Pollution Control District (SJVAPCD). The letters referenced applicable National Flood Insurance Program floodplain management requirements and SJVAPCD rules and regulations, respectively. Responses to the comments were provided in Chapter 2 of the Final EIR.

CONCLUSION:

To summarize the principal issues discussed in the findings used in considering the Conditional Use permit:

1. The site is adequate for the proposed use in terms of size and features. The proposed use would not be adversely impacted by the site's lack of significant ground water and drainage normally needed to sustain agricultural uses and is of sufficient acreage to make such facilities efficient.
2. The streets and highways in the area are adequate to serve the use and provision to ensure they function appropriately during periods of construction have been provided.
3. The use while not agricultural, is compatible with surrounding agricultural uses. Further, this project site has been identified as a preferable location for solar power due to poor soil quality. The proposed development would result only in a temporary conversion of agricultural land which could be restored to the prior agricultural state upon cessation of the solar use. Said agricultural land currently receives surface agricultural irrigation water from Westlands Water District. The proposed use would utilize available surface industrial and Municipal classified water (I&M) not agriculture surface water resources, which would reduce the demand of water resources for the surrounding agricultural uses.
4. The project is compatible with the Goals, policies and provisions of the General plan. The discretionary permit of the use ensures these issues are implemented as conditions of approval and through detailed review in subsequent final design reviews at Site Plan Review.

Allowing a temporary alternative use for this marginal farmland discourages the placement of similar facilities on more productive agricultural land, consistent with General Plan Policies and Goals. Mitigation was included requiring that a reclamation plan be submitted for approval and implemented upon cessation of the project, to return the site to its pre-project condition at the end of the project's life. Based on the factors cited in the analysis, staff recommends adoption of the findings of fact and certification of Environmental Impact Report No. 7813. It is also recommended that the required Findings for granting the CUP be made, and Unclassified Conditional Use Permit No. 3671 be approved, subject to the Mitigation Measures and recommended Conditions of Approval.

PLANNING COMMISSION MOTIONS:

Recommended Motion (Approval Action)

1. Determine the Final EIR (FEIR) was presented to, reviewed and considered by the Planning Commission, and represents their independent judgement;
2. Move to adopt the California Environmental Quality Act (CEQA) Findings of Fact and certify that Environmental Impact Report (EIR) No. 7813 prepared for the Luna Valley Solar Project, consisting of Unclassified Conditional Use Permit (CUP) No.3671, as complete and adequate in conformance with California Environmental Quality Act;
3. Move to determine the required Findings can be made, as stated in the Staff Report, and move to approve the Unclassified Conditional Use Permit Application No. 3671 subject to the Mitigation Measures, Conditions of Approval, and Project Notes listed in Exhibit 1;
4. Direct the Secretary to prepare a Resolution documenting the Commission's action and direct staff to file a Notice of Determination for the Project.

Alternative Motion (Denial Action)

- Move to not certify Environmental Impact Report (EIR) 7813; and
- Move to determine that the required Findings cannot be made (state basis for not making the Findings) and move to deny Unclassified CUP No. 3671; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

Mitigation Measures, Recommended Conditions of Approval and Project Notes:

See attached Exhibit 1.

JS:jp

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EXHIBIT 1

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Air Quality				
4.4-2	<p>The Project owner shall require that all off-road diesel equipment with greater than 100 horsepower used at the Project site meet USEPA Tier 4 Final off-road emission standards or equivalent to reduce NOX and diesel particulate matter emissions. In the event that it is determined that Tier 4 Final compliant equipment is not available for a specific piece or pieces of equipment with greater than 100 horsepower, the Project owner shall prepare an Emissions Reduction Plan to be submitted to the County for review and approval to substantiate that use of the available equipment that meet reduced emissions standards would not result in total Project emissions that would exceed 10 tons NOx per rolling 12-month average using either the air emissions calculations prepared for the Environmental Impact Report or other air emissions calculations estimated using the CalEEMod emissions model. The Plan shall identify the piece(s) of construction equipment that meet reduced emission standards, including the horsepower, certified tier specification status, and the associated maximum rolling 12-month average NOx emissions. As new or replacement construction equipment are required, the Project owner shall document each unit's horsepower, certified engine tier status, and associated emissions, consistent with the Plan prior to use on the Project.</p>	<p>Project owner and/or its designee(s) to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.</p>	<p>Prior to the issuance of construction or building permits and throughout the construction duration.</p>
Biological Resources				
4.5-1	<p>Protection of Special-Status Species</p> <p>Crownscale:</p> <p>A qualified biologist shall survey the site prior to construction¹ to identify the current extent of the Crownscale rare plant community, and the Project owner shall develop a Rare Plant Avoidance and Mitigation Plan. The Rare Plant Avoidance and Mitigation Plan shall evaluate options for safeguarding the rare plant community, including potential avoidance, maintenance, fencing, restoration, transplantation or seed transfer, as well as monitoring and long-term management requirements.</p> <p>Prior to construction, the Project owner shall coordinate with Fresno County regarding the Project's impacts on Crownscale. Fresno County shall be notified at least 10 days prior to construction in areas containing special-status plants to allow for the salvage of special-status plants or seed.</p>	<p>Project owner and/or its designee(s) to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.</p>	<p><i>Crownscale:</i> Prior to construction (Rare Plant Avoidance and Mitigation Plan); 10 days prior to construction activities in areas containing special-status plants (salvage of plants or seed).</p> <p><i>San Joaquin kit fox:</i> 14 days prior to commencement of construction activities.</p> <p><i>Burrowing owl:</i> 14 days before the initiation of.</p>

¹ Construction activities include fence installation, vegetation removal, ground disturbance, grading, materials placement, assembly and installation of components, on-site vehicle traffic, and any other site activities associated with building the Project.

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources (cont.)				
4.5-1 (cont.)	<p>San Joaquin kit fox:</p> <p>Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox (areas that have been disked within 12 months prior to the start of ground-disturbing activities are not considered suitable). Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the site is disturbed. If no potential San Joaquin kit fox dens are present, no further mitigation is required. If potential dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines §15364 consistent with the USFWS [1999] <i>Standardized Recommendations for Protection of the San Joaquin Kit Fox</i>) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities.</p> <p>If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:</p> <ul style="list-style-type: none"> • If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction. • If the qualified biologist determines that a potential non-natal den may be active, an on-site passive relocation program shall be implemented with prior approval from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the Project boundary, the dens shall be hand-excavated as stated above for inactive dens. • 			equipment staging or ground-disturbing activities

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources (cont.)				
4.5-1 (cont.)	<p>Burrowing owl:</p> <p>The Project owner shall have biological surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct pre-construction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been disturbed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the CDFW (2012) <i>Staff Report on Burrowing Owl Mitigation</i> and shall consist of walking parallel transects 23 to 66 feet (7 to 20 meters) apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department.</p> <ul style="list-style-type: none"> • If active burrowing owl burrows are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within 330 feet from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by a qualified biologist. During the non-breeding (winter) season (September 1 to January 31), no ground-disturbing work shall be permitted within a buffer of 50 feet from the active burrow. Depending on the level of disturbance, a smaller buffer may be established by a qualified biologist based on the visibility and sensitivity responses of each individual burrowing owls or pairs. • If burrow avoidance is infeasible during the non-breeding season or during the breeding season where resident owls have not yet begun egg laying or incubation or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with the CDFW (2012) <i>Staff Report on Burrowing Owl Mitigation</i>. • If passive relocation is anticipated due to on-site burrowing owl populations, a qualified biologist shall prepare a Burrowing Owl Exclusion Plan in accordance with CDFW (2012) <i>Staff Report on Burrowing Owl Mitigation</i>. 			

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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources (cont.)				
4.5-2	<p>Worker Environmental Awareness Training and Best Management Practices for Biological Resources</p> <p>During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:</p> <ul style="list-style-type: none"> • Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting the Crownscale, nesting birds protected under the MBTA, San Joaquin kit fox, Swainson's hawk, and the burrowing owl. The WEAP training shall indicate the appropriate steps to be taken if a special-status species is observed, which may include work stoppage and consultation with the CDFW and USFWS. • The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special-status species, under guidance of a biologist. Construction-related activities, vehicles and equipment outside of the impact zone shall be avoided. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas. • To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by construction personnel for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a species is trapped, the USFWS and/or CDFW shall be contacted immediately. 	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to the issuance of grading or building permits and throughout the construction duration.

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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources (cont.)				
4.5-2 (cont.)	<ul style="list-style-type: none"> • All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected by construction personnel for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the qualified biologist. If the trapped animal is a special-status species, the USFWS and/or CDFW shall be consulted prior to relocation. • Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected by construction personnel for the presence of wildlife prior to moving. • Vehicular traffic shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited. • A speed limit of 20 miles per hour shall be enforced within all construction areas. • A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (<i>Corvus corax</i>), coyote (<i>Canis latrans</i>), and feral dogs. • Workers shall be prohibited from bringing pets (excluding service animals) to the Project site and from feeding wildlife in the vicinity. • Intentional killing or collection of any wildlife species shall be prohibited. 			
4.5-3	<p>Protection of Nesting Birds</p> <p>If construction is scheduled to commence outside of nesting season (September 1 to January 31), no preconstruction surveys or additional measures are required for nesting birds, including raptors. During the nesting bird breeding season (February 1 to August 31), to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified biologist shall conduct preconstruction surveys of all potential nesting habitat within the</p>	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	February 1 to August 31: 14 days prior to commencement of construction activities. If construction is halted for 14 days or more, the area shall be re-surveyed prior to re-initiating work.

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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources (cont.)				
<p>4.5-3 (cont.)</p>	<p>Project site where vegetation removal or ground disturbance is planned. The survey shall be performed within the site and also include potential nest sites within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. If construction is halted for 14 days or more, the area shall be re-surveyed prior to re-initiating work.</p> <p>Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.25-mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a qualified biologist in consultation with CDFW.</p>			
Cultural and Tribal Resources				
<p>4.6-1</p>	<p>Cultural Resources Awareness Training</p> <p>The Project Applicant shall retain a qualified archaeologist to carry out all mitigation measures related to archaeological and historical resources.</p> <p>Prior to the start of any ground-disturbing activities, the Project Applicant shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. A Native American-designated representative will be invited to attend and provide additional materials during each training. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed, retained by the Project construction contractor for the duration of Project construction to demonstrate attendance at the awareness training, and provided to the County upon the completion of Project construction.</p>	<p>Project owner and/or its designee(s) to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.</p>	<p>Prior to the start of any ground-disturbing activities.</p>

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Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Cultural and Tribal Resources (cont.)				
4.6-2	<p>Inadvertent Discovery of Cultural Resources</p> <p>In the event archaeological materials are encountered during Project activities, the Project construction contractor shall immediately cease any ground disturbing activities within 100 feet of the find. The qualified archaeologist (and a Native American-designated representative if the resource is Native American-related) shall evaluate the significance of the resources for California Register of Historical Resources eligibility and recommend appropriate treatment measures to the County and the Applicant. Per CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall (in coordination with a Native American-designated representative if the resource is Native American-related) develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric, tribal cultural resources, or Native American in nature. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist with the County's agreement.</p>	<p>Project owner and/or its designee(s) to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.</p>	<p>During construction activities.</p>
4.6-3	<p>Inadvertent Discovery of Human Remains</p> <p>If human remains are uncovered during Project activities, the Project owner shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended). The NAHC shall designate a Most Likely Descendant (MLD) for the remains per Public Resources Code Section 5097.98, and the Project Applicant shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further activity under the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98</p>	<p>Project owner and/or its designee(s) to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.</p>	<p>During construction activities.</p>

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Cultural and Tribal Resources (cont.)				
4.6-3 (cont.)	with the MLD regarding their recommendation for the disposition of the remains, taking into account the possibility of multiple human remains.			
4.6-4	<p>In addition to implementing Mitigation Measures 4.6-1, 4.6-2, and 4.6-3, the Project owner shall retain a Secretary of the Interior-qualified archaeologist to prepare and implement a cultural resource monitoring plan (Plan) and coordinate and schedule Project archaeological monitors during Project construction. The plan will be submitted to the County for review and approval. The plan will include a requirement for monitoring of Project ground-disturbing activities of previously undisturbed soils by a qualified archaeologist and a Native American-designated monitor, if participating. The plan will include (but not be limited to) the following components:</p> <ul style="list-style-type: none"> • The identification and qualifications of person(s) responsible for conducting monitoring activities, including a request to the Native American tribe for a Native-American designated monitor; • The identification of person(s) responsible for overseeing and directing the monitors; • Monitoring protocols and procedures and the required format and content of monitoring logs; • The schedule for submittal of monitoring logs and identification of person(s) responsible for review and approval of monitoring logs; • A protocol for notifications in the event cultural resources are encountered, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation); • Methods to ensure the security of cultural resources sites; and • A protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction. • Identify protocols and procedures for a final monitoring report that summarizes the duration of monitoring activities, all daily monitoring logs, any inadvertent discoveries, and associated reporting. This report will be submitted to the County and, once finalized, to the SSJVIC 	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Cultural resource monitoring plan: prior to construction. Monitoring during ground-disturbing activities.

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Cultural and Tribal Resources (cont.)				
4.6-4 (cont.)	During the course of the construction monitoring, the archaeologist may adjust the frequency, from continuous to intermittent, of the monitoring based on the conditions and professional judgment regarding the potential to impact resources, with consideration of the judgement of the Native American-designated monitor.			
Geology, Soils, and Paleontological Resources				
4.8-7	<p>Unanticipated Fossil Discovery</p> <p>Prior to any ground disturbing activities, the Project owner shall develop and implement a Paleontological Worker Education and Awareness Program. If paleontological resources are discovered during ground-disturbing activities (e.g., during Project construction or decommissioning), all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until a qualified professional paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with the standards of the Society of Vertebrate Paleontology that are current as of the discovery and with currently-accepted scientific practice. For example, as of the publication of the Draft EIR for the Luna Valley Solar Project, the current standards of the Society of Vertebrate Paleontology are set forth in the SVP's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, as prepared by the SVP's Impact Mitigation Guidelines Revision Committee. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds.</p>	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to ground-disturbing activities.
Hydrology and Water Quality				
4.11-2	<p>Determine Future Water Supply Availability</p> <p>Prior to decommissioning activities, the Project owner shall identify and provide an analysis to the County of the water supply source proposed for use during</p>	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to decommissioning activities.

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Hydrology and Water Quality (cont.)				
4.11-2 (cont.)	decommissioning activities and demonstrate that if water for decommissioning is to be from on-site wells, the use of that water will not impede sustainable groundwater management of the basin. If water in the basin is not sufficient to supply the approximately 300 Ac-ft needed for decommissioning, the Project owner shall truck in water from a source that has sufficient capacity to serve the Project and other water users that depend on that supply.			
Noise and Acoustics				
EXHIBIT 1 Page 10 4.14-1a	<p>Noise Reduction for Construction Activities</p> <p>Prior to issuance of construction permits for the proposed project, the Project Applicant shall submit to the County for approval a Construction Noise Reduction Plan to be implemented by all contractors as a condition of contract. Contents of the Plan should include at a minimum:</p> <ul style="list-style-type: none"> • Maintain all construction tools and equipment in good operating order according to manufacturers' specifications; • Limit use of major excavating and earth-moving machinery to daytime hours; • Equip any internal combustion engine used for any purpose on the job or related to the job with a properly operating muffler that is free from rust, holes, and leaks; • For construction devices that utilize internal combustion engines, ensure the engine's housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers' guidelines, if possible; • Limit possible evening and nighttime shift work to low noise activities such as welding, wire pulling, and other similar activities, together with appropriate material handling equipment; and • Utilize a Complaint Resolution Procedure to address any noise complaints received from residents. 	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to issuance of construction permits.

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Noise and Acoustics (cont.)				
4.14-1b	<p>Noise Reduction for Substation Operation and Operation of Invertors</p> <p>Within three months after commencement of operations of the substation facility, the Project owner shall provide to the County evidence demonstrating that operation of the substation transformer will not increase existing nighttime noise levels by more than 5 dBA at the nearest noise sensitive land use compared to levels without operation of the equipment. Meeting this standard may be achieved proactively through equipment selection and incorporation of design measures (if applicable) or, if measurement of operational noise indicates an exceedance, through implementation of shielding techniques. Design measures may include the selection of quieter units and/or use of enclosures or otherwise configuring the units in a location that provides an acoustical barrier.</p>	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Within three months after commencement of operations of the substation facility.
Transportation				
4.18-1	<p>Construction and Decommissioning Traffic Management Plan.</p> <p>Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works and Planning Department and the California Department of Transportation, District 6, as appropriate, for approval. The Traffic Management Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> • Temporary Traffic Control (TTC) plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections; • Identify the timing of deliveries of heavy equipment and building materials; • Requirement for designated construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed; • Requirement to place temporary signage, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along 	Project owner and/or its designee(s) to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations.

**MITIGATION MONITORING AND REPORTING PROGRAM CONDITIONAL USE PERMIT APPLICATION No. 3671
(INCLUDING CONDITIONS OF APPROVAL AND PROJECT NOTES)**

Mitigation Measure No.	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Timing
Transportation (cont.)				
4.18-1 (cont.)	<p>access routes to indicate the presence of heavy vehicles and construction traffic;</p> <ul style="list-style-type: none"> • Ensure access for emergency vehicles to the Project site; • Access to adjacent properties shall be maintained; • Specify both construction/decommissioning-related vehicle travel and oversize load haul routes, minimizing construction/decommissioning traffic during the a.m. and p.m. peak hour, distributing construction/decommissioning traffic flow across alternative routes to access the Project site, and avoiding residential neighborhoods to the maximum extent feasible. <p>Requirement to obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.</p> <ul style="list-style-type: none"> • Applicant shall enter into a secured agreement with Fresno County to ensure that any County roads that are demonstrably damaged by Project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Fresno County. • The Traffic Management Plan elements listed above would reduce the potentially significant effects of short-term and intermittent construction-related congestion caused by construction vehicles/equipment on local roadways. 			

EXHIBIT 1 Page 1

Conditions of Approval

1.	Development and operation of the project shall be in substantial conformance with the Site plan, Elevations, Operational Statement, Project Description, and draft Reclamation Plan submitted to the Planning Commission.
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2.	The expiration of this Conditional Use Permit (CUP No. 3671) shall be concurrent with expiration of life of the project, 40 years from the date of issuance of any development permits for the project. If the solar lease is to be extended or the initial life of the project extends beyond this approval, approval of an amended Conditional Use Permit shall be obtained prior to expiration of the 40 years.
3.	Prior to issuance of a building permit for CUP 3671, a Site Plan Review (SPR) Application shall be submitted for approval by the Director of the Department of Public Works and Planning in accordance with Section 874 of the Fresno County Zoning Ordinance. The SPR shall be applicable to those portions of the project site to be improved with substation, inverters, perimeter access roads, parking, and driveway access, excluding the solar panel fields. Items to be addressed under the SPR process may include, but are not limited to, design of parking and circulation, driveway, access, grading and drainage, fire protection and lighting; and, shall ensure compliance with setback requirements, including a minimum 50-foot buffer from the edges of the project's property boundaries to the closest structural improvements or equipment (excluding fencing).
4.	Prior to issuance of any development permits the applicant shall provide to the County evidence of effecting an irrevocable offer of dedication to Caltrans for an additional 5 feet of right-of-way to accommodate the ultimate configuration of State Route 33.
5. EXHIBIT 1 Page 13	<p>Prior to the County of Fresno's issuance of any grading or development permit, the project owner must enter into a reclamation agreement with the County of Fresno on terms and conditions acceptable to the County of Fresno, which reclamation agreement shall require the project owner to (1) decommission, dismantle, and remove the project and reclaim the site to its pre-project condition in accordance with the approved Reclamation Plan, and (2) maintain a financial assurance to the County of Fresno, to secure the project owner's obligations under the reclamation agreement, in an amount sufficient to cover the costs of performing such obligations, as provided herein. Such financial assurance shall be in the form of cash and maintained through an escrow arrangement acceptable to the County of Fresno. Such financial assurance may be in any other form of security acceptable to the County of Fresno.</p> <p>The amount of the financial assurance under the reclamation agreement shall (1) initially cover the project owner's cost of performing its obligations under the reclamation agreement, as stated above, based on the final County of Fresno-approved design of the project, which cost estimate shall be provided by the project owner to the County of Fresno, and be subject to approval by the County of Fresno, and (2) be automatically increased annually, due to increases in costs, using the Engineering News-Record construction cost index. This initial cost estimate will consider any project components, other than Improvements, that are expected to be left in place at the request of and for the benefit of the subsequent landowner as long as the improvements are directly supportive restoring the site to a viable agricultural use (e.g., access roads, electrical lines, O&M building).</p>
6.	During construction, operation and decommissioning, the Project shall utilize any Municipal and Industrial classified surface water available from the Westlands Water District for all non-potable water uses.
7.	The project shall adhere substantially to the procedures listed in the draft Reclamation Plan as submitted to the Planning Commission and prepared for project decommissioning when operation ceases. Reasonable modifications may be made to the Plan to address changes of scope and configuration of the final site plan and improvements. The draft reclamation plan shall be reviewed and approved as final by the County of Fresno, Department of Public Works and Planning prior to the issuance of any development permits.
8.	The project shall be in substantial compliance with the Integrated Pest Management Plan, dated February 2020, as submitted to the Planning Commission, in order to control vegetation and vertebrate pests, and general animal control on the project site, that may impact adjacent properties.
9.	The County of Fresno shall enter into an agreement with a Consultant to act as a Third-Party Monitor and implement the Mitigation Monitoring and/or Reporting Program and Conditions Compliance Matrix in accordance with Section 21081.6 of the California Public Resources Code and Section 15097 of Title 14, Chapter 3 of the California Code of Regulations. This agreement shall cover monitoring the Project's Mitigation Measures and Conditions of Approval as provided in the Mitigation Monitoring and/or Reporting Program and Conditions Compliance Matrix, and the Applicant shall enter into an agreement with the County to pay all costs associated with the Consultant costs, Mitigation Monitoring expenses, and cost of County staff time related to implementation of mitigation measures and Conditions of Approvals.
10.	The applicant/project developer shall make all reasonable efforts to establish a point of sale in Fresno County for equipment and construction related items necessary for the project.

11.	The applicant/project developer shall make all reasonable efforts to conduct local recruitment efforts and/or coordinate with employment agencies in an attempt to hire from the local workforce.
12.	The applicant/project developer shall make all reasonable efforts to purchase products and equipment from local (Fresno County) manufacturing facilities and/or vendors.
13.	Prior to the issuance of any development permits, the Applicant shall record a document on the subject property incorporating the provisions of the County "Right-to-Farm" Notice (Fresno County Ordinance Code Section 17.40.100).

Notes (Mandatory Requirements)

The following Notes reference mandatory requirements of Fresno County or other Agencies and are provided as information to the project Applicant.

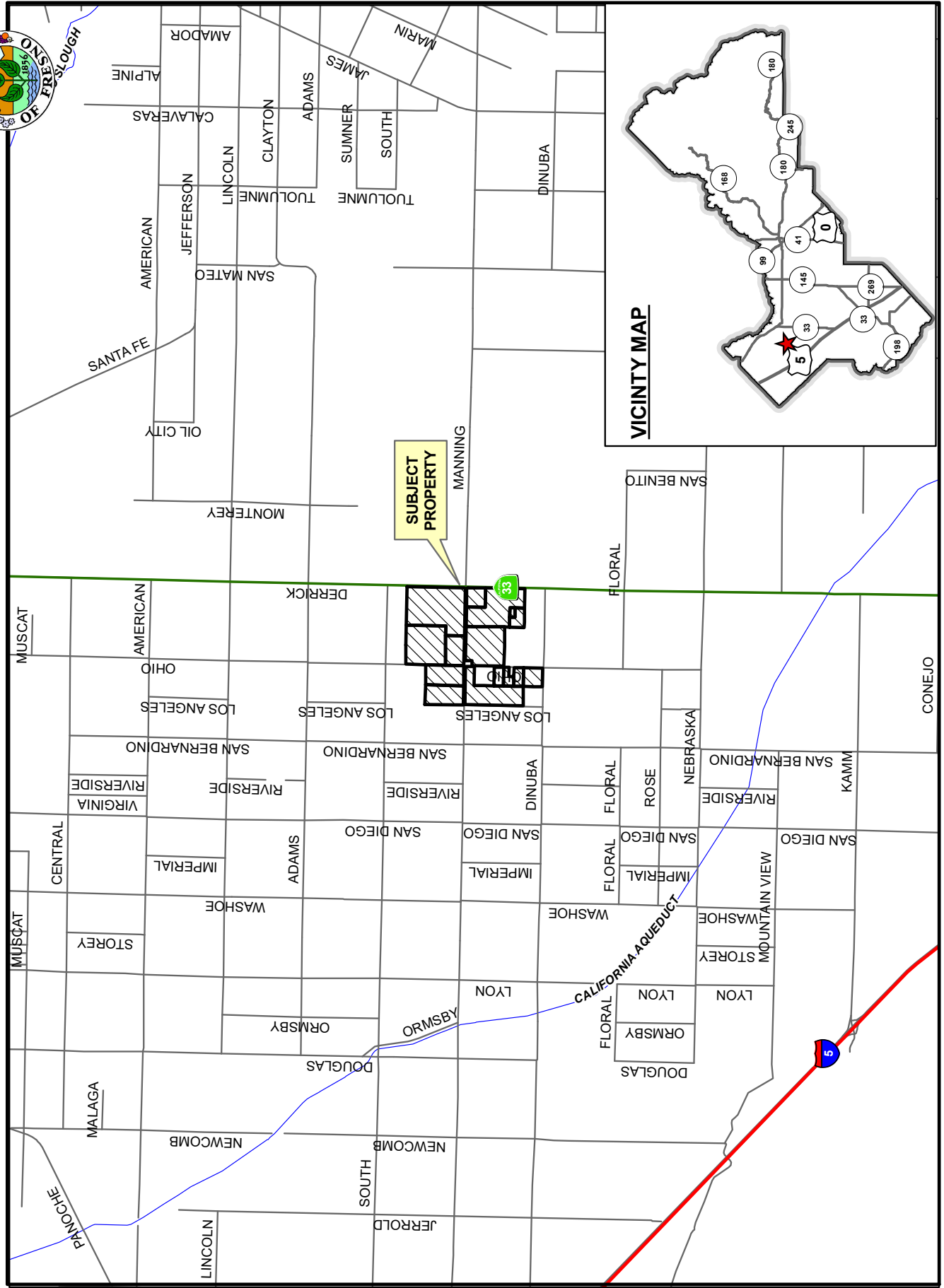
1.	The Conditional Use Permit will become void unless there has been substantial development within two years of the effective date of this approval.
2.	Prior to initiating construction, the Applicant shall be required to contact Underground Service Alert (811) to allow Westlands Water District staff to locate and mark its facilities prior to commencement of grading or construction activities.
3.	Prior to the issuance of an encroachment permit application submittal, the project proponent is required to schedule a "pre-submittal" meeting with the Caltrans District 6 Encroachment Permit Office.
4.	Any work within the State right-of-way will require an encroachment permit from the California Department of Transportation. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State Highway right-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work within the State right-of-way must be submitted using English units.
5.	The Applicant shall comply with all applicable laws and standards, including, but not limited to, those governing the use, storage, and disposal of hazardous materials; worker training and safe work practices; air quality (such as the San Joaquin Valley Air Pollution Control District's indirect source rule and fugitive dust regulation), water quality (e.g., local design standards for retention or detention basins to manage storm water runoff), and Energy Storage Systems more generally (see Draft EIR Section 4.10, p. 4.10-19). Similarly, site preparation and construction activities would be performed in accordance with a SWPPP, or similar plan that incorporates storm water BMPs to reduce the adverse effects of erosion and sedimentation, and herbicide would be applied by qualified personnel following project label instructions and applicable regulations.
6.	Prior to occupancy, the Applicant shall complete and submit either a Hazardous Materials Business Plan or a Business Plan Exemption form to the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 445-3271 for more information.
7.	All hazardous waste shall be handled in accordance with requirements set forth in the California Health and Safety Code, Chapter 6.5. This chapter discusses proper labeling, storage and handling of hazardous wastes.
8.	A storm water pollution prevention plan (SWPPP) shall be submitted to the U.S. Environmental Protection Agency and administered by the California State Regional Water Quality Control Board.

9.	An engineered grading and drainage plan shall be required to show how additional storm water runoff generated by the proposed development will be handled without adversely impacting adjacent properties.
10.	Because the proposed project includes land disturbances of more than one acre, the Applicant will be required to obtain a National Pollution Discharge Elimination System (NPDES) General Construction Storm Water Permit from the Regional Water Quality Control Board.
11.	The Applicant shall adhere to San Joaquin Air Pollution Control District Regulation VIII - Fugitive Dust Rules. The Applicant also shall adhere to the District's permitting requirements, which include a District-Issued Dust Control Plan and Authority to Construct (ATC). The Applicant shall consider entering into a voluntary emission reduction agreement (VERA) with the District.
12.	<p>The following project notes relate to improvements of the private drives and parking areas:</p> <ul style="list-style-type: none"> • An Encroachment Permit will be required for any improvements within the County right-of-way prior to commencement of construction. • The driveway should be a minimum of 24 feet and a maximum of 35 feet in width as approved by the Road Maintenance and Operations Division. • If only the driveway is to be paved, the first 100 feet off of the edge of the ultimate right-of-way shall be concrete or asphalt. • Any proposed gate that provides initial access to this site shall be set back from the edge of the road right-of-way a minimum of 20 feet or the length of the longest vehicle to enter the site, whichever is greater, and the gate shall not swing outward. • A dust palliative shall be required on all parking and circulation areas. • If not already present, a ten (10) foot by ten-foot corner cut-off is required for site distance purposes at any existing or proposed driveway accessing Ohio Avenue, Los Angeles Avenue, Dinuba Avenue and Manning Avenue. • If not already present, a minimum thirty (30) foot by thirty-foot right-of-way corner cut-off is required at the intersection of Manning Avenue and Los Angeles Avenue. • If not already present, a minimum thirty (30) foot by thirty-foot right-of-way corner cut-off is required at the intersection of Manning Avenue and Ohio Avenue.
13.	Any proposed septic system shall adhere to the California Plumbing Code and the Fresno Local Agency Management Program (LAMP).
14.	The project shall comply with the Westlands Water District Backflow Prevention Guidelines.

EXHIBIT 2

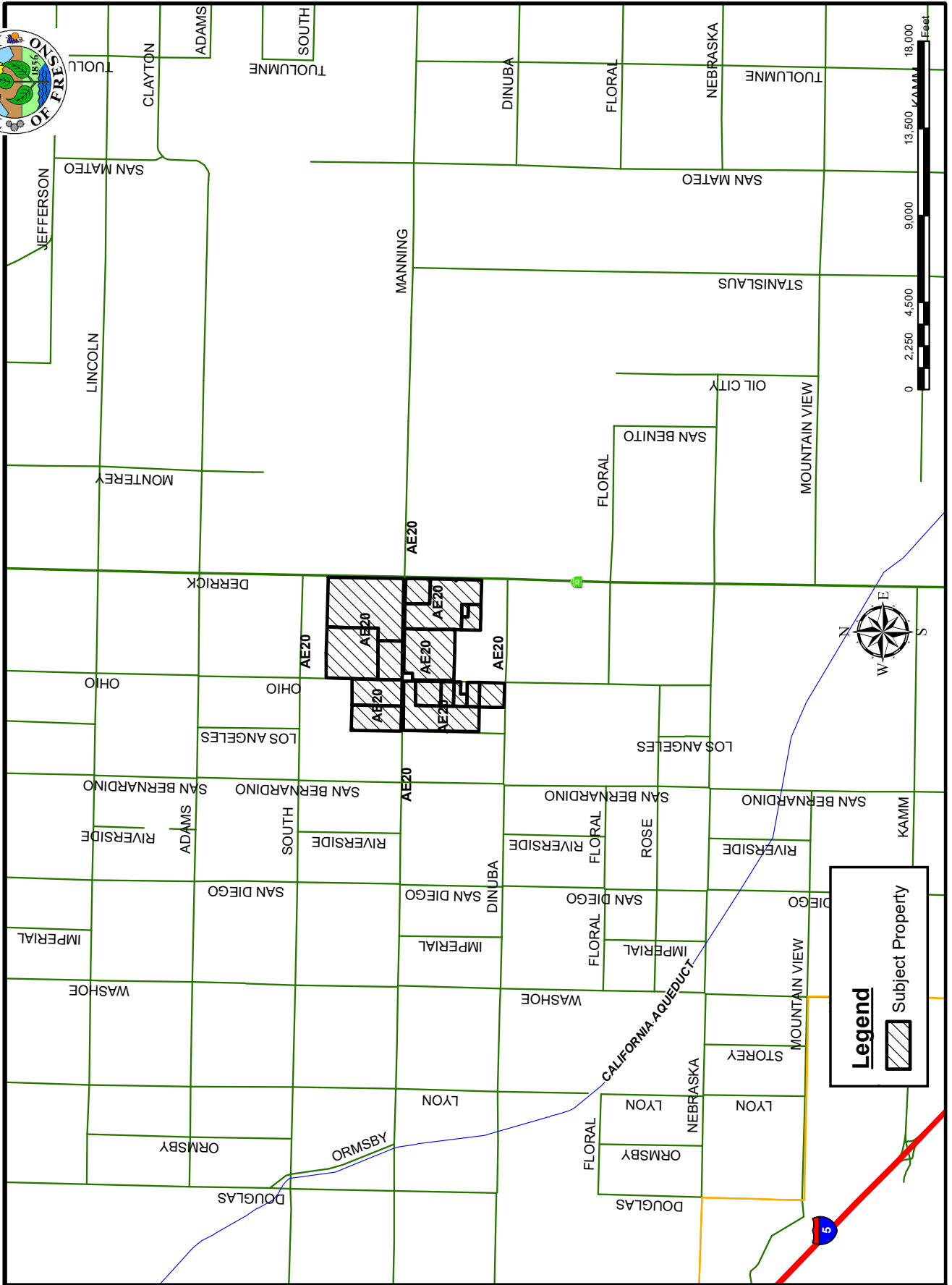
LOCATION MAP

CUP 3671



EXISTING ZONING MAP

CUP 3671
STR 22-15/14

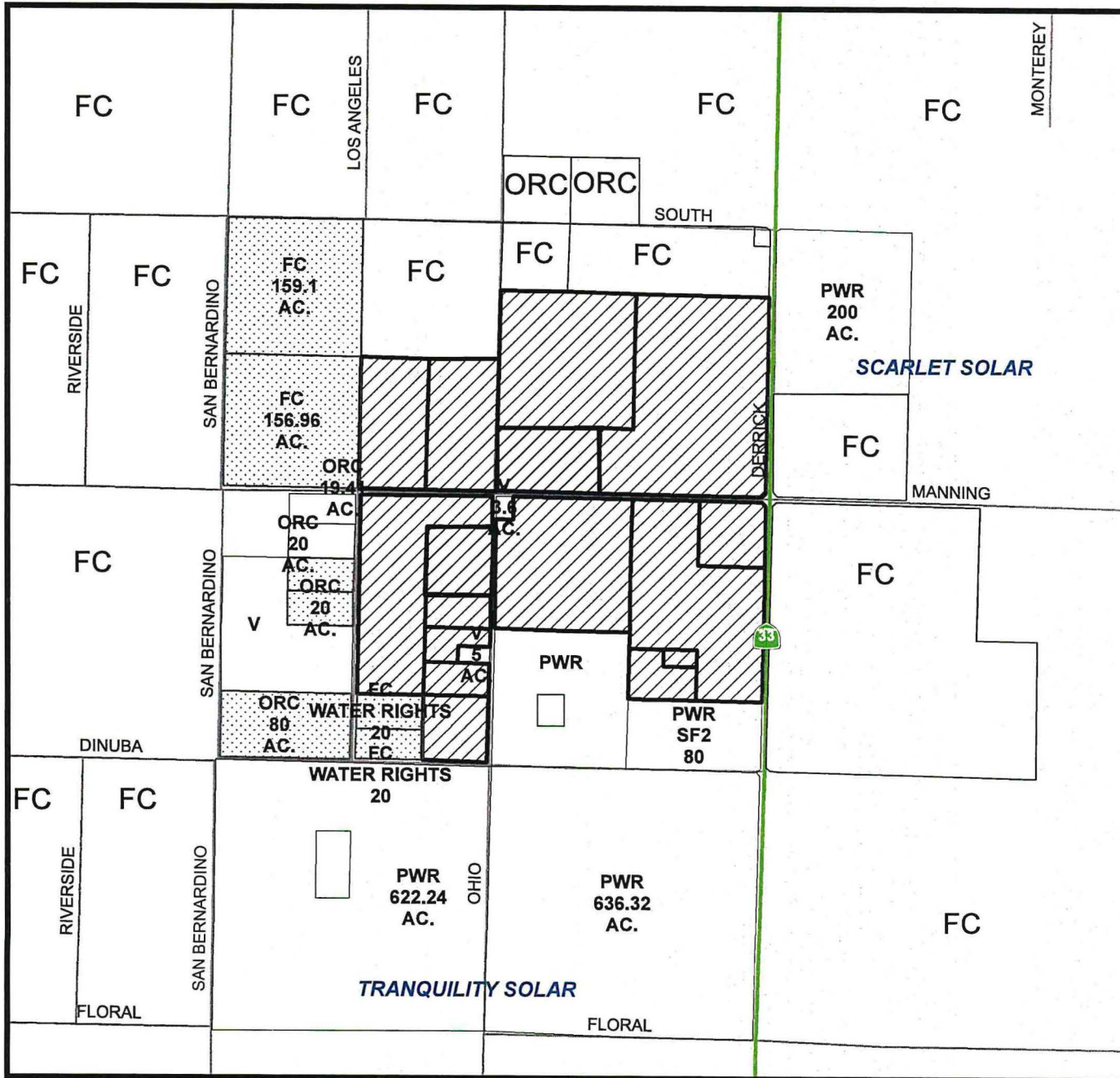


Legend

Subject Property

EXISTING LAND USE MAP



CUP 3671

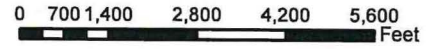


LEGEND

SF#- SINGLE FAMILY RESIDENCE
FC - FIELD CROP
ORC - ORCHARD
PWR - POWER GENERATION SITE
V - VACANT

LEGEND:

 Subject Property
 Ag Contract Land



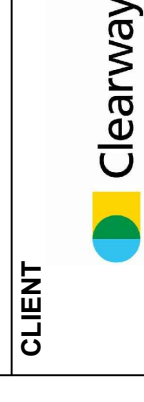
Department of Public Works and Planning
Development Services Division

- SHEET NOTES:
1. LOCATIONS SHOWN ARE FOR GENERAL GUIDANCE ONLY. SLOPES OF THE SITE ARE NOT DEPICTED AND LOCATIONS MUST BE VERIFIED ON SITE BEFORE INSTALLATION.
 2. FINAL STRING SIZING TO BE CONFIRMED BY ENGINEER-OF-RECORD.

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ENGINEER'S STAMP

555 12th St, 5th Floor
Oakland, CA 94607
www.revamp-eng.com



PROJECT NAME
LUNA VALLEY SOLAR
200MW AC
SITE LOCATION
FRESNO COUNTY, CA
36.603312°, -120.388439°

DRAWING ISSUE

1	02/10/2020	EXHIBIT
2	02/19/2020	PER COMMENTS
3	02/20/2020	PER COMMENTS

REVISION ISSUE

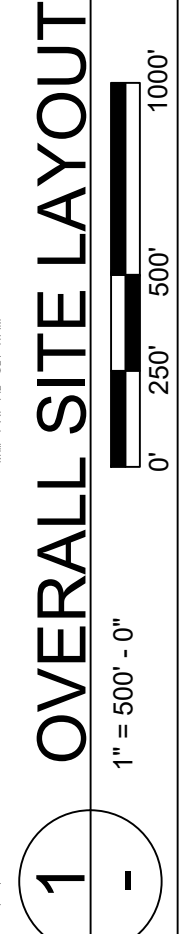
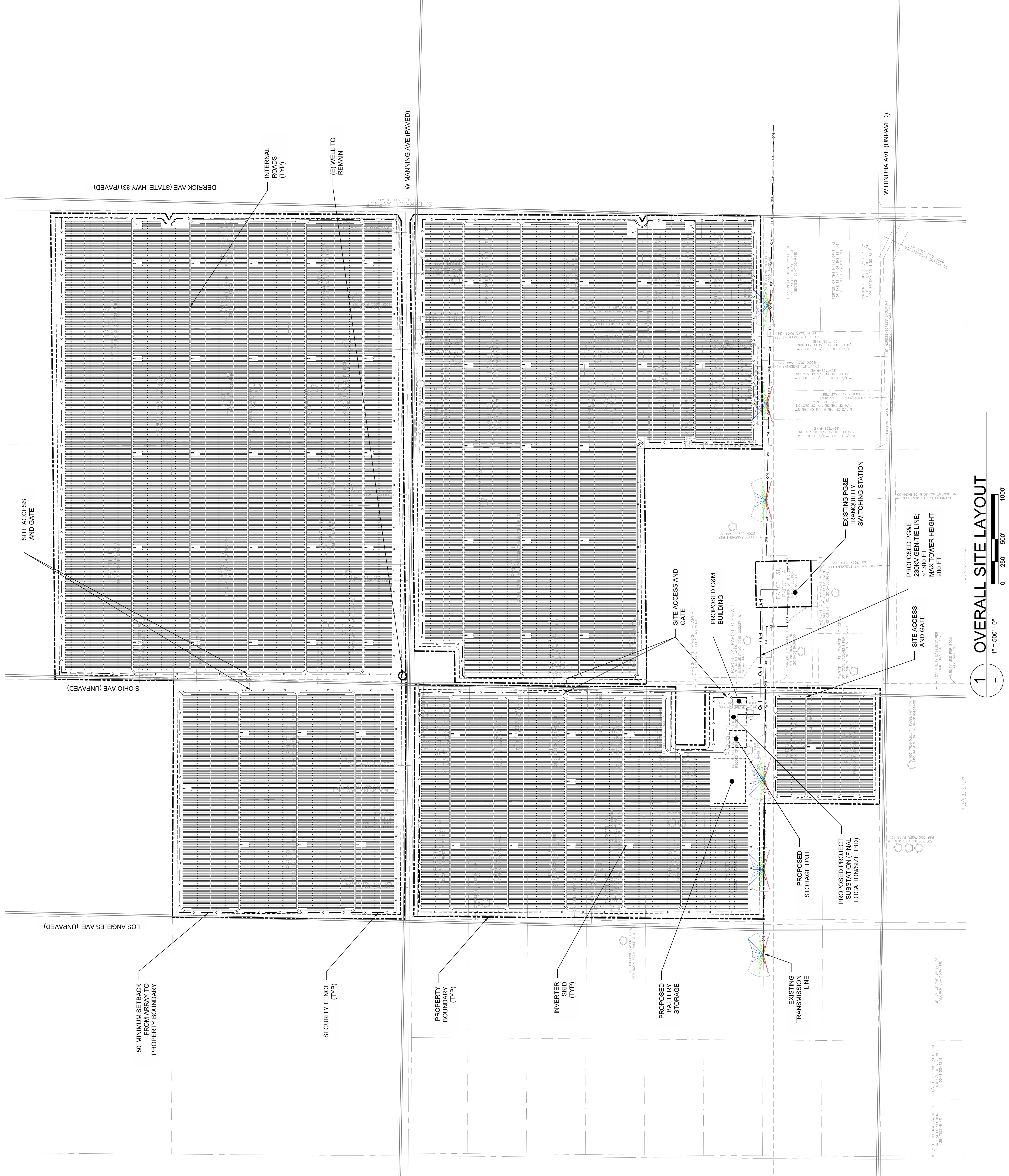
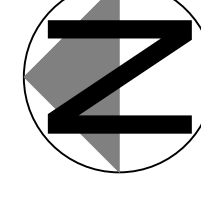
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PROJECT NO.: 20015

DRAWING TITLE
OVERALL SITE LAYOUT

DRAWING NUMBER

E200

PRELIMINARY - NOT FOR CONSTRUCTION



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LUNA VALLEY SOLAR
PROJECT NAME
SITE LOCATION
FRESNO COUNTY, CA
36.603312, -120.388439°

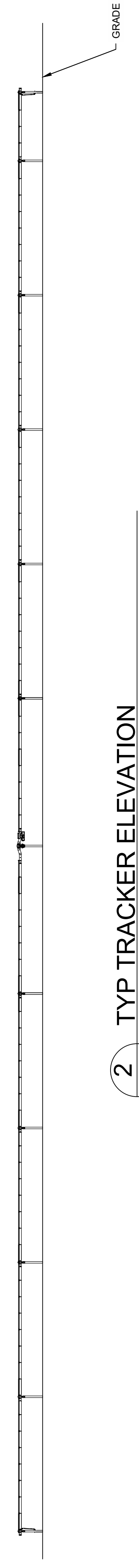
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2 PER COMMENTS	02/19/2020
3 PER COMMENTS	02/20/2020

REVISION ISSUE

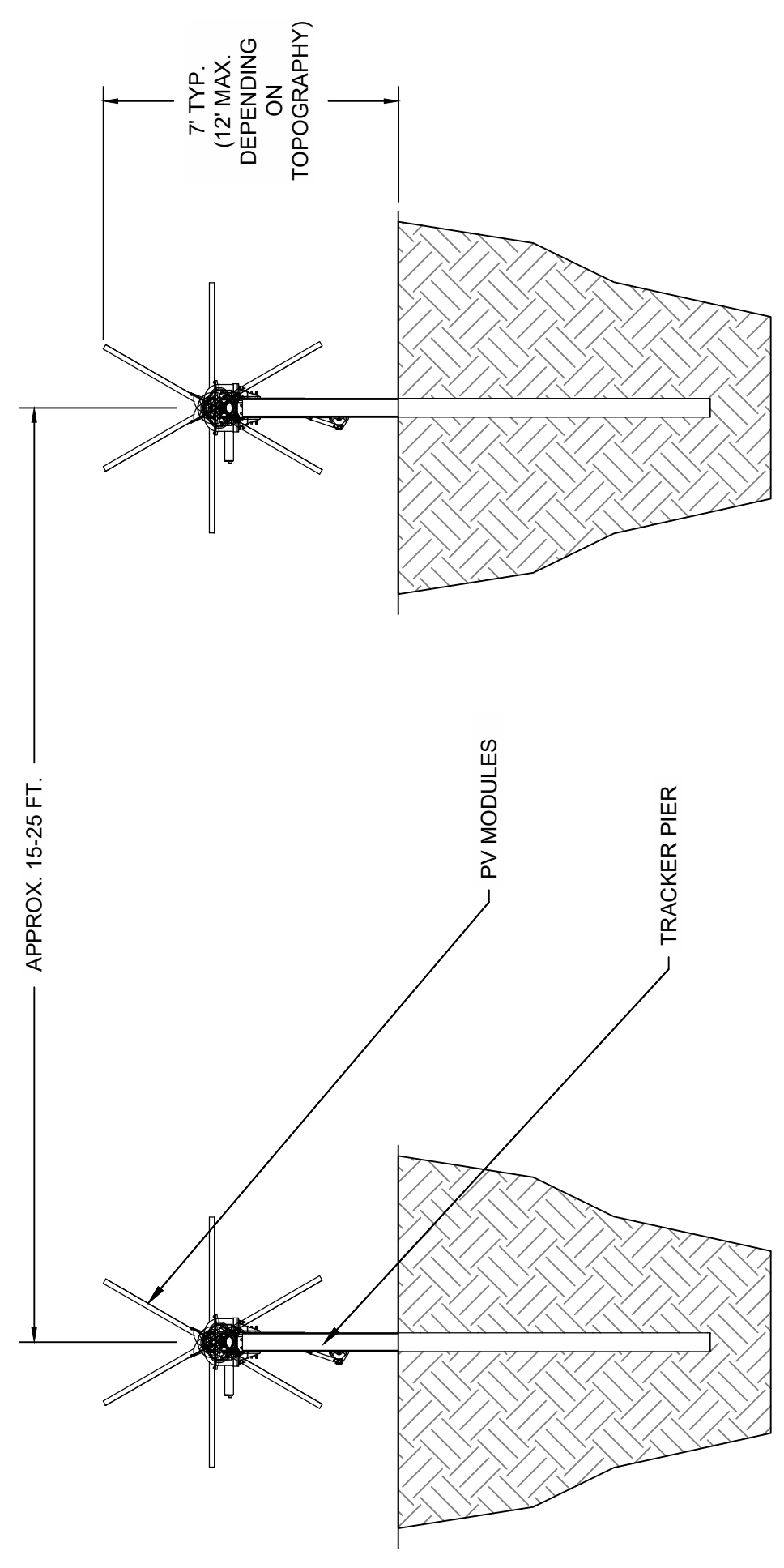
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PROJECT NO.: 20015
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**TRACKER
DETAILS**

DRAWING NUMBER
A100

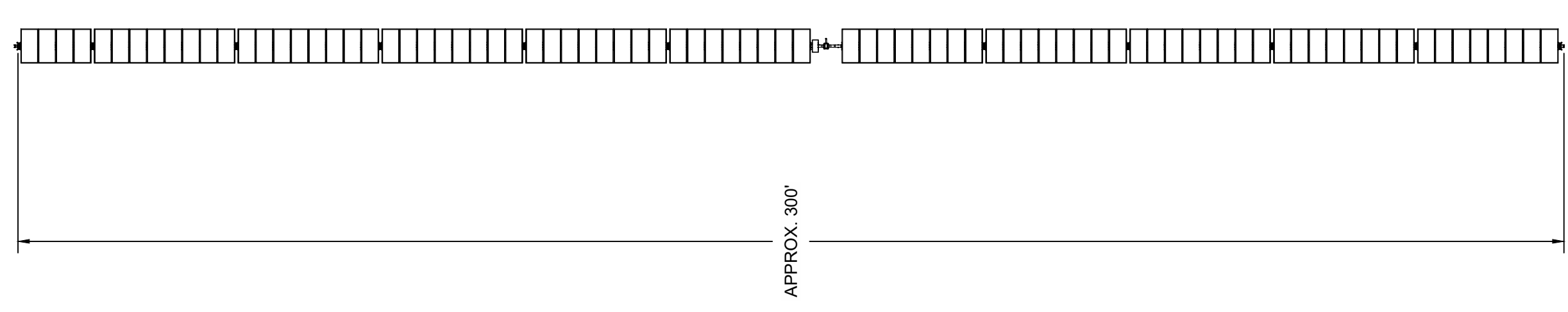
PRELIMINARY - NOT FOR CONSTRUCTION



2 - TYP TRACKER ELEVATION
SCALE: N.T.S



3 - TYP TRACKER ELEVATION DETAIL
SCALE: N.T.S



1 - TYP TRACKER PLAN VIEW
SCALE: N.T.S

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LUNA VALLEY SOLAR
PROJECT NAME
FRESNO COUNTY, CA
SITE LOCATION
36.603312, -120.388439

DRAWING ISSUE	
1	02/10/2020 DETAILS
2	02/19/2020 PER COMMENTS
3	02/20/2020 PER COMMENTS

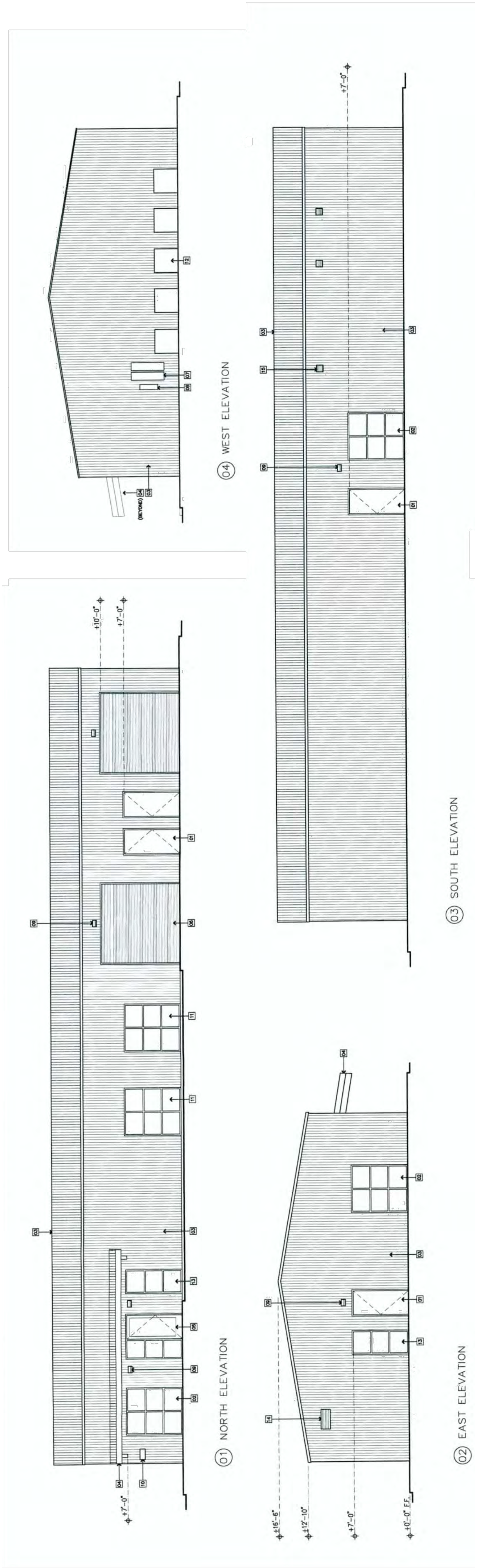
REVISION ISSUE	

DRAWN BY: ZZZ CHECKED BY: MH
PROJECT NO.: 20015

DRAWING TITLE
O&M DETAIL 2

DRAWING NUMBER
A104

PRELIMINARY - NOT FOR CONSTRUCTION



1 O&M BUILDING ELEVATIONS
SCALE: N.T.S.

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ENGINEER'S STAMP



LUNA VALLEY SOLAR
PROJECT NAME
SITE LOCATION
FRESNO COUNTY, CA
36.603312, -120.388439

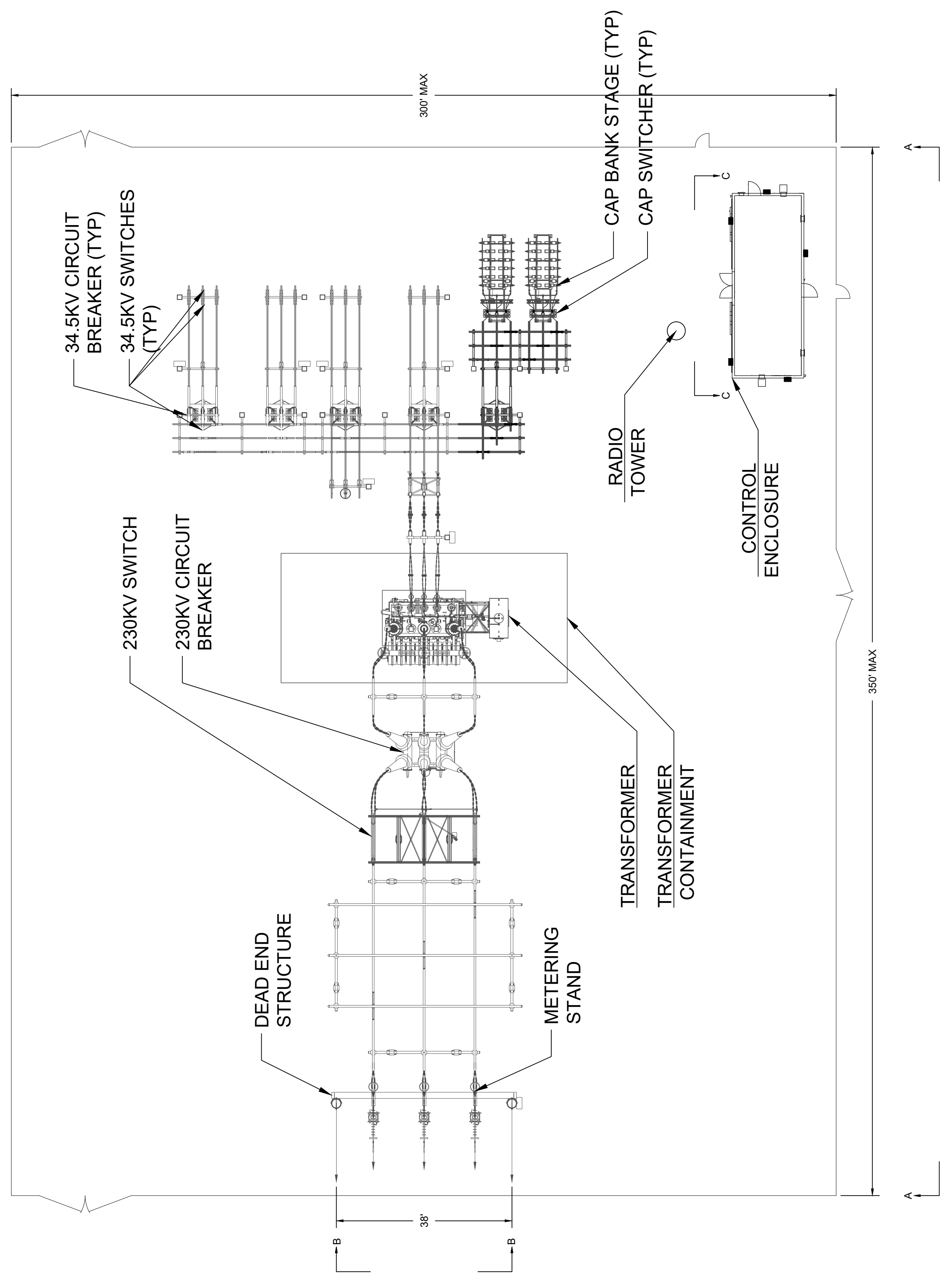
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1 02/10/2020 DETAILS
2 02/19/2020 REVISE COMMENTS
3 02/20/2020 PER COMMENTS

REVISION ISSUE

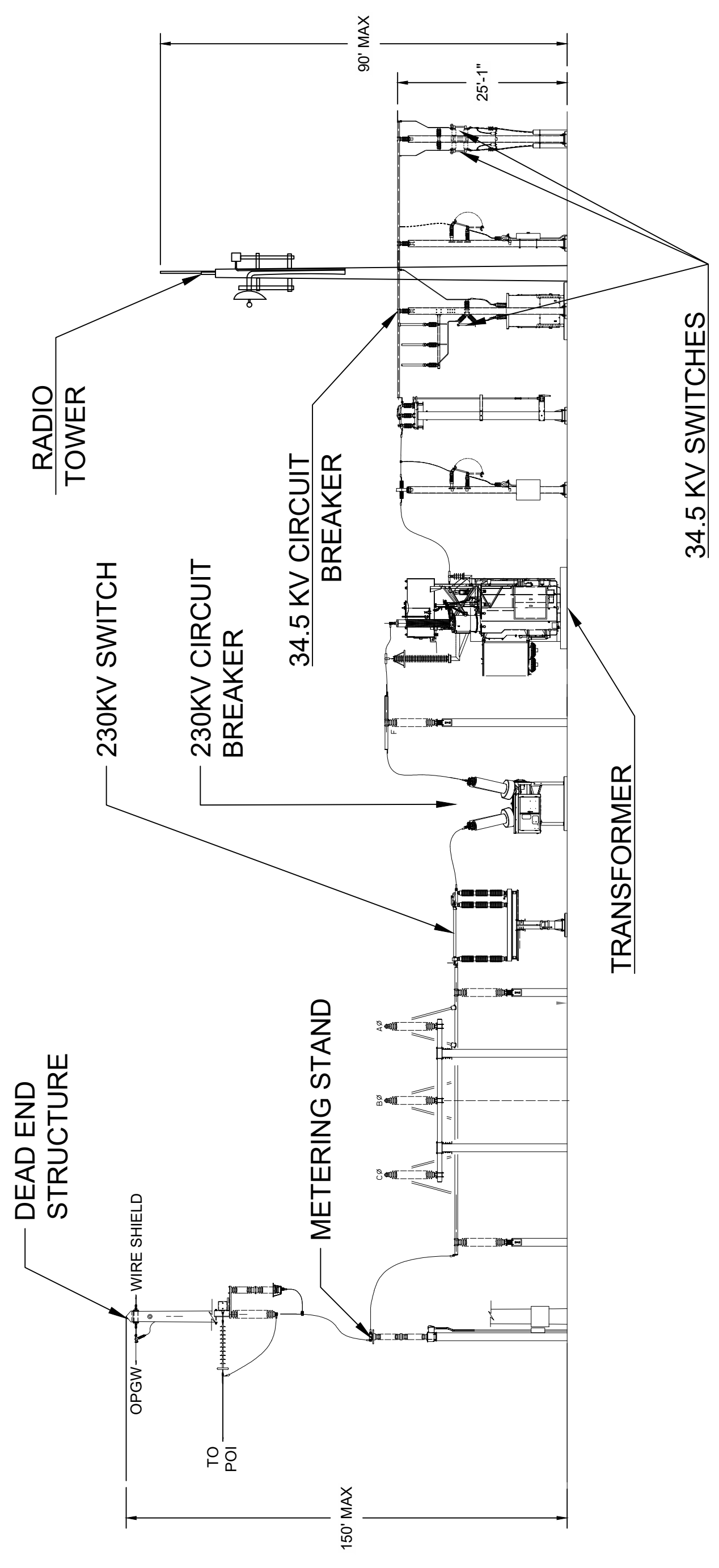
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PROJECT NO.: 20015
DRAWING TITLE
**SUBSTATION
DETAILS**

DRAWING NUMBER
A105

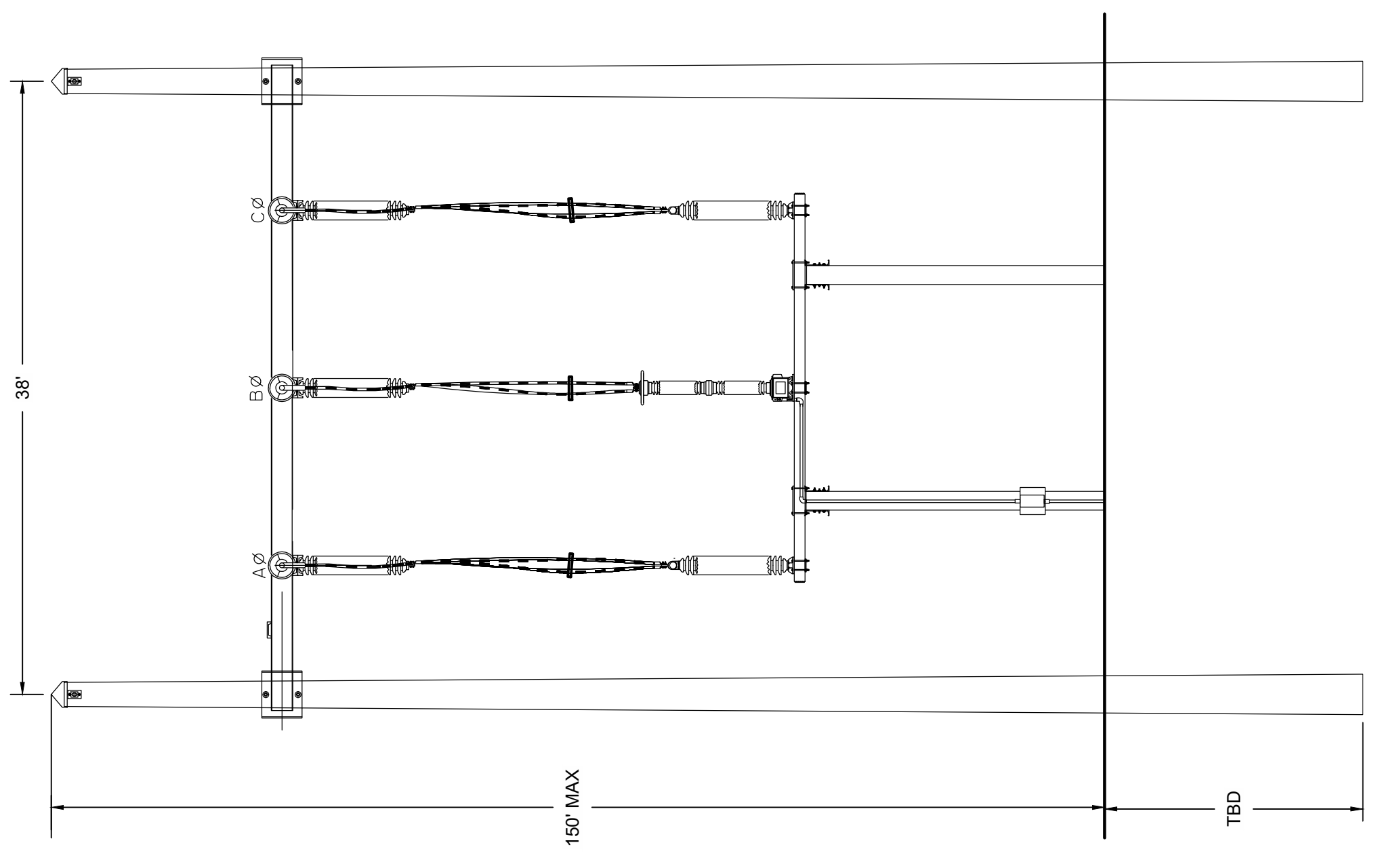
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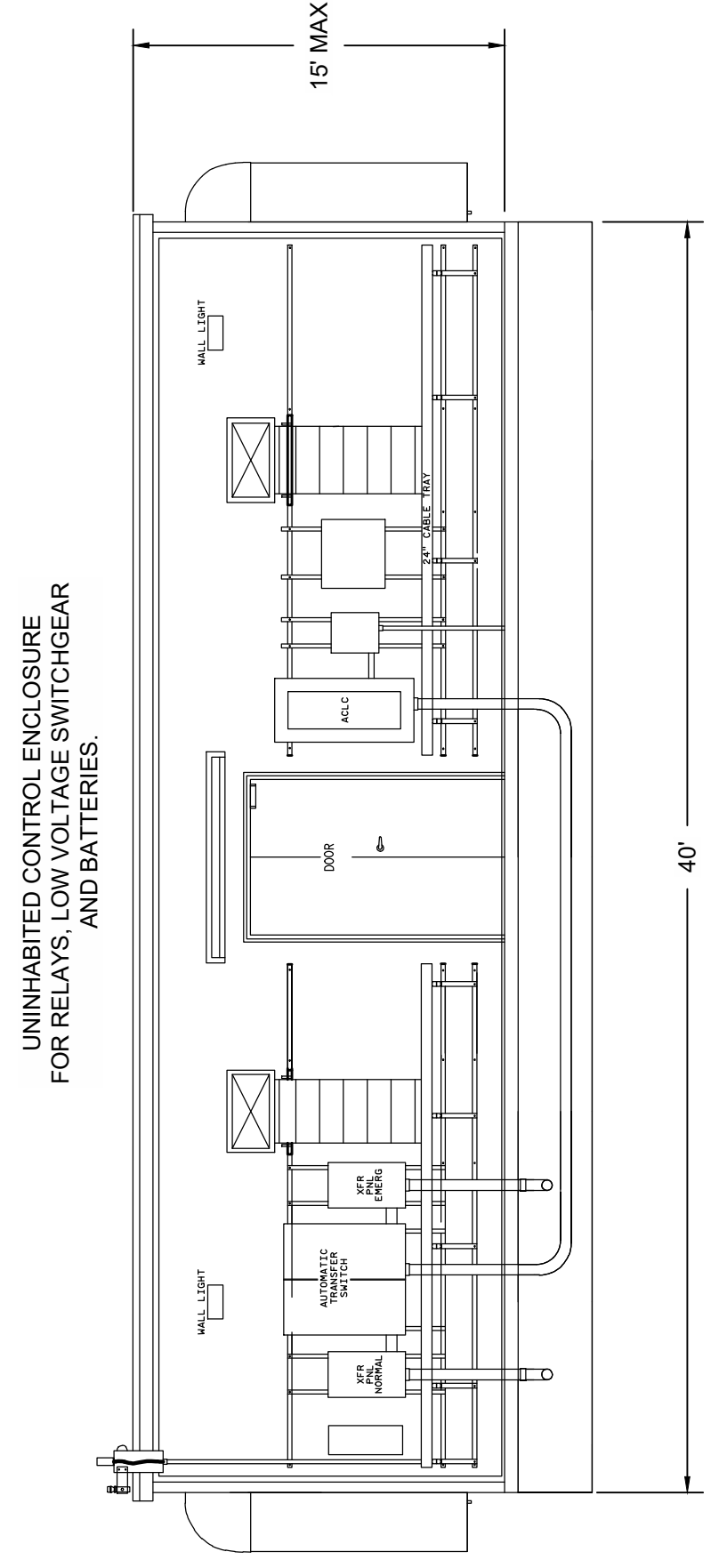
1 SUBSTATION PLAN VIEW
SCALE: N.T.S.



2 SUBSTATION ELEVATION A-A
SCALE: N.T.S.



3 DEAD END ELEVATION DETAIL B-B
SCALE: N.T.S.



4 CONTROL ENCLOSURE ELEVATION C-C
SCALE: N.T.S.

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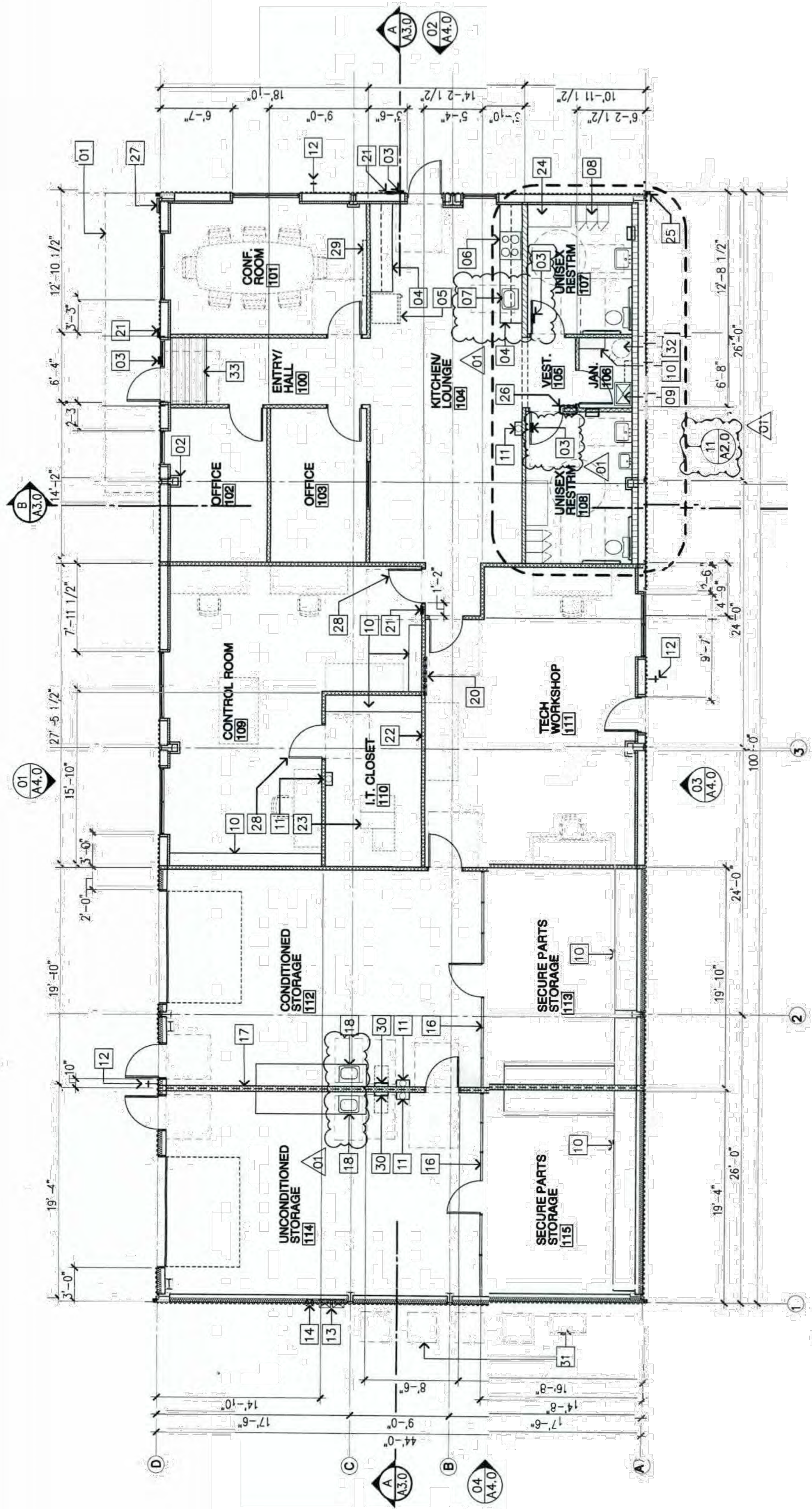
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2	02/19/2020
3	02/20/2020

REVISION ISSUE	DATE

DRAWN BY: ZZZ CHECKED BY: MH
PROJECT NO.: 20015
DRAWING TITLE
O&M DETAIL 1

DRAWING NUMBER
A103

PRELIMINARY - NOT FOR CONSTRUCTION



1 O&M BUILDING FLOOR PLAN
SCALE: N.T.S.

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DRAWING ISSUE	
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2	02/19/2020 PER COMMENTS
3	02/20/2020 PER COMMENTS

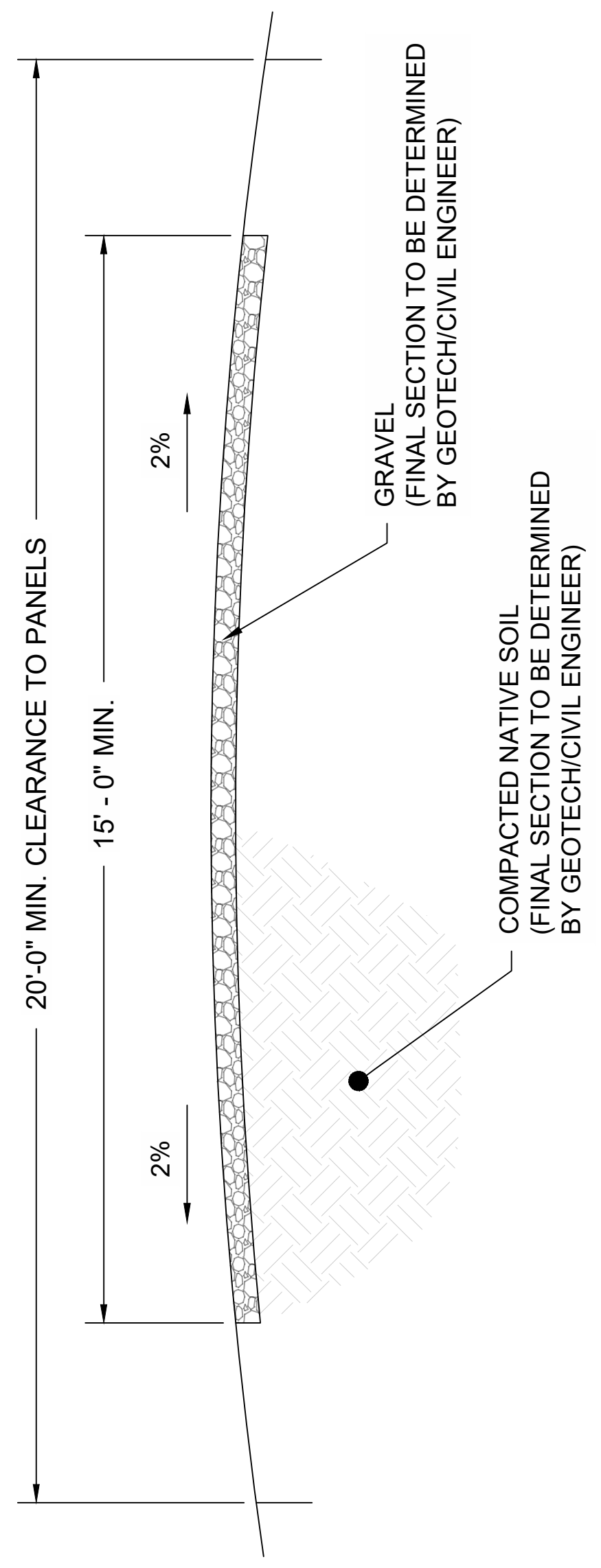
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PROJECT NO.: 20015

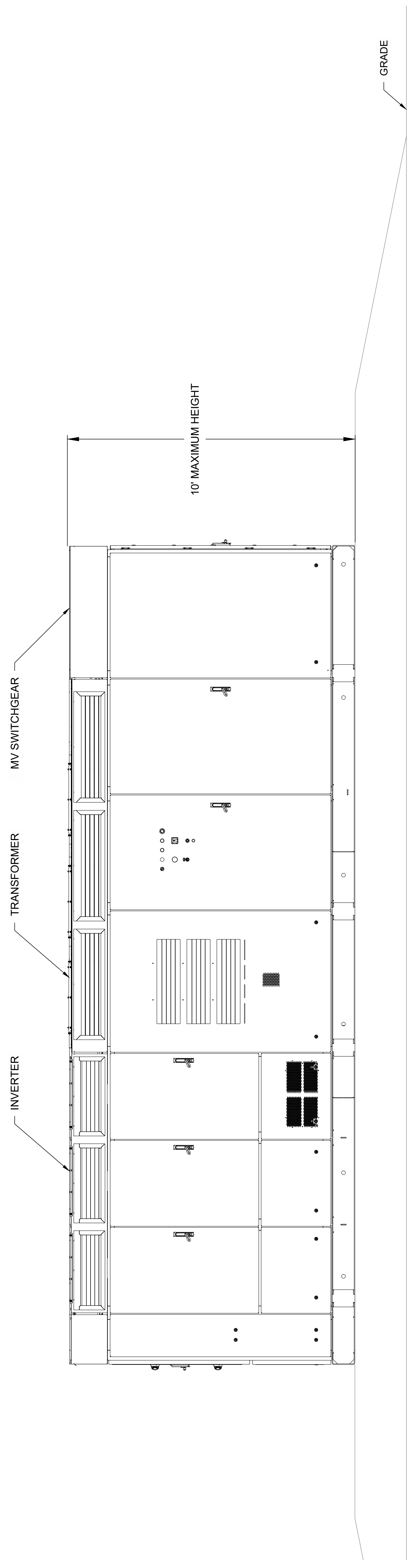
**ROAD AND
INVERTER
DETAILS**

DRAWING NUMBER
A101

PRELIMINARY - NOT FOR CONSTRUCTION



1 ACCESS ROAD DETAIL
SCALE: N.T.S.



2 INVERTER SKID ELEVATION SECTION
SCALE: N.T.S.

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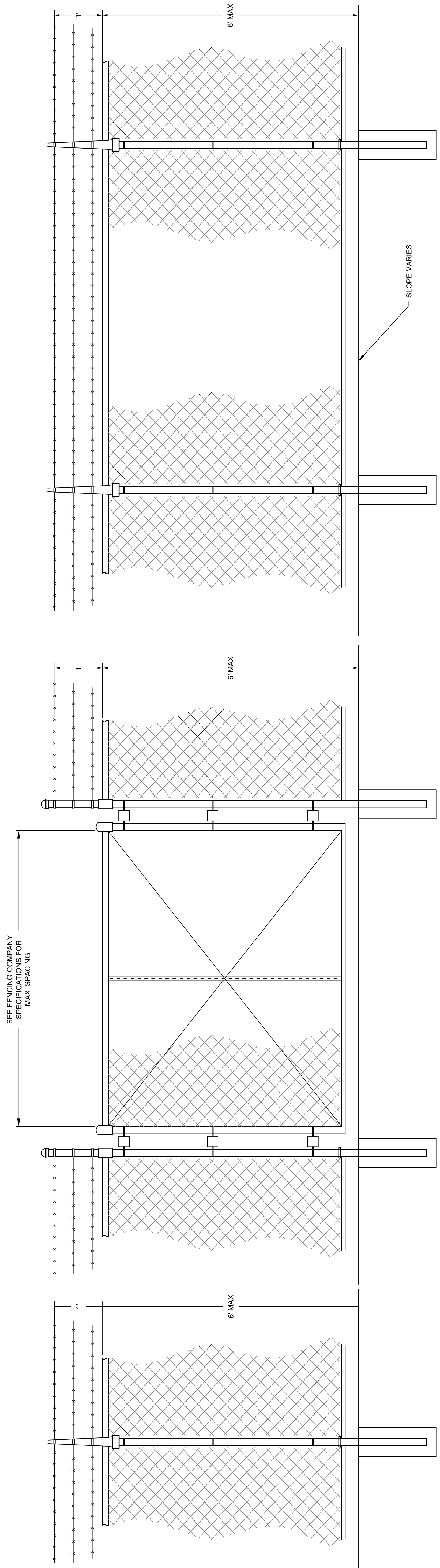
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DRAWN BY: ZZ CHECKED BY: MH
PROJECT NO.: 20015

DRAWING TITLE
FENCE DETAILS

DRAWING NUMBER
A102

- NOTES:
- FENCE SHALL BE GROUNDED IN ACCORDANCE WITH APPLICABLE CODES.
 - IF ANY CHAIN LINK FABRIC IS TO BE CONSTRUCTED, SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN LINK FABRIC SHALL BE ON THE OPPOSITE SIDE OF THE SECURE SIDE.



1 - FENCE-DETAIL
NTS

2 - FENCE-DETAIL-GATE
NTS

3 - TYPICAL-CHAIN-LINK-FENCE-DETAIL
NTS

PRELIMINARY - NOT FOR CONSTRUCTION

LUNA VALLEY SOLAR PROJECT OPERATIONAL STATEMENT

1 NATURE OF THE OPERATION

Luna Valley Solar I, LLC (Applicant) is proposing to develop, own, and operate the Luna Valley Solar Project (Project) in Fresno County, California, 9 miles west-southwest of the city of Tranquility within the unincorporated area of Levis (Figure 1). The Project consists of constructing and operating a utility-scale alternating current (AC) photovoltaic (PV) solar generating and energy storage system (ESS) that would produce up to 200 megawatts of energy at the point of electrical grid interconnection on approximately 1,300 acres of privately-owned agricultural land (Figure 2). The Project would include the construction of access roads, electrical interconnection facilities, and a Project substation.

2 OPERATIONAL TIME LIMITS

Construction is anticipated to begin in 2022. The facility would begin operation in 2023. The facility is intended to operate for 35 years or more.

2.1 Months (if seasonal)

The Project is not seasonal.

2.1.1 Days per Week and Hours of Operation

Operations would occur 7 days per week.

2.2 Special Activities

No special activities are included in the Project.

3 NUMBER OF CUSTOMERS OR VISITORS

No customers or visitors are anticipated on a regular basis, other than the employees and/or maintenance contractors.

4 NUMBER OF EMPLOYEES

Only occasional, on-site maintenance is expected to be required following commissioning. Initially, personnel would likely visit the Project area daily or weekly, but it is anticipated that eventually maintenance visits would be reduced to once a month or less. Operations and maintenance activities would require up to 4 workers performing visual inspections, monitoring plant performance, executing minor repairs, and responding to needs for plant adjustment. On intermittent occasions, the presence of 5 to 30 workers may be required for repairs or replacement of equipment, panel cleaning, and other specialized maintenance, mainly during daylight hours, as needed. However, due to the self-operating nature of the facilities, such actions would likely occur infrequently. No personnel would live onsite as a caretaker.

Figure 1. Project Location

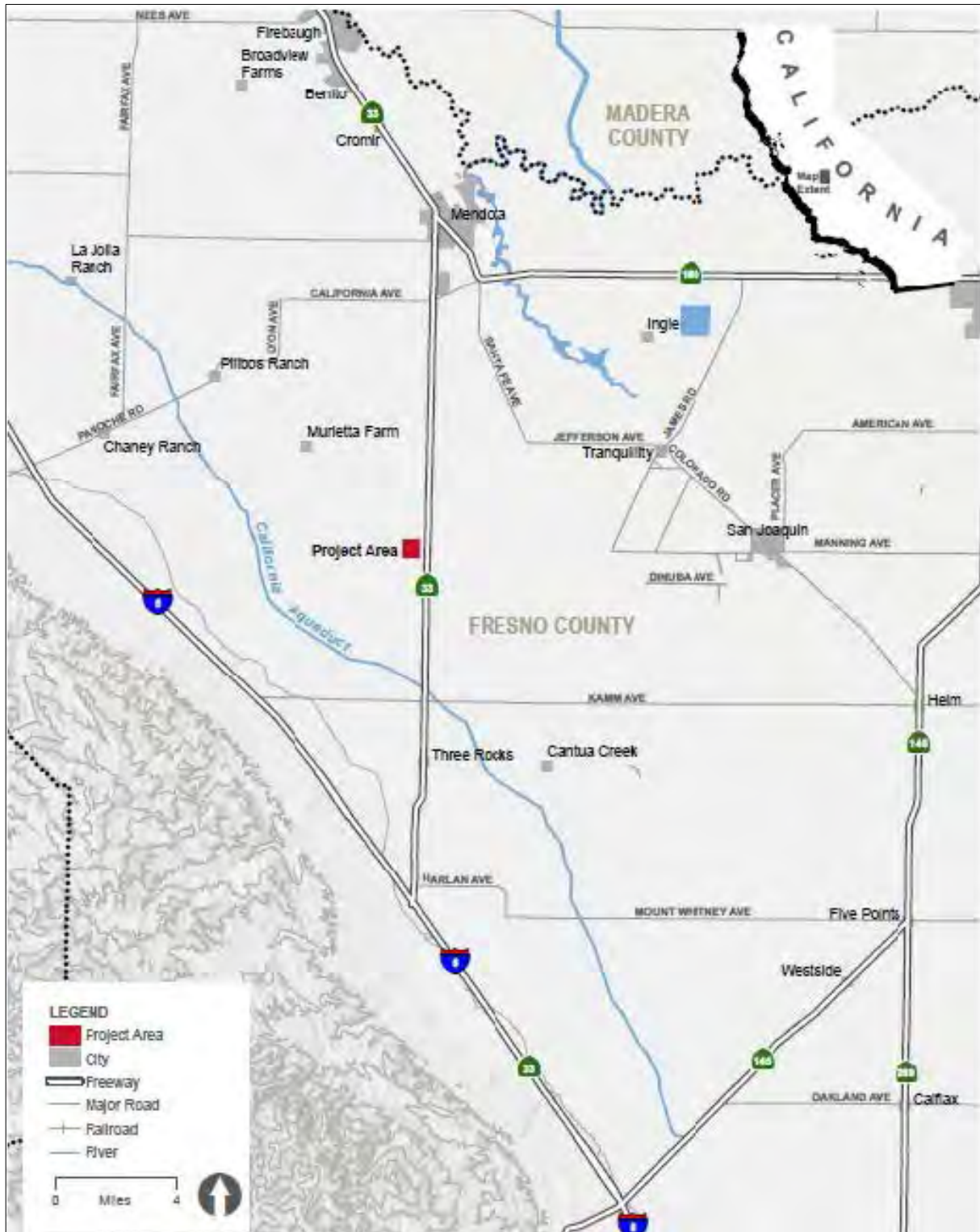
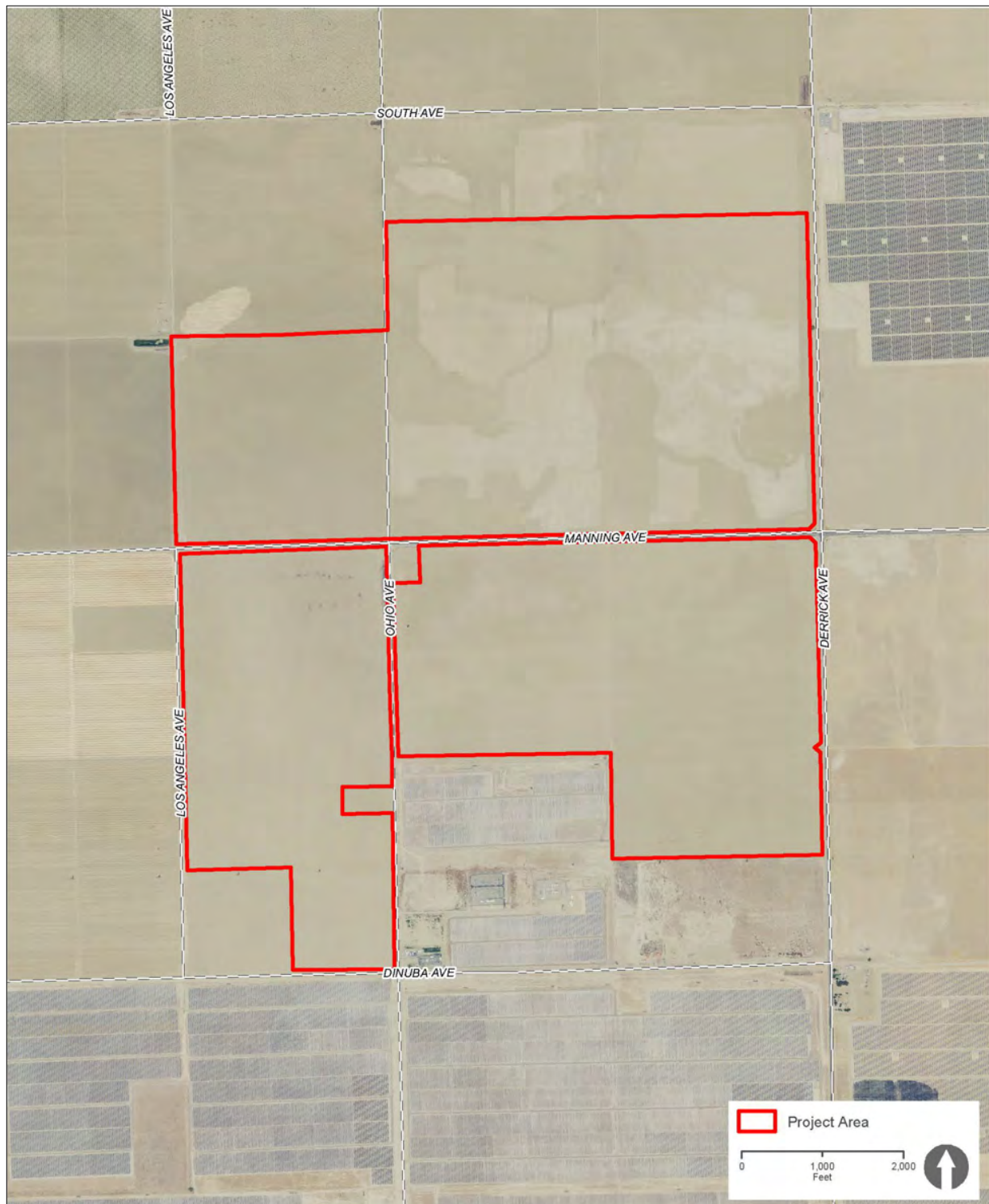


Figure 2. Project Site



5 SERVICE AND DELIVERY VEHICLES

Approximately 7,000 truck trips are anticipated for construction. The expected maintenance would generate little traffic during operations. Operations and maintenance vehicles would include light duty trucks (e.g., pickup, flatbed) and other light equipment for maintenance and module washing. Heavy equipment would not be utilized during normal operation. Large or heavy equipment may be brought to the facility infrequently for equipment repair or replacement or vegetation control.

6 ACCESS TO THE SITE

Access to the Project area would be via main entrances along West Manning Avenue and Highway 33 (South Derrick Avenue). The Applicant plans to utilize existing interior access roads, however these roads may be improved with the addition of an aggregate base or other native material with a soil stabilization material, if necessary. Interior and perimeter access routes would be approximately 20 feet wide.

7 PARKING

The areas surrounding the inverters and switchgear would be graveled and would have adequate space for parking for up to 4 employee vehicles during operations.

8 GOODS TO BE SOLD ON-SITE

No goods would be sold on-site. The Project's generation-tie (gen-tie) line would collect the energy from the solar arrays and transmit it from the Project substation to the Pacific Gas & Electric (PG&E)-owned Tranquility substation.

9 EQUIPMENT TO BE USED

The Project would include a solar energy generating facility, direct current (DC) electricity to AC electricity power inverters and transformers or power conditioning stations, a Project on-site substation, battery ESS, and a connection to the PG&E-owned Tranquility substation. Major Project features are described below and displayed on the submitted Site Plan.

Other Project components include access roads, perimeter fences, telecommunications, a meteorological data collection system, signage, lighting, stormwater facilities, and an operations and maintenance building. These components are also all discussed in detail below.

9.1 Photovoltaic Modules and Support Structures

The solar facility would consist of Project PV or solar cells mounted on modules that track the sun (Figure 3). The PV cells on the trackers convert sunlight into electricity. When modules are mounted on tracking devices, they are referred to as trackers or tracker blocks. The trackers are organized in rows in a uniform grid pattern or solar array. The proposed Project would have multiple solar arrays interconnected to form a utility-scale PV system.

Figure 3. Typical Tracker Panel and Pier Design

The modules may be constructed of glass encasing crystalline silicon, poly crystalline silicon, or thin film technology. The PV modules would be dark blue, almost black in color, with minimal light reflection. A plastic binding material and metal frame provides structural rigidity. The solar modules would be self-contained, durably constructed units designed to withstand exposure to the elements for a period of 35 years or greater. The solar modules deployed for use in the Project would be certified to comply with all industry standard quality testing. Modules would be electrically connected and grounded. The plant would be designed in accordance with local and state codes and regulations. The final panel selection would be determined at the detailed Project-engineering phase.

To support the trackers, the Project would utilize a single-axis tracking system designed to optimize power production of the modules by ensuring proper orientation to the sun both daily and seasonally. Metal piers driven into the ground by a pile-driving machine support the single-axis tracking systems. Pier placement begins with a precise surveyed layout, ensuring proper positioning of remaining tracker assembly parts. Affixed to the top of each pier is a pier cap and bearing assembly that supports and allows proper movement of the torque tube assembly. Single-axis tracking systems require a drive system that provides directional force to the torque tube. This can be accomplished with either a mechanical or hydraulic drive arm and tube assembly that “pushes and pulls” the torque arm through its range of motion or by a geared assembly that redirects rotational force to the tubes. Both approaches require a small geared

motor or hydraulic system mounted on a pile support or pad strong enough to move the system through its daily range of motions.

The trackers would be separated by distances to accommodate maintenance personnel and design parameters that meet applicable Fresno County fire safety requirements. Modules would be organized in rows in a uniform grid pattern, with each row separated by approximately 15-25 feet (from post to post). The module and tracker features allow for a natural light regime between and under the modules, supporting the co-management of solar energy generation, agriculture, and wildlife.

9.2 Power Conditioning Stations (Inverters and Transformers)

Individual PV tracker panels would be connected together in series to create a “string” of trackers carrying DC electricity using a combiner box. Inverters in the power conditioning stations (PCS) convert the DC electricity produced by the trackers to AC electricity. The PCS transformers then accumulate the AC electricity to the appropriate collection level voltage (34.5 kilovolt [kV]) for movement to the Project substation and eventual delivery to the electrical grid. The number of trackers connected to each PCS would vary with module output relative to inverter size and desired output from the PCS.

The Project would require approximately 62 PCS, depending on final design details. The number of trackers connected to each of the PCS varies with tracker output relative to inverter size and desired output from the PCS. The PCS would be placed strategically throughout the Project site and the inverters and transformers, as well as other electrical equipment that comprises each PCS, would be contained within electrical equipment enclosures.

The Project is proposing to use Power Electronics HEM 3430 inverters and transformers, or equivalent. Each inverter and transformer would be installed as per manufacturer’s requirements.

9.3 Substation

A substation located in the southwest corner of the Project area, adjacent to the ESS, would be constructed as part of the Project (as shown on the Site Plan). The Project substation would include transformers, breakers, switches, meters, and related equipment. All interconnection equipment, including the control room if required, would be installed aboveground and within the footprint of the substation. The overall footprint of the Project substation is anticipated to be approximately 500 feet by 500 feet and up to 175 feet in height.

The Project substation may also contain a control room building approximately 40 feet by 40 feet with an overall height of less than 15 feet. The substation would be surrounded by an 8-foot barbed wire chain-link fence to comply with electrical codes. The control room may be outside the fenced area.

The substation must have access to communication systems in the area to comply with Federal Energy Regulatory Commission/California Independent System Operator utility monitoring and control requirements. Compliance may be accomplished by underground lines, aboveground lines, or wirelessly.

9.4 Energy Storage System

ESS components are advantageous for renewable energy projects because they allow energy to be reliably fed to the grid from an otherwise intermittent energy production source. The ESS

is expected to be either located adjacent to the substation or distributed throughout the solar array at the inverter equipment pads or tracker rows. If batteries are located adjacent to the substation, they would be contained within either steel enclosures similar to a refrigerator-sized cabinet. The color of the metal enclosure has not yet been determined; it typically varies by manufacturer. If distributed throughout the solar array, the ESS would likely be contained within metal housings and electrically connected to the inverters at each of the equipment pads.

Up to 4 acres may be utilized for the ESS. The key components of the ESS are described below.

- **Batteries.** Individual lithium ion cells form the core of the ESS. Cells are assembled either in series or parallel connection, in sealed battery modules. The battery modules would be installed in self-supporting racks electrically connected either in series or parallel to each other. The operating rack-level DC voltage currently ranges between 700 and 1,500 volts. The individual battery racks are connected in series or a parallel configuration to deliver the battery storage system energy and power rating.
- **Battery Storage System Enclosure and Controller.** The battery storage system enclosure would house the batteries described above, as well as the battery storage system controller. The battery storage system controller is a multilevel control system designed to provide a hierarchical system of controls for the battery modules, PCS, medium voltage system, and up to the point of connection with the electrical grid. The controllers ensure that the battery storage system effectively mimics conventional turbine generators when responding to grid emergency conditions. The battery storage system enclosure would also house required heating, ventilation, and air conditioning (HVAC) and fire protection systems.
- **DC/DC Converter.** In a DC-coupled system, the DC/DC converter allows the connection of the battery storage system to the DC side of the PV inverter. The DC/DC converter manages the battery and PV bus voltage and provides appropriate protections for the PV inverter.
- **PCS - Inverter.** The PCS consists of an inverter, protection equipment, circuit breakers, air filter equipment, equipment terminals, and cabling. Electricity is transferred from the PV array (or power grid) to the Project batteries during a battery charging cycle and from the Project batteries to the power grid during a battery discharge cycle. The inverter is bi-directional, with the ability to convert power from AC to DC when the energy is transferred from the grid to the battery and from DC to AC when the energy is transferred from the battery to the grid. The inverter DC operating voltage would be between 700 and 1,500 volts, with a typical power rating of approximately 3,000 kilowatts. The inverter AC operating voltage may be approximately 630 volts AC nominal. Voltage is increased to medium voltage levels (typically approximately 13-34.5 kV) when combined with a medium voltage transformer. Voltage and power ratings are specific to the equipment manufacturer and product model. The installed equipment would be selected at a later date and therefore is subject to change.
- **Medium Voltage Transformer.** A separate medium voltage transformer may be present if not integrated into the inverter skid. This would be a pad-mounted transformer used to increase voltage on the AC side of the inverter from low to medium voltage. Medium voltage transformers are used to increase the efficiency of power transmission, associated with reduced resistive power losses higher voltage.

The ESS would likely use one of several available lithium ion technologies, though alternatives may be considered (such as flow batteries or fly-wheel technology) given continuing rapid technological change in the battery industry. In general, a lithium ion battery is a rechargeable battery consisting of three major functional components: a positive electrode made from metal oxide, a negative electrode made from carbon, and an electrolyte made from lithium salt. Lithium ions move from negative to positive electrodes during discharging and in the opposite direction when charging. Five major lithium ion battery sub-chemistries are commercially available:

- Lithium nickel cobalt aluminum (NCA)
- Lithium nickel manganese cobalt (NMC)
- Lithium manganese oxide (LMO)
- Lithium titanate oxide (LTO)
- Lithium iron phosphate (LFP)

Selection of the lithium ion sub-chemistry for the Project would take into consideration various technical factors, including safety, life span, energy performance, and cost.

The proposed ESS would be designed, constructed, operated, and maintained in accordance with existing federal, state, and local regulations for health and safety, including the 2016 California Fire Code. The Applicant would select batteries or ESS providers that comply with the application-specific codes, standards, and regulations for the siting, construction, and operation of lithium-ion stationary ESS.

The configuration of the safety system would be determined based on site-specific environmental factors and associated fire response strategy. The ESS would contain a safety system that would be triggered automatically when the system senses imminent fire danger. The fire safety system inside each enclosure would shut down the unit if any hazard indicators are detected. If the safety system detects a potential issue as detected by the smoke and temperature sensors, the batteries would be automatically deenergized by opening the electrical contacts, and HVAC units and fans are shut off. The enclosure wall is designed to contain the fire for at least 2 hours, providing sufficient time for the fire to die down and allow the system to cool. Fire responders are trained to monitor fire from a safe distance using infrared cameras until temperature of the affected enclosure cools to ambient temperature.

9.5 Telecommunications

The Project would require connection with the existing local telecommunication service. A telecommunication line is comprised of fiber optic cable and/or 25-pair telephone line, which would be installed above and below ground, either attached to existing distribution lines or installed immediately adjacent to the Project substation. The telecommunication routes would use a combination of existing poles or new poles and below ground installations. Lines would be placed within utility franchise easements to the extent feasible. The point of interconnection to the existing telecommunication facilities would be in a small telephone/fiber optic vault.

Interconnection to the Project would be within the Project substation. Below ground installations are usually installed 24-48 inches below grade. Aboveground lines are typically placed 6 feet below existing distribution lines or on new, adjacent wooden poles. Telecommunications may also be transmitted by a small wireless antenna, which would be placed at the Project substation.

9.6 Meteorological Data Collection System

The Project would require several meteorological data collection systems. The systems would include a variety of instruments to collect meteorological data, which would be mounted at various locations throughout the facility. The meteorological data would be collected at the level of the solar panels or approximately 10 feet above the ground.

10 SUPPLIES, MATERIALS, AND STORAGE

An emergency generator for use in the event that the regional transmission system fails would be located at the substation; this emergency generator would provide emergency power until the regional transmission system restores operations. The generator would be powered by propane or diesel and is estimated to be 49 kilowatts or less in size. An approximately 220-gallon fuel tank would be immediately adjacent to the generator. Other materials and supplies would generally not be stored onsite.

11 DOES THE USE CAUSE AN UNSIGHTLY APPEARANCE

Operations of the project would not cause an unsightly appearance or generate substantial noise, glare, dust, or odors.

11.1 Noise

Operation and maintenance of the Project would generate minimal noise, primarily from fans used to cool electrical equipment and transformers. Considering the distance to the nearest residence, it is not expected that fans or transformers would be audible from any residential area. The inverters would be placed away from the site boundaries to ensure that off-site areas do not experience noise levels exceeding County standards described in the Fresno County Noise Control Ordinance (Fresno County Code 8.40).

11.2 Glare and Lighting

The Project would use solar panels that have a low profile (typically 6 feet high, but generally no more than 13 feet high at the highest point during the day) to minimize visual impacts. These solar panels are designed to be anti-reflective.

Nighttime lighting impacts would be minimized by including only small lighting features that are equipped with on/off switches or motion detectors. The lighting impacts from such fixtures would be similar to those of domestic fixtures on local homes.

11.3 Dust

Onsite roads would be constructed with a scarified and compacted subgrade and coated to create a dustless or durable surface or surfaced with compacted gravel. At the footing for the PCS pads, existing soil would be scarified and recompacted following recommendations of the geotechnical report. Water would be used for dust control as needed during construction.

11.4 Odor

The Project is not anticipated to generate any odors.

12 SOLID OR LIQUID WASTES TO BE PRODUCED

Sanitary facilities for operations would be provided through the septic system at the proposed operations and maintenance building. Other wastes from equipment replacement or other work would be minimal. Wastes would be removed from the site at the end of the day, or as needed, and disposed of at approved facilities.

13 WATER USE

During construction, 198,000,000 gallons of water are anticipated to be required.

During operations, minimal water would be required for panel washing activities and general maintenance. The need for panel washing would be infrequent (e.g., months to years between washings) and determined based on operating considerations, including actual soiling of the PV panels and any expected benefit from cleaning. Should cleaning be necessary, demineralized water would be sprayed on the PV panels to remove dust or a dry cleaning method may be used.

13.1 Source of Water

Water would be supplied by the onsite well or would be trucked in from a municipal source, as needed.

14 SIGNAGE AND ADVERTISING

No advertising is proposed as part of the Project. Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. Signage is proposed to be installed on the fence or ground mounted in the vicinity of the main entry gates. Signage would identify the Project operator and owner and would provide emergency contact information. Small-scale signage would also be posted at the main entry gates and intermittently along the perimeter fencing on all exterior parcel boundaries, to indicate “No Trespassing” and “Private Property” for security purposes. All signage would conform to Fresno County signage requirements.

15 EXISTING BUILDINGS AND NEW BUILDINGS TO BE CONSTRUCTED

New buildings and structures would be constructed and used in operations, including a project substation and an operations and maintenance building.

15.1 Substation

The overall footprint of the Project substation is anticipated to be approximately 500 feet by 500 feet and up to 175 feet in height.

The Project substation may also contain a control room building approximately 40 feet by 40 feet with an overall height of less than 15 feet.

15.2 Operations and Maintenance Building

Operations and maintenance activities would take place in a new operations and maintenance building located near the southwest corner of the Project area (as shown on the Site Plan). This building would be approximately 50 feet by 50 feet. Sanitary facilities for operations would be provided through the proposed operations and maintenance building to include a septic system. No additional wastewater or septic system facilities would be required.

16 BUILDINGS USED IN THE OPERATION

The substation and operations and maintenance building would be used during operations.

17 OUTDOOR LIGHTING AND OUTDOOR SOUND AMPLIFICATION

Limited lighting is proposed on the Project site. Lighting would be used from dusk to dawn. Project lighting would be installed to allow for ongoing maintenance and security. Low-level lighting may be installed at entry and egress gates and at other strategic locations around the facility. Manually controlled lights would be installed at equipment pads and substations. All Project lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to applicable Fresno County outdoor lighting codes.

Nighttime lighting impacts would be minimized by including only small lighting features that are equipped with on/off switches or motion detectors. The lighting impacts from such fixtures would be similar to those of domestic fixtures on local homes.

No outdoor sound amplification system is included as part of the Project.

18 LANDSCAPING AND FENCING

Chain-link fencing is proposed along the perimeter of the Project area. One foot of three-strand concertina wire may also be added to the perimeter fence if deemed necessary. The substation would be surrounded by an 8-foot barbed wire chain-link fence to comply with electrical codes. Access gates would be provided at each site entry road. No Project landscaping is proposed.

19 ADDITIONAL PROJECT OPERATIONS INFORMATION

19.1 Stormwater Facilities

The site drainage is designed to follow the natural drainage pattern, and none of the on-site facilities, including fences and panel posts, should prevent stormwater flow. Therefore, the Applicant anticipates that the Project would have very limited impact on site drainage. No on-site detention facilities are planned.

19.2 Security

Security would be maintained through installation of a chain-link fence, which would include 1-foot of three-strand concertina wire along the perimeter of the site. Existing barbed wire fencing would be replaced with the Project perimeter fencing as needed. Infrared security cameras, motion detectors, and/or other similar technology may also be installed to allow for monitoring of the Project site through review of live, 24/7 footage. A security company may also be contracted by the Applicant for security purposes during construction and operation. Should the security system detect the presence of unauthorized personnel, a security representative would be dispatched to the facility, and appropriate local authorities would be notified.

19.3 Vegetation Management

Combustible vegetation or agricultural products on and around the Project boundary would be actively managed by the Project owner or its affiliates during both the construction and operation phases of the Project to minimize fire risk. Combustible products would be either

limited in height or removed. Additionally, the Project would include firebreaks around the site boundary in the form of access roads subject to Fresno County standards.

19.4 Emergency Response

An Emergency Response Plan would be included for construction and operations of the Project. The Emergency Response Plan is used to train local emergency response personnel during development and operations of the facility. The plan would be completed in accordance with existing state regulations (Health and Safety Code § 25504(b); 19 California Code of Regulations [CCR] §2731; 22 CCR §66262.34(a)(4)). The contents of the Emergency Response Plan would comply with existing state regulations and include the following components and involve training for the local fire responders:

- Developed in consultation with Fire Department and ESS Supplier
- Defined roles and responsibilities
- Potential emergency scenarios including fire
- On-site training of fire personnel and on-site Project staff
- Training for local first responders

20 IDENTIFY ALL OWNERS, OFFICERS AND/OR BOARD MEMBERS FOR EACH APPLICATION SUBMITTED

Please refer to Table 1 for a list of Luna Valley Solar I, LLC officers and members.

Table 1. Luna Valley Solar I, LLC Officers and Members

Name	Title	Title Role
Cornelius, Craig	President	Officer
Trenary, Ross	Vice President & Treasurer	Officer
Hickok, Randall	Vice President	Officer
Magner, Brian	Vice President	Officer
Menconi, Kathryn M.	Vice President	Officer
Ryder, Steven	Vice President	Officer
Samuelian, Mitch	Vice President	Officer
Stavish, Michael	Vice President	Officer
Sullivan, Patrick	Vice President	Officer
Woody, John	Vice President	Officer
Hein, Jennifer	Secretary	Officer
Raven Solar Parent Company, LLC	Sole Member	Sole Member

LUNA VALLEY SOLAR PROJECT

CEQA Findings of Fact

EIR No. 7813

CUP No. 3671

SCH No. 2020080488

Prepared for
County of Fresno Department of
Public Works and Planning

September 2021



LUNA VALLEY SOLAR PROJECT

CEQA Findings of Fact

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CUP No. 3671

SCH No. 2020080488

Prepared for
County of Fresno Department of Public
Works and Planning

September 2021

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202000231

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CHAPTER 1

Statement of Findings

1.1 Introduction

The findings and determinations contained herein are based on competent and substantial evidence, both oral and written, contained in the record relating to the Luna Valley Solar Project (Project) and the Environmental Impact Report (EIR) prepared for the Project (EIR No. 7813; State Clearinghouse No. 2020080488). These findings and determinations constitute the independent findings and determinations by the County of Fresno (County) in all respects and are fully and completely supported by substantial evidence in the record as a whole.

Although the findings below identify specific pages within the Draft and Final EIRs in support of various conclusions reached below, the County incorporates by reference and adopts as its own, the reasoning set forth in both environmental documents, and thus relies on that reasoning, even where not specifically mentioned or cited below, in reaching the conclusions set forth below, except where additional evidence is specifically mentioned. The County further intends that if these findings fail to cross reference or incorporate by reference any other part of these findings, any finding required or permitted to be made by the County with respect to any particular subject matter of the Project must be deemed made if it appears in any portion of these findings or findings elsewhere in the record.

The County proposes to approve the Luna Valley Solar Project (Project) proposed by Luna Valley Solar I, LLC (Applicant). The Applicant has applied to the Fresno County Department of Public Works and Planning an Unclassified Conditional Use Permit (CUP) to construct, operate, maintain, and decommission a solar photovoltaic (PV) electricity-generating facility and associated infrastructure. The Project would consist of three major components: The solar facility, energy storage system, and the Pacific Gas and Electric Company (PG&E) infrastructure necessary to interconnect the Project to the grid at the existing PG&E Tranquillity Switching Station. The Project would generate up to 200 megawatts alternating current (MWac)¹ on approximately 1,300 acres of Westlands Water District (WWD)-owned and Applicant-owned lands in unincorporated Fresno County adjacent to and north of the existing Tranquillity Solar Project. PG&E owns the Tranquillity Switching Station parcel.

¹ PV panel capacity generally is measured in direct current (DC) watts; however, because the DC output from panels must be converted to alternating current (AC) before being distributed on the electric grid, EIR No. 7813 reports expected capacity in terms of AC watts. Although preliminary estimates indicate that 200 MWac would be the expected nominal generating capacity of the Project, the actual generating capacity would depend on the efficiency of the PV panels available at the time of construction and the layout and tracking technology approved.

In accordance with CEQA and its implementing regulations (the “CEQA Guidelines”),² the County published the Draft Environmental Impact Report (DEIR) for the Project on May 7, 2021. The DEIR documented the County’s analysis of the potential environmental impacts of implementing the Project. The DEIR was circulated for public review and comment for a period of 45 days that ended June 21, 2021. During and the review period, two comment letters were received on the DEIR.

The County reviewed the letters to identify specific environmental concerns and to determine whether any additional environmental analysis would be required to respond to issues raised in the comments. The County determined that the letters raised no new significant issues, and responses to all substantive comments received on the DEIR were prepared and included in the Final EIR (FEIR), which was made available to the public on August 17, 2021.

Section 15132 of the CEQA Guidelines requires an FEIR to include:

- The DEIR or a revision of the draft;
- Comments and recommendations received on the DEIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the DEIR;
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency.

The County has reviewed the FEIR prepared for this Project and has determined that it contains each of the items required by CEQA Guidelines Section 15132. Therefore, the County certifies that the FEIR has been completed in compliance with CEQA. Following certification of the FEIR, the County will evaluate the action it will take with regard to the Project, which could include approving the Project as proposed by the Applicant, approving the Project with modifications, approving an alternative to reflect changes or concerns identified as a result of this CEQA review, or denying the Project.

The documents and other materials that constitute the record of the proceedings on which the County’s decision is based are located at the County of Fresno, Public Works and Planning Department, 2220 Tulare Street, Suite A, Fresno, California. The custodian for these documents and materials is County of Fresno, Department of Public Works and Planning, Development Services and Capital Projects Division. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e).

² Pub. Res. Code §21000 et seq.; 14 Cal. Code Regs. §15000 et seq.

1.2 Description of the Project

1.2.1 Project Location

The Project site is located approximately 11 miles east of Interstate 5 (I-5), approximately 9 miles northeast of Tranquillity and adjacent to and west of State Route 33 (SR-33), in unincorporated Fresno County (County). The Project site is comprised of approximately 1,300 acres of Westlands Water District-owned and Applicant-owned lands, and would encompass the 16 parcels generally bounded by West South Avenue to the north, SR-33 to the east, Dinuba Avenue to the south, and South San Bernardino Avenue to the west. West Manning Avenue bisects the site from east to west; South Ohio Avenue bisects it from north to south. PG&E owns the Tranquillity Switching Station parcel. All of the parcels are within the jurisdictional boundaries of Fresno County, and located within Sections 23, 24, 25, and 26 of Township 15 South and Range 14 East of the Mt. Diablo Baseline and Meridian. (DEIR, pp. ES-2, 2-2)

1.2.2 Project Objectives

The following Project Objectives have been identified (DEIR, pp. ES-5, 2-4):

1. Establish a PV solar power-generating facility of a sufficient size and configuration to produce up to 200 MW_{AC} of electricity in a cost-competitive manner;
2. Assist California utilities in meeting their obligations under California's Renewable Portfolio Standard (RPS) Program and Senate Bill 100 (SB 100), which calls for 100 percent of all electricity sold in California to come from carbon-free resources by 2045, including 60 percent renewables by 2030;
3. Assist California utilities in meeting their obligations under the California Public Utilities Commission's Energy Storage Framework and Design Program;
4. Provide for the economically viable, commercial financeable, and environmentally beneficial use of the site's physically impaired agricultural capacity;
5. Provide a utility-scale solar generation facility on highly disturbed lands that provide minimal habitat value for wildlife;
6. Develop a site in proximity to transmission infrastructure in order to minimize environmental impacts;
7. Facilitate grid integration of intermittent and variable PV solar generation and minimize line losses associated with off-site storage by collocating battery storage at the Project site; and
8. Create jobs and tax revenue for Fresno County.

1.2.3 Project Description

The Project as proposed and evaluated in the EIR consists of the following key components (DEIR, pp. 1-1, 2-1, 2-4, 2-6, 2-8, 2-11, 2-14, and 2-15):

1. Solar Facility, including:

- a. Arrays of solar PV modules (or panels) and support structures. The facility would include inverters, transformers, and a 34.5 kilovolt (kV) overhead collection system;
 - b. On-site electrical substation. The substation would include transformers, breakers, bus work, site control center building, backup power, and associated substation equipment, as well as a dedicated perimeter fence; and
 - c. Other necessary infrastructure would include a permanent operation and maintenance building, meteorological data system, telecommunications infrastructure, access roads, and security fencing.
2. Energy Storage System, including:
- a. The battery energy storage system would be located either adjacent to the substation or distributed throughout the solar facility.
 - b. Key components of the energy storage system include the batteries, enclosures, controllers, converters, inverters, and transformers.
 - c. Sealed battery modules would be installed in self-supporting racks within enclosures housing any required heating, ventilation, and air conditioning (HVAC) and fire protection systems. One of several available lithium ion technologies is proposed for the battery storage modules.
3. Generation Tie-Line (Gen-tie Line), including:
- a. The solar facility would include the construction by PG&E of a new, approximately 1,300-foot-long overhead 230 kV gen-tie line from the on-site substation that would connect to the existing PG&E-owned Tranquillity Switching Station.
 - b. Approximately two tubular steel poles up to 140 feet in height would be constructed, owned and operated by the Luna Valley Solar Project, while three to five poles would be constructed, owned and operated by PG&E.
 - c. The PG&E transmission line also would include underground fiber optic line for communications.

Fresno County has discretionary authority over the primary Project proposal. To implement this Project, the Applicant would need to obtain the following discretionary permits/approvals:

- Fresno County – Unclassified Conditional Use Permit (UCUP); Variance for gen-tie pole height; Lot Line Adjustment, Lot Merger, Subdivision Map, and/or a Tentative Parcel Map; and Site Plan Review for the UCUP to ensure compliance with County Requirements relating to design of parking and circulation, driveway, access, grading and drainage, fire protection, lighting, etc.
- Central Valley Regional Water Quality Control Board – General Permit for Discharges of Storm Water Associated with Construction Activity, Construction General Permit Order 2009-0009-DWQ, Section 401 Clean Water Act Permit, if required.
- California Department of Fish and Wildlife – Streambed Alteration Agreement, if required; Incidental Take Permit for state-listed species (ITP), if the Applicant elects to obtain one.
- California Public Utilities Commission – authorizations pursuant to General Order 131-D may be required for PG&E’s expansion of the Tranquillity Switching Station and construction of the gen-tie line.

- United States Army Corps of Engineers – Section 404 Clean Water Act Permit, if required.
- United States Fish and Wildlife Services – ITP for federally-listed species, if required.
- Additional Fresno County approvals may be required if work is to be performed within a County right-of-way (i.e., an encroachment permit from the Road Maintenance and Operations Division of the Department of Public Works and Planning) or for the erection, demolition, or conversion of any building or structure (i.e., building and grading permits).
- San Joaquin Valley Unified Air Pollution Control District: District approval of Indirect Source Review, stationary and/or mobile sources may be required.

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CHAPTER 2

Record of Proceedings

In addition to this Statement of Findings, in accordance with Public Resources Code Section 21167.6(e), the record of proceedings for the Project includes, but is not limited to, the following elements:

- The Notice of Preparation (NOP) and all other public notices issued by the County in conjunction with the Project;
- The May 2021 DEIR for the Project;
- The August 2021 FEIR for the Project;
- The Mitigation Monitoring and Reporting Program for the Project (Staff Report Exhibit 1);
- All reports, studies, memoranda, staff reports, or other documents related to the Project prepared by the County, or consultants to the County with respect to the County's compliance with the requirements of CEQA and with respect to the County's action on the Project;
- All documents submitted to the County by other public agencies, the Applicant or the Applicant's consultants, or members of the public in connection with the Project, up through the close of the public hearing;
- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the Project; and
- Any other materials required for the record of proceedings by Public Resources Code Section 21167.6(e).

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CHAPTER 3

Findings Required Under CEQA

These findings have been prepared in accordance with CEQA and the CEQA Guidelines. Public Resources Code Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]” Section 21002 goes on to state, “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

The principles in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. Pursuant to CEQA Guidelines Section 15091, the approving agency must issue a written finding reaching one or more of three permissible conclusions for each significant environmental effect identified in an EIR for a project:

- Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.
- Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

The County's findings with respect to the Project's significant effects and mitigation measures are set forth below. The discussion below does not attempt to describe the full analysis of each environmental impact contained in the EIR. Instead, the discussion summarizes each potentially significant impact, describes the applicable mitigation measures identified in the FEIR and adopted by the County, and states the County's findings on the significance of each impact after imposition of the adopted mitigation measures. In making these findings, the County ratifies, adopts, and incorporates into these findings the analysis and explanation in the FEIR and the determinations and conclusions of the FEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

CEQA does not require a lead agency to make individual findings for impacts that are determined to be less than significant without mitigation (CEQA Guidelines §15091(a)). Impacts associated with the Project deemed to be less than significant prior to mitigation are discussed in detail in the

EIR (see, e.g., DEIR, p. ES-7 and pp., ES-9 through ES-20). The CEQA Guidelines Appendix G Environmental checklist identifies multiple considerations/questions for each resource area. The answer to all questions for the following resource areas was either “no impact” or that impacts would be less than significant:

- Aesthetics (including cumulative impacts)
- Agriculture and Forestry Resources (including cumulative impacts)
- Energy (including cumulative impacts)
- Greenhouse Gas Emissions (including cumulative impacts)
- Hazards and Hazardous Materials (including cumulative impacts)
- Land Use and Planning (including cumulative impacts)
- Mineral Resources (including cumulative impacts)
- Public Services (including cumulative impacts)
- Population and Housing (including cumulative impacts)
- Recreation (including cumulative impacts)
- Wildfire (including cumulative impacts)

For the remaining resources, impact conclusions were a combination of no impact, less than significant impact, and less than significant with mitigation incorporated. Resource impacts found to be less than significant with mitigation incorporated are addressed in Section 3.1. Resource impacts found to be a combination of no impact or less than significant without mitigation are as follows:

- Air Quality – The Project would not contribute to violations of ambient air quality standards during operation and maintenance activities (Less than Significant Impact)
- Air Quality – The Project could expose sensitive receptors to substantial pollutant concentrations. (Less than Significant Impact)
- Air Quality – The Project could generate odor or dust emissions. (Less than Significant Impact)
- Air Quality – Project construction and decommissioning activities would not expose sensitive receptors to risk of Valley Fever. (Less than Significant Impact)
- Biological Resources – The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS (No Impact)
- Biological Resources – The Project would not have a substantial adverse effect on state or federally protected wetlands. (No Impact)
- Biological Resources – Construction could interfere substantially with native resident or migratory wildlife corridors. (Less than Significant Impact)
- Biological Resources – The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)

- Geology, Soils, and Paleontological Resources – The Project would not cause substantial adverse effects involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or based on other substantial evidence of a known fault. (No Impact)
- Geology, Soils, and Paleontological Resources – The Project would not cause adverse effects including risk of loss, injury, or death related to strong seismic groundshaking. (Less than Significant Impact)
- Geology, Soils, and Paleontological Resources – The Project would not cause adverse effects including risk of loss, injury, or death related to seismic-related ground failure, including liquefaction. (Less than Significant Impact)
- Geology, Soils, and Paleontological Resources – The Project would not result in substantial soil erosion or loss of topsoil. (Less than Significant Impact)
- Geology, Soils, and Paleontological Resources – The Project would not cause adverse effects including risk of loss, injury, or death related to landslides. (No Impact)
- Geology, Soils, and Paleontological Resources – The Project would not be located on unstable soils or become unstable as a result of the Project including landslides, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant Impact)
- Geology, Soils, and Paleontological Resources – The Project could be located on expansive or corrosive soils, creating substantial direct or indirect risks to life or property. (Less than Significant Impact)
- Geology, Soils, and Paleontological Resources – The Project site would not have soils incapable of accommodating a septic or alternative waste water disposal system. (Less than Significant Impact)
- Hazards and Hazardous Materials – The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant Impact)
- Hazards and Hazardous Materials – The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. (Less than Significant Impact)
- Hazards and Hazardous Materials – The project would not emit hazardous emissions or handle hazardous substances or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school. (No Impact)
- Hazards and Hazardous Materials – The project would not 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 not create a significant hazard to the public or the environment. (No Impact)
- Hazards and Hazardous Materials – The project is not located within an airport land use plan or within two miles of a public use airport, and so would not result in a safety hazard for people residing or working in the project area. (No Impact)
- Hazards and Hazardous Materials – Whether the Project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (No Impact)

- Hydrology and Water Quality – The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Less than Significant Impact)
- Hydrology and Water Quality – The Project would not substantially alter the drainage pattern of the site or area in a manner which would result in substantial erosion or siltation, flooding, exceed the capacity of stormwater drainage systems, provide additional sources of polluted runoff, or impede or redirect flood flows. (Less than Significant Impact)
- Hydrology and Water Quality – The Project would not be located in a flood hazard, tsunami, or seiche zone. (No Impact)
- Noise and Acoustics – Project activities could expose people and/or structures to vibration levels. (Less than Significant Impact)
- Noise and Acoustics – The project is not located within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public use airport, and so would not expose people residing or working in the project area to excessive noise levels. (No Impact)
- Transportation – The Project would not conflict or be inconsistent with CEQA Guidelines Section 15074.3(b). (Less than Significant Impact)
- Transportation – The Project would not substantially increase hazards due to a geometric design feature or incompatible uses. (Less Than Significant Impact)
- Transportation – The Project would not result in inadequate emergency access. (Less Than Significant Impact)
- Cumulative impacts to Air Quality, Biological Resources, Cultural and Tribal Resources, Geology, Soils, and Paleontological Resources, Hazards and Hazardous Materials, and Noise and Acoustics. (Regarding cumulative impacts to Hydrology and Water Quality, Utilities, and Transportation, see Section 3.1).

3.1 Findings of Fact

The County has reviewed the FEIR, which contains responses to comments on the DEIR, any text changes to the DEIR, and additional information. The County also has considered the entire record for this Project (see Section 1.3 of these Findings of Fact). On the basis of this review, the County hereby makes the following Findings of Fact regarding the significant effects of the Project pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091.

3.1.1 Air Quality Impacts

Impact 4.4-1: Criteria pollutant emissions during Project construction would conflict with the SJVAPCD's air quality plans.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Estimated emissions associated

with construction of the Project would exceed the annual SJVAPCD thresholds of significance for NO_x. (DEIR, p. 4.4-21). The Project would comply with SJVAPCD Rule 9510, Indirect Source Review, which requires large development projects to reduce exhaust emissions from construction equipment by 20 percent for NO_x. However, the Project would result in emissions of NO_x that would exceed the SJVAPCD's annual threshold for construction-generated NO_x; therefore, the Project would conflict or obstruction of implementation of the applicable SJVAPCD ozone plans. Implementation of Mitigation Measure 4.4-2 would reduce this significant short-term construction impact to a less-than-significant level by requiring all off-road equipment that is 100 horsepower or greater at the Project site to meet USEPA Tier 4 Final emission standards

Implement Mitigation Measure 4.4-2 (see Impact 4.4-2, below)

Impact 4.4-2: Construction and decommissioning activities associated with the Project would generate emissions that could contribute to violations of ambient air quality standards.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Estimated emissions associated with construction of the Project would exceed the annual SJVAPCD thresholds of significance for NO_x (DEIR, p. 4.4-21). The Project would comply with SJVAPCD Rule 9510, Indirect Source Review, which requires large development projects to reduce exhaust emissions from construction equipment by 20 percent for NO_x. However, the Project would result in emissions of NO_x that would exceed the SJVAPCD's 10 tons per year threshold. Implementation of Mitigation Measure 4.4-2 would reduce total maximum annual NO_x emissions to as low as 7.36 tons per year by requiring off-road equipment that is 100 horsepower or greater at the Project site to meet USEPA Tier 4 Final emission standards. Mitigation Measure 4.4-2 offers flexibility if some Tier 4 Final compliant equipment are not available during construction as long as it can be substantiated that the total Project emissions would not exceed 10 tons NO_x on a rolling 12-month average.

Mitigation Measure 4.4-2: *The Project owner shall require that all off-road diesel equipment with greater than 100 horsepower used at the Project site meet USEPA Tier 4 Final off-road emission standards or equivalent to reduce NO_x and diesel particulate matter emissions. In the event that it is determined that Tier 4 Final compliant equipment is not available for a specific piece or pieces of equipment with greater than 100 horsepower, the Project owner shall prepare an Emissions Reduction Plan to be submitted to the County for review and approval to substantiate that use of the available equipment that meet reduced emissions standards would not result in total Project emissions that would exceed 10 tons NO_x per rolling 12-month average using either the air emissions calculations prepared for the Environmental Impact Report or other air emissions calculations estimated using the CalEEMod emissions model. The Plan shall identify the piece(s) of construction equipment that meet reduced emission standards, including the horsepower, certified tier specification status, and the associated maximum rolling 12-month average NO_x emissions. As new or replacement construction equipment are required, the Project*

owner shall document each unit's horsepower, certified engine tier status, and associated emissions, consistent with the Plan prior to use on the Project.

3.1.2 Biological Resources Impacts

Impact 4.5-1: Project construction and decommissioning could have a substantial adverse direct or indirect impact on special-status species.

Impact 4.5-2: Project operation could have a substantial adverse direct or indirect impact on special-status species.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measures that will reduce the effects of the impact to a less-than-significant level.

A 20.4-acre community of crownscale was observed in the middle of the Project site, which was tilled in winter 2020 and its acreage may vary upon re-sprouting. If present at the time of construction, this community would be temporarily impacted during installation of solar arrays, or be permanently lost. Development and implementation of a Rare Plant Avoidance and Mitigation Plan would reduce the impact to a less-than-significant level.

San Joaquin kit fox was not detected in surveys of the Project site, and the active agricultural uses of the site and surrounding lands provide minimal habitat value for this species. The Project site is surrounded by other agricultural lands which could potentially support San Joaquin kit fox movement. While the agricultural lands on the site are not suitable denning habitat, pipes and culverts on the fringe of the site could serve as non-pupping den habitat. If present during construction, activities would have the potential to cause a significant adverse impact to San Joaquin kit fox either directly (e.g., through mortality or injury) or indirectly (e.g., disturbance from increased site activity). Preconstruction clearance surveys, fencing, and other minimization measures described in Mitigation Measures 4.5-1 and 4.5-2 would ensure that no San Joaquin kit foxes are impacted during construction (DEIR, pp. 4.5-25 through 4.5-28).

Burrowing owls are likely to occur on the Project site due to the presence of suitable burrow surrogates (pipes), prey and habitat. Winter surveys noted the presence of owl sign, including pellets and white wash. Thus, construction could result in impacts to burrowing owls through injury to owls, nest destruction, or the loss of owls within burrows. Adverse impacts, either direct or indirect, to the population of burrowing owls during construction would be considered significant. Preconstruction clearance surveys and other minimization measures as described in the following mitigation measures would reduce impacts to less than significant (DEIR, pp. 4.5-26 through 4.5-28).

Two adult Swainson's hawks were observed perched on power poles along the eastern boundary of the Project site during biological surveys (DEIR Appendix F1), and focused surveys recorded three active Swainson's hawk nests within approximately 1-mile of the Project site. Trees and artificial structures such as transmission poles that occur in the immediate vicinity provide nest sites or perch sites for Swainson's hawk or other raptors.

Construction activities initiated within the vicinity of an active Swainson's hawk or other raptor nest could disturb such birds that are nesting in the vicinity, thereby resulting in nest disturbance or abandonment. Implementation of the protective actions described in the following mitigation measures would ensure that no Swainson's hawks or other raptors are impacted during construction (DEIR, pp. 4.5-27, 4.5-28).

The following mitigation measures will be implemented to ensure that construction-related impacts to crownscale, San Joaquin kit foxes, burrowing owls, or Swainson's hawks are less than significant:

Mitigation Measure 4.5-1: Protection of Special-Status Species

Crownscale: *A qualified biologist shall survey the site prior to construction³ to identify the current extent of the crownscale rare plant community, and the Project owner shall develop a Rare Plant Avoidance and Mitigation Plan. The Rare Plant Avoidance and Mitigation Plan shall evaluate options for safeguarding the rare plant community, including potential avoidance, maintenance, fencing, restoration, transplantation or seed transfer, as well as monitoring and long-term management requirements.*

Prior to construction, the Project owner shall coordinate with Fresno County regarding the Project's impacts on crownscale. Fresno County shall be notified at least 10 days prior to construction in areas containing special-status plants to allow for the salvage of special-status plants or seed.

San Joaquin kit fox: *Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox (areas that have been disked within 12 months prior to the start of ground-disturbing activities are not considered suitable). Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the site is disturbed. If no potential San Joaquin kit fox dens are present, no further mitigation is required. If potential dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines §15364 consistent with the USFWS [1999] Standardized Recommendations for Protection of the San Joaquin Kit Fox) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities.*

If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:

- *If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction.*
- *If the qualified biologist determines that a potential non-natal den may be active, an on-site passive relocation program shall be implemented with prior approval from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one-way doors at burrow entrances,*

³ Construction activities include fence installation, vegetation removal, ground disturbance, grading, materials placement, assembly and installation of components, on-site vehicle traffic, and any other site activities associated with building the Project.

monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the Project boundary, the dens shall be hand-excavated as stated above for inactive dens.

Burrowing owl: *The Project owner shall have biological surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct pre-construction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been disturbed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 23 to 66 feet (7 to 20 meters) apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department.*

- *If active burrowing owl burrows are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within 330 feet from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by a qualified biologist. During the non-breeding (winter) season (September 1 to January 31), no ground-disturbing work shall be permitted within a buffer of 50 feet from the active burrow. Depending on the level of disturbance, a smaller buffer may be established by a qualified biologist based on the visibility and sensitivity responses of each individual burrowing owls or pairs.*
- *If burrow avoidance is infeasible during the non-breeding season or during the breeding season where resident owls have not yet begun egg laying or incubation or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with the CDFW (2012) Staff Report on Burrowing Owl Mitigation.*
- *If passive relocation is anticipated due to on-site burrowing owl populations, a qualified biologist shall prepare a Burrowing Owl Exclusion Plan in accordance with CDFW (2012) Staff Report on Burrowing Owl Mitigation.*

Mitigation Measure 4.5-2: Worker Environmental Awareness Training and Best Management Practices for Biological Resources

During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:

- *Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of*

sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting the crownscale, nesting birds protected under the MBTA, San Joaquin kit fox, Swainson's hawk, and the burrowing owl. The WEAP training shall indicate the appropriate steps to be taken if a special-status species is observed, which may include work stoppage and consultation with the CDFW and USFWS.

- *The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special-status species, under guidance of a biologist. Construction-related activities, vehicles and equipment outside of the impact zone shall be avoided. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.*
- *To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by construction personnel for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a species is trapped, the USFWS and/or CDFW shall be contacted immediately.*
- *All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected by construction personnel for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the qualified biologist. If the trapped animal is a special-status species, the USFWS and/or CDFW shall be consulted prior to relocation.*
- *Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected by construction personnel for the presence of wildlife prior to moving.*
- *Vehicular traffic shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited.*
- *A speed limit of 20 miles per hour shall be enforced within all construction areas.*
- *A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.*

- *Workers shall be prohibited from bringing pets (excluding service animals) to the Project site and from feeding wildlife in the vicinity.*
- *Intentional killing or collection of any wildlife species shall be prohibited.*

Mitigation Measure 4.5-3: Protection of Nesting Birds

If construction is scheduled to commence outside of nesting season (September 1 to January 31), no preconstruction surveys or additional measures are required for nesting birds, including raptors. During the nesting bird breeding season (February 1 to August 31), to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project site where vegetation removal or ground disturbance is planned. The survey shall be performed within the site and also include potential nest sites within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. If construction is halted for 14 days or more, the area shall be re-surveyed prior to re-initiating work.

Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.25-mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a qualified biologist in consultation with CDFW.

Impact 4.5-4: Construction could conflict with local policies or ordinances protecting biological resources.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. The Project site and immediate vicinity contain potentially suitable breeding, denning, or nesting habitat for wildlife species, including San Joaquin kit fox; burrowing owl and other raptors, including Swainson's hawk; and migratory birds, including loggerhead shrike. Implementation of the preconstruction wildlife surveys, worker environmental awareness and wildlife avoidance and protection measures described in Mitigation Measures 4.5-1 through 4.5-3 would avoid or minimize potential impacts to these species and ensure compliance with General Plan Goal OS-E.

Implement Mitigation Measure 4.5-1: Protection of Special-Status Species, Mitigation Measure 4.5-2: Worker Environmental Awareness Training and Best

**Management Practices for Biological Resources, and Mitigation Measure 4.5-3:
Protection of Nesting Birds.**

3.1.3 Cultural and Tribal Resources Impacts

Impact 4.6-1: Ground disturbing activities associated with the Project could cause a substantial adverse change in the significance of a newly-discovered historical or archaeological resource, as defined in CEQA Guidelines Section 15064.5.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Construction of the Project could impact previously unknown, buried archaeological resources. Results of records searches and field surveys identified no archaeological resources within the Project site. Additionally, geoarchaeological review characterized the Project site as having a low potential for discovering significant archaeological deposits. However, there nevertheless exists the possibility that buried archaeological resources may be encountered during ground disturbing activities (DEIR, p. 4.6-15). Retention of a qualified archaeologist and cultural resources awareness training, and establishing procedures in the event of inadvertent discovery of archaeological materials, impacts to historical and unique archaeological resources from construction of the Project would mitigate impacts to a less-than-significant level (DEIR, pp. 4.6-15, 4.6-16).

Mitigation Measure 4.6-1: Cultural Resources Awareness Training

The Project Applicant shall retain a qualified archaeologist to carry out all mitigation measures related to archaeological and historical resources.

Prior to the start of any ground-disturbing activities, the Project Applicant shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. A Native American-designated representative will be invited to attend and provide additional materials during each training. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed, retained by the Project construction contractor for the duration of Project construction to demonstrate attendance at the awareness training, and provided to the County upon the completion of Project construction.

Mitigation Measure 4.6-2: Inadvertent Discovery of Cultural Resources

In the event archaeological materials are encountered during Project activities, the Project construction contractor shall immediately cease any ground disturbing activities within 100 feet of the find. The qualified archaeologist (and a Native American-designated representative if the resource is Native American-related) shall evaluate the significance of the resources for California Register of Historical Resources eligibility and recommend appropriate treatment measures to the County

and the Applicant. Per CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall (in coordination with a Native American-designated representative if the resource is Native American-related) develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric, tribal cultural resources, or Native American in nature. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist with the County's agreement.

Impact 4.6-2: Ground disturbing activities associated with the Project could result in damage to previously unidentified human remains.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. While no human remains were discovered during the course of the archaeological and historical resources survey of the Project site, the possibility that such resources exist on the site cannot be completely ruled out; therefore, the impact is potentially significant (DEIR, p. 4.6-16). The following mitigation measure renders the impact less than significant.

Mitigation Measure 4.6-3: Inadvertent Discovery of Human Remains

If human remains are uncovered during Project activities, the Project owner shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended). The NAHC shall designate a Most Likely Descendant (MLD) for the remains per Public Resources Code Section 5097.98, and the Project Applicant shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further activity under the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98 with the MLD regarding their recommendation for the disposition of the remains, taking into account the possibility of multiple human remains.

Impact 4.6-3: Ground disturbing activities associated with the Project could cause a substantial adverse change to previously unknown archaeological resources that are also tribal cultural resources, as defined in Public Resources Code Section 21074(a).

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. A tribal consultation letter from the Santa Rosa Rancheria Tachi Yokut Tribe noted the area as sensitive due to tribal history and requested that monitors be present during all ground disturbance related to the Project. The results of the records search conducted at the SSJVIC identified two prehistoric archaeological isolates within 1-mile of the Project site, and five prehistoric archaeological isolates were identified during field survey of the Project site by Tetra Tech (2020). A letter from the NAHC stated that a review of the Sacred Lands File failed to identify any Native American resources in the vicinity of the Project.

The potential for tribal cultural resources has been identified through consultation with the Santa Rosa Rancheria, which noted a heightened sensitivity for tribal resources in the area. In light of the nature of the Project and the disturbed character of the site, types of tribal cultural resources, if any, are anticipated to be subsurface prehistoric archaeological resources, including human remains. As further described above, no such prehistoric resources have been documented within, or in the immediate vicinity of, the Project site. If not discovered prior to development, such resources could be damaged or destroyed through earthwork, ground disturbance, or other subsurface construction activities. Damage to or loss of tribal cultural resources would be a potentially significant impact. Implementation of Mitigation Measures 4.6-1, 4.6-2, 4.6-3, and 4.6-4 would ensure that any encountered archaeological resources that are considered tribal cultural resources would be appropriately addressed, thus reducing any potential impacts to a less-than-significant level (DEIR, pp. 4.6-18, 4.6-19).

Mitigation Measure 4.6-4: *In addition to implementing Mitigation Measures 4.6-1, 4.6-2, and 4.6-3, the Project owner shall retain a Secretary of the Interior-qualified archaeologist to prepare and implement a cultural resource monitoring plan (Plan) and coordinate and schedule Project archaeological monitors during Project construction. The plan will be submitted to the County for review and approval. The plan will include a requirement for monitoring of Project ground-disturbing activities of previously undisturbed soils by a qualified archaeologist and a Native American-designated monitor, if participating. The plan will include (but not be limited to) the following components:*

- *The identification and qualifications of person(s) responsible for conducting monitoring activities, including a request to the Native American tribe for a Native-American designated monitor;*
- *The identification of person(s) responsible for overseeing and directing the monitors;*
- *Monitoring protocols and procedures and the required format and content of monitoring logs;*
- *The schedule for submittal of monitoring logs and identification of person(s) responsible for review and approval of monitoring logs;*
- *A protocol for notifications in the event cultural resources are encountered, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);*
- *Methods to ensure the security of cultural resources sites; and*

- *A protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.*
- *Identify protocols and procedures for a final monitoring report that summarizes the duration of monitoring activities, all daily monitoring logs, any inadvertent discoveries, and associated reporting. This report will be submitted to the County and, once finalized, to the SSJVIC*

During the course of the construction monitoring, the archaeologist may adjust the frequency, from continuous to intermittent, of the monitoring based on the conditions and professional judgment regarding the potential to impact resources, with consideration of the judgement of the Native American-designated monitor.

3.1.4 Geology, Soils, and Paleontological Resources Impacts

Impact 4.8-7: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Because the surface up to 16 inches would have been disturbed regularly pursuant to on-site agricultural operations, the potential is low that surficial Holocene alluvial deposits at the Project site would yield significant paleontological resources. Project-related excavation to install the steel supports for the solar panels is proposed at depths of up to 10 feet below ground surface. Soils up to this depth also may be disturbed during Project decommissioning. Because the Project would not disturb soils below this depth, it would have no effect on Holocene alluvium found below 10 feet. Nonetheless, because Holocene alluvium exists at the Project site between 16 inches below ground surface and 10 feet below ground surface, it is possible that Project activities could disturb paleontological resources. While the potential to encounter significant paleontological resources is considered low, a potentially significant impact could result if paleontological resources are encountered and inadvertently destroyed during ground-disturbing activities. Implementation of the following mitigation measure would assure that potential damage to paleontological resources would be less-than-significant (DEIR, pp. 4.8-14, 4.8-15).

Mitigation Measure 4.8-7: Unanticipated Fossil Discovery

Prior to any ground disturbing activities, the Project owner shall develop and implement a Paleontological Worker Education and Awareness Program. If paleontological resources are discovered during ground-disturbing activities (e.g., during Project construction or decommissioning), all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until a qualified professional paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment

and salvage is required, recommendations will be consistent with the standards of the Society of Vertebrate Paleontology that are current as of the discovery and with currently-accepted scientific practice. For example, as of the publication of the Draft EIR for the Luna Valley Solar Project, the current standards of the Society of Vertebrate Paleontology are set forth in the SVP's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, as prepared by the SVP's Impact Mitigation Guidelines Revision Committee. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds.

3.1.5 Hydrology and Water Quality Impacts

Impact 4.11-2: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. The Project would require approximately 300 acre-feet of non-potable water during decommissioning and site reclamation. While the Water Supply Assessment (WSA) prepared for the Project (DEIR Appendix L) concludes that there is sufficient water supply available to meet Project construction and operation demands, it does not address the availability of water supply at the time of Project decommissioning up to 40 years in the future. (This analysis is not required in a WSA because the Water Code only requires a WSA to look at a 20-year planning horizon.) It is possible that the life of the Project could be extended through maintenance of existing equipment or with equipment replacement and could remain in operation beyond 2063 with further County review and approval. To address the potential impact of the Project on groundwater resources during decommissioning, compliance with the following mitigation measure would be required prior to initiating decommissioning activities. This measure would require assurance of sufficient water resources by identifying and examining the availability of water supply prior to decommissioning (DEIR, p. 4.11-11).

Mitigation Measure 4.11-2: Determine Future Water Supply Availability

Prior to decommissioning activities, the Project owner shall identify and provide an analysis to the County of the water supply source proposed for use during decommissioning activities and demonstrate that if water for decommissioning is to be from on-site wells, the use of that water will not impede sustainable groundwater management of the basin. If water in the basin is not sufficient to supply the approximately 300 af needed for decommissioning, the Project owner shall truck in water from a source that has sufficient capacity to serve the Project and other water users that depend on that supply.

Impact 4.11-4: The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. As noted under Impact 4.11-2, the use of groundwater for decommissioning activities could potentially be in conflict with the Westside Subbasin Groundwater Sustainability Plan after the Project's expected 40-year operational period. Due to the unavailability of a projection of water supply availability beyond 2040, use of ground water for decommissioning activities may result in a potentially significant impact. Implementation of Mitigation Measure 4.11-2 would reduce the potential impact to less than significant.

Implement Mitigation Measure 4.11-2: Determine Future Water Supply Availability

3.1.6 Noise and Acoustics Impacts

Impact 4.14-1: The Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. The County of Fresno Noise Ordinance exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific hours. Most Project-related construction activity is expected to occur within the window of time covered by the Noise Ordinance exemption. The nighttime Leq limit is 45 dBA based on the Fresno County Exterior Noise Level Standard and may be exceeded at the nearest receptors on some occasions when nighttime work is required and near the southern project boundary.

It is expected during Project operation that most equipment would operate during the daytime period, with only the battery storage cooling units and substation transformer operating during the nighttime period. Ambient noise levels are expected to increase more than 5 dB above the existing ambient noise levels for one of the four closest sensitive receptors adjacent to the Project site during nighttime hours, primarily from operation of the substation transformer. As a result, significant noise impacts could result from the equipment operations.

Implementation of the following noise mitigation measures would reduce impacts to less than significant during construction (MM 4.14-1a) and operation (MM 4.14-1b) (DEIR, pp. 4.14-15 through 4.14-21).

Mitigation Measure 4.14-1a: Noise Reduction for Construction Activities

Prior to issuance of construction permits for the proposed project, the Project Applicant shall submit to the County for approval a Construction Noise Reduction Plan to be implemented by all contractors as a condition of contract. Contents of the Plan should include at a minimum:

- *Maintain all construction tools and equipment in good operating order according to manufacturers' specifications;*
- *Limit use of major excavating and earth-moving machinery to daytime hours;*
- *Equip any internal combustion engine used for any purpose on the job or related to the job with a properly operating muffler that is free from rust, holes, and leaks;*
- *For construction devices that utilize internal combustion engines, ensure the engine's housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers' guidelines, if possible;*
- *Limit possible evening and nighttime shift work to low noise activities such as welding, wire pulling, and other similar activities, together with appropriate material handling equipment; and*
- *Utilize a Complaint Resolution Procedure to address any noise complaints received from residents.*

Mitigation Measure 4.14-1b: Noise Reduction for Substation Operation and Operation of Invertors

Within three months after commencement of operations of the substation facility, the Project owner shall provide to the County evidence demonstrating that operation of the substation transformer will not increase existing nighttime noise levels by more than 5 dBA at the nearest noise sensitive land use compared to levels without operation of the equipment. Meeting this standard may be achieved proactively through equipment selection and incorporation of design measures (if applicable) or, if measurement of operational noise indicates an exceedance, through implementation of shielding techniques. Design measures may include the selection of quieter units and/or use of enclosures or otherwise configuring the units in a location that provides an acoustical barrier.

3.1.7 Transportation Impacts

Impact 4.18-1: Construction of the Project would generate a temporary increase in traffic volumes on area roadways, which could conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level.

The increase in traffic volume on SR 33 and West Manning Avenue during Project construction would be noticeable to motorists who regularly travel along these roadways, but there would be sufficient capacity to accommodate the added traffic during the construction period. However, it is expected that most construction-related traffic would occur during commute hours when construction workers are traveling to and from the Project site, resulting in a potentially significant congestion impact on the affected roadways. Implementation of the following mitigation measure would reduce the impact of Project construction traffic on study area roadways during peak commute hours to a less-than-significant level (DEIR, pp. 4.18-9 through 4.18-12).

Mitigation Measure 4.18-1: Construction and Decommissioning Traffic Management Plan.

Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works Department and the California Department of Transportation, District 6, as appropriate, for approval. The Traffic Management Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following elements:

- *Temporary Traffic Control (TTC) plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections;*
- *Identify the timing of deliveries of heavy equipment and building materials;*
- *Requirement for designated construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed;*
- *Requirement to place temporary signage, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;*
- *Ensure access for emergency vehicles to the Project site;*
- *Access to adjacent properties shall be maintained;*
- *Specify both construction/decommissioning-related vehicle travel and oversize load haul routes, minimizing construction/decommissioning traffic during the a.m. and p.m. peak hour, distributing construction/decommissioning traffic flow across alternative routes to access the Project site, and avoiding residential neighborhoods to the maximum extent feasible.*
- *Requirement to obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.*

- *Applicant shall enter into a secured agreement with Fresno County to ensure that any County roads that are demonstrably damaged by Project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Fresno County.*
- *The Traffic Management Plan elements listed above would reduce the potentially significant effects of short-term and intermittent construction-related congestion caused by construction vehicles/equipment on local roadways.*

3.1.8 Utilities and Service Systems Impacts

Impact 4.19-2: The Project would have sufficient water supplies available to serve the project and reasonable foreseeable future development during normal, dry and multiple dry years.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Project on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

Facts in Support of Finding: The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. The Water Supply Assessment (WSA) prepared for the Project (DEIR Appendix L) concludes that there is sufficient water supply available to meet Project construction and operation demands, but it does not address the availability of water supply at the time of Project decommissioning up to 40 years in the future. (This analysis is not required in a WSA because the Water Code only requires a WSA to look at a 20-year planning horizon.) It is possible that the life of the Project could be extended through maintenance of existing equipment or with equipment replacement and could remain in operation beyond 2063 with further County review and approval. To address the potential impact of the Project regarding sufficient water supply during decommissioning, compliance with the following mitigation measure would be required prior to initiating decommissioning activities. This measure would require assurance of sufficient water resources by identifying and examining the availability of water supply prior to decommissioning (DEIR, p. 4.11-11).

Implement Mitigation Measure 4.11-2: Determine Future Water Supply Availability

3.1.9 Cumulative Impacts

Hydrology and Water Quality / Utilities

Groundwater pumping would be regulated by the Water Quality Control Plan (Basin Plan) for the Tulare Lake Basin and Westside Subbasin GSP. The basin's current overdraft condition is expected to be corrected by 2030 through compliance with requisite pumping reductions.

However, given the historical fluctuation of groundwater levels and current uncertainty about what the groundwater level would be within the Tulare Lake Basin and Westside Subbasin during that decommissioning phase of the Project, this analysis conservatively concludes that cumulative conditions at that time would reflect a significant cumulative impact to which the Project could contribute. The Water Supply Assessment (WSA) for the Project only accounts for the groundwater needs during Project construction and operation; it does not account for

decommissioning activities. The WSA determined water availability during a 20-year projection, which does not account for decommissioning of the Project. To account for this, **Mitigation Measure 4.11-2: Determine Future Water Supply Availability**, would be implemented to ensure an assessment would be performed prior to decommissioning to determine the water supply availability at the time of decommissioning. Groundwater pumping activities for other development projects would be required to obtain similar WSAs applicable to those development projects, which would ensure that sufficient groundwater supplies would be available. In this context, the Project (as mitigated by Mitigation Measure 4.11-2 and as subject to independently enforceable requirements) would not have a cumulatively considerable contribution to a cumulative impact on groundwater supplies.

The WSA for the Project determined water availability during a 20-year projection, which does not account for decommissioning of the Project. To account for this, Mitigation Measure 4.11-2: Determine Future Water Supply Availability, would be implemented to ensure an assessment would be performed prior to decommissioning to determine the water supply availability at the time of decommissioning. In this context, the Project (as mitigated by Mitigation Measure 4.11-2 and as subject to independently enforceable requirements) would not have a cumulatively considerable contribution to a cumulative impact on groundwater supplies.

Transportation

Based on temporary (construction and decommissioning) and long-term (operation and maintenance) impacts of the Project or Alternative 1 on traffic conditions, West Manning Avenue and SR 33 near the Project site may experience congested conditions during peak commute hours. Given that West Manning Avenue and SR 33 would still be able to accommodate a substantial amount of additional traffic given projected hourly traffic volumes and the roadway capacities, it is possible (although not likely) that construction-generated traffic, when combined with traffic generated by construction activities associated with the Sonrisa Solar Project and Scarlet Solar Energy Project anticipated to use SR 33, could combine to cause a significant adverse cumulative impact relating to traffic conditions on SR 33.

Accordingly, the County has considered whether the Project's incremental contribution would be cumulatively considerable. **Mitigation Measure 3.18-1** would require the Project owner to prepare a Construction and Decommissioning Traffic Management Plan that assures that the necessary permitting of any oversize vehicles used on public roadways during these phases of the Project would occur, and that the County has sufficient information about anticipated delivery times and vehicle travel routes in advance to work with other project owners to minimize construction and decommissioning traffic during peak a.m. and p.m. hours and to coordinate as necessary with emergency services provides to assure adequate access on shared roads. With the implementation of Mitigation Measure 3.18-1, the Project's incremental contribution to cumulative transportation impact would not be cumulatively considerable.

3.1.10 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires an evaluation of growth inducing impacts that may result from a proposed project and provides the following guidance regarding growth-inducing impacts: A project is identified as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Growth inducement can be a result of new development that increases employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the Project would require up to 550 on-site personnel during Project construction. State of California Employment Development Department data cited in the DEIR demonstrate that the existing construction labor pool in Fresno County is sufficient for meeting Project needs. Following construction, the Project would require up to four full-time personnel. On a typical day, the number of staff on site may range from none (it is not necessary for staff to be present during plant operations) up to 30 during periodic, routine maintenance events. Non-routine (emergency) maintenance could require additional workers. Decommissioning and site restoration activities are expected to require a similar or smaller workforce than construction; decommissioning and site restoration-related activities are expected to take approximately 16 months to complete. Because construction and decommissioning are temporary, the Project is unlikely to cause substantial numbers of people to relocate to Fresno County. Therefore, this Project would not result in a large increase in employment levels that would significantly induce growth.

While it is expected that construction workers would commute to the Project site instead of relocating to Fresno County, even if all workers were to migrate into Fresno County, the County's housing market would have the capacity to absorb the increase in residents without requiring the construction of new housing units. Therefore, the Project is not expected to induce population growth, the housing and provision of services for which could cause significant adverse environmental impacts.

Although the Project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand, and the availability of electrical capacity by itself does not ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, availability of water supply or sewer services, and local planning policies have a more direct effect on growth. See DEIR, pp. 4.15-6, 4.15-7.

3.1.11 Significant Irreversible Environmental Changes That Would Result if the Project Is Implemented

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continuing phases of the project. Irreversible impacts also can result from damage caused by environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified. Buildout of the Project would commit nonrenewable resources during Project construction and ongoing utility services during Project operations. During operations, oil, gas,

and other fossil fuels and nonrenewable resources would be consumed and irreversible commitments of small quantities of nonrenewable resources would occur as a result of long-term operations. However, once operational, the Project would result in a substantial net benefit associated with the amount of renewable energy that would be generated. See DEIR, pp. 4.7-11, 4.7-12.

3.2 Mitigation Monitoring and Reporting Program

Public Resources Code Section 21081.6(a)(1) states:

(a) When making the findings required by paragraph (1) of subdivision (a) of Section 21081 [that changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment]. . . [1] The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment...

The County will use the Mitigation Monitoring and Reporting Program (MMRP) to track Project compliance with required mitigation measures. The Final MMRP is attached to and incorporated into the environmental document approval resolution and is approved in conjunction with certification of the EIR and adoption of these Findings of Fact.

3.3 Recirculation of the DEIR is Not Required

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide the following examples of significant new information under this standard:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (CEQA Guidelines §150885(a); *Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043).

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is “not

intend[ed] to promote endless rounds of revision and recirculation of EIRs.” *Laurel Heights Improvement Ass’n v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132. “Recirculation was intended to be an exception, rather than the general rule.” *Id.*

No substantial changes were made between the DEIR and FEIR. Additionally, no new information was incorporated into the FEIR. Therefore, recirculation is not necessary.

3.4 Findings Regarding Project Alternatives

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any alternatives that are both environmentally superior and feasible within the meaning of CEQA. (*See, e.g., Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 445.)

Here, as noted in the preceding discussion regarding Project impacts, the County finds that all potential Project impacts either would be avoided or reduced to less-than-significant levels through the implementation of best management practices and feasible mitigation measures recommended in the EIR. The Project would not cause or contribute to any significant and unavoidable impacts. The Project would contribute to significant cumulative impacts to hydrology and water quality, utilities, and transportation; however, with the incorporation of mitigation measures, these impacts would be reduced to a less than significant level. Therefore, the Project would not have a cumulatively considerable contribution to a significant cumulative impact.

CEQA does not require an evaluation of all possible alternatives, only an evaluation of “a range of feasible alternatives” so as to encourage both meaningful public participation and informed decision making (CEQA Guidelines §15126.6(a)). “The discussion of alternatives need not be exhaustive, and the requirement as to the discussion of alternatives is subject to a construction of reasonableness” (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) Cal.App.3d 274,286-287). For this Project, the County evaluated the potential impacts of the alternatives described in DEIR Section 3.3 (DEIR, pp. 3-7 through 3-10).

The County has considered the alternatives presented and analyzed as part of the CEQA process. In considering the Project alternatives, the County considered not only the relative environmental impacts and the feasibility of the alternatives, but also the ability of the alternatives to achieve most of the basic objectives of the Project, which are listed on page 1-3 of these Findings. The potential direct, indirect, and cumulative impacts of the Alternatives are analyzed on a resource-by-resource basis throughout DEIR Chapter 4 and then are compared in DEIR Chapter 5. The alternatives evaluated in detail in the EIR are:

- Reduced Acreage Alternative
- Distributed Solar Alternative

It is the Finding of the County that there is no feasible environmentally superior alternative to the Project. Thus, the Project may be approved as mitigated.

3.4.1 Alternatives Considered and Rejected from Detailed Evaluation

Potential alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (14 Cal. Code Regs. §15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not require consideration (14 Cal. Code Regs. §15126(f)(2)). As described in DEIR Section 3.2 (p. 3-3 et seq.), the County considered several potential alternatives to determine whether they could reduce impacts to Aesthetics, Air Quality, Biological Resources, and Hydrology and Water Quality. Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following potential alternatives initially were considered but then eliminated from further consideration based on the screening criteria described in DEIR Section 3.2 (DEIR, pp. 3-3 through 3-6):

- Alternative sites: Other impaired agricultural lands, brownfields, or underutilized lands.
- Alternative approach to the proposed generation of solar energy: conservation and demand side management.

These alternatives are summarized below, including the rationale for not carrying forward for more detailed environmental review.

Alternative Sites

The Project site is poorly-suited for productive, sustainable agriculture and well-suited for solar development for the following reasons:

- The Project site is degraded, poorly drained farmland subject to restrictive covenants prohibiting the use of irrigation water on three parcels included in the Project site. It is not subject to a Williamson Act contract and is not designated as Prime or another category of special-status farmland.
- The ultimate removal of solar project infrastructure and reclamation of the Project site in accordance with the proposed Reclamation Plan (DEIR Appendix B) would facilitate a possible return to non-irrigated agricultural use of the site.
- The Project site has been identified as an “environmental conservation least conflict area” by environmental conservation stakeholders including representatives of the Center for Biological Diversity, The Nature Conservancy, Defenders of Wildlife, Sierra Club, Audubon California and others.
- The Project site is flat and will require minimal grading, resulting in limited alteration of existing drainage patterns or surface disturbance.
- The Project is proposed adjacent to a point of interconnection to the PG&E Tranquillity Switching Station, and would avoid the costs and impacts associated with building transmission or interconnection infrastructure from a more distant site. Further, the Project would help maximize the utilization of this existing infrastructure.

For these reasons, and as described below, no other sites were considered for the Project. See DEIR, pp. 3-4, 3-4.

Other Impaired Agricultural Lands

Other potential candidate sites that would be reasonable, feasible, accomplish most of the basic objectives of the Project and not be speculative could include other degraded agricultural lands that are not subject to a Williamson Act contract, where the use of irrigation water is prohibited or that otherwise have been identified as a “least conflict area” for purposes of solar development. Such sites include, for example, WWD-owned retired farmland located adjacent to and north of the Project site, south of the City of Mendota along both sides of SR 33 as shown and analyzed in Section 5.2.4 of the Westlands Solar Park and Gen-Tie Corridors Plans Draft Program EIR (Westlands Water District 2017).

However, none of these potential alternative sites would avoid or substantially lessen any of the potentially significant impacts of the Project. The increased distances of potential alternative sites to the Tranquillity Switching Station’s point of interconnection or to other existing substations along the 230 kV transmission corridor would result in increased impacts relative to those of the Project with respect to aesthetics (additional poles and wires), collision-related impacts to avian species, wildfire risk (if the transmission lines were strung above ground) or ground-disturbance related impacts for burrowing species (if placed below-ground).

Brownfields or Underutilized Lands

Other potential alternative sites could include brownfields, closed landfills, Superfund sites, Resource Conservation and Recovery Act (RCRA) sites or closed mine lands. The County researched potentially contaminated and underutilized sites identified as appropriate for solar-PV projects as part of the United States Environmental Protection Agency’s Re-Power America’s Lands Project and reviewed the RE-Powering Screening Dataset (which provides details for more than 130,000 sites nationwide, and 11,707 in California, that have been pre-screened for renewable energy potential) to identify potential utility-scale or large-scale solar PV energy sites in Fresno County, that were located on existing contaminated lands, landfills, or mines (USEPA 2020a, 2020b).

This effort resulted in the identification of 273 contaminated land sites in Fresno County, only six of which were noted as suitable for utility-scale PV solar development: the Basic Training Center No. 8 (J09CA7280) site located at 1121 S. Chance Avenue and the South Fresno Regional Groundwater Plume site located at North of Church Avenue at South East Avenue are both in the City of Fresno; each has an estimated solar PV capacity potential of approximately 67 MW. The other sites identified as potentially suitable for utility-scale solar development include the American Avenue Landfill site located at 18950 West American Avenue in Kerman (estimated solar PV capacity potential of 82 MW), the Huron Auxiliary Field #2 site in Huron (approximately 85 MW), the Westlake Proposed 430-acre Development, which is bounded by Shields, Grantland, Garfield, and Gettysburg in Fresno (approximately 96 MW) and the West Auxiliary Field #5 site in Lemoore (approximately 116 MW). (USEPA 2020c).

The development of a project that combines solar energy generation and battery storage on the West Auxiliary Field #5 site in Lemoore would meet most of the objectives of the Project,

although it would not establish a PV solar power-generating facility of a sufficient size and configuration to produce up to 200 MWac of electricity at the proposed Point of Interconnection in a cost-competitive manner. Solar development this site would not be speculative. However, this potential alternative site was not carried forward for more detailed review based on considerations of feasibility. Pursuant to CEQA Guidelines Section 15126.6(f)(1), issues relevant to the consideration of the feasibility of off-site alternatives include “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent.” Here, the Applicant does not have site access or control the West Auxiliary Field #5 site, whereas it owns one of the parcels that makes up the Project site and has an option to purchase the remaining parcels.

Therefore, the six sites described above were eliminated from further consideration as inadequately sized or served to meet the Project objective of establishing a solar PV energy-generating facility of a sufficient size and configuration to produce approximately 200 MWac of electricity.

Alternative Approaches

The County considered whether conservation and demand side management could provide a reasonable feasible alternative to the Project and elected not to carry forward for further consideration. This approach is part of a sustainable energy future; however, this method alone will not meet the State’s renewable energy goals. See DEIR, p. 3-6.

Conservation and Demand Side Management

Conservation and demand side management consists of a variety of approaches to reduce electricity use and shift electrical demand to times of the day when energy demand is lower. It includes increased energy efficiency and conservation, building and appliance standards, fuel substitution, and load management. Implementation of conservation and demand side management techniques could result in a reduction in demand thus reducing the need for new generation, and thereby serve the region’s growing demand for power.

Increased energy efficiencies and reductions in energy demand would not meet Project objectives. For example, they would not generate up to 200 MWac of PV solar electricity at the point of interconnection; would not assist California utilities in meeting their obligations under either California’s RPS and SB 100, or the CPUC’s Energy Storage Framework and Design Program; and would not provide for the economically viable and environmentally beneficial use of a site with physically impaired agricultural capacity.

This potential alternative also was not carried forward because reliance on conservation and demand side management alone would be a technically infeasible alternative to the Project and would be speculative. California’s long-term Energy Efficiency Strategic Plan (adopted by the CPUC in September 2008 and updated in January 2011) provides an integrated framework of goals and strategies for saving energy through 2020 (CPUC 2008, 2011, 2020). The plan champions specific programmatic initiatives for key market sectors (i.e., commercial, residential, industrial, and agricultural) and a series of “big bold energy efficiency strategies” including all new residential construction being zero net energy by 2020 and all new commercial construction being zero net energy by 2030. Given the aggressiveness of these goals, it would be speculative to

assume that incremental savings beyond them could be achieved. While energy efficiency efforts have been effective and will continue to be part of California's overall energy future, conservation and demand-side management alone will not be sufficient to address California's rising energy demand. See DEIR, p. 3-6.

3.4.2 Alternatives Considered for Detailed Evaluation

The Reduced Acreage Alternative and Distributed Solar Alternative were selected through the screening process described above; the No Project alternative also is included as required by CEQA. The Reduced Acreage Alternative would meet most of the basic Project objectives, would be feasible, and would reduce the project's incremental contribution to a cumulative effect on aesthetics and would avoid habitat for crownscale. The Reduced Acreage Alternative would reduce potential environmental impacts associated with aesthetics, air quality, biological resources, cultural and tribal resources, geology and paleontology, hazards, hydrology and water quality, noise and acoustics, transportation, utilities, and wildfire. The Distributed Solar Alternative would meet most of the basic Project objectives and would be feasible. It would reduce impacts to aesthetics, agriculture, air quality, biological resources, cultural and tribal resources, geology and paleontology, greenhouse gas emissions, hazards, hydrology and water quality, noise and acoustics, population and housing, transportation, utilities, and wildfire.

Reduced Acreage Alternative

Description

Under the Reduced Acreage Alternative, solar project-related development would occur on approximately 498 acres fewer than the Project (the Alternative site would be approximately 800 acres as compared to the Project's approximately 1,298-acre site). Under this Alternative, no on-site solar-related development would occur within approximately 0.4 mile of SR 33 north of Manning Avenue, or within approximately 0.5 mile of SR 33 south of Manning Avenue. It also would be further removed south of Manning Avenue along the segment between SR 33 and South Ohio Avenue. No site ingress/egress would be available directly to SR 33, consistent with a suggestion provided in the scoping letter from Caltrans, which recommends that "alternatives to design should avoid direct access to and from SR 33 during all phases of construction and during normal operations." The Project otherwise would be as described in DEIR Section 2.5, *Description of the Project*. Compared to the Project, the Reduced Acreage Alternative would entail less surface disturbance, less construction dust, reduced construction and decommissioning emissions, and reduced demand for water.

Impacts

Aesthetics: Under the Reduced Acreage Alternative, the Project site would decrease from approximately 1,298 acres to approximately 800 acres. Under this alternative, impacts to the visual character and quality of the Project vicinity would be similar but slightly reduced in comparison to the impacts of the Project although the impact conclusions regarding Aesthetics would be the same: less than significant impacts to the existing visual character or quality of public views of the site and its surroundings, and regarding the generation of glare that could adversely affect daytime views in the area. DEIR, p. 4.2-27.

Agriculture and Forestry Resources: Similar to the Project, there would be no impact with respect to conversion of Farmland to non-agricultural use, conflicts with existing zoning for agricultural use or with Williamson Act contracts, and forest land or timberland with this alternative because no Farmland, Williamson Act contracts, or forest land or timberland are present within the boundaries of the alternative site. Similar to the Project, the parcels adjacent to Farmland of Statewide Importance would continue to be developed under this alternative and the same less than significant indirect impact related to conversion of off-site Farmland to non-agricultural use would occur. DEIR, p. 4.3-11.

Air Quality: Compared to the Project, the Reduced Acreage Alternative would entail less surface disturbance, less construction dust, and reduced construction, operation, and decommissioning emissions. It is estimated that emissions associated with the PV panels and associated hardware and facilities would be proportionately lower (i.e., 38 percent lower) than those calculated for the Project; however, construction of several components of the Reduced Acreage Alternative (i.e., the battery storage facility, substation, and gen-tie line) would likely result in similar emissions as the Project. Considering these assumptions, construction of the Reduced Acreage Alternative would likely result in NO_x emissions greater than 10 tons per year. Therefore, although the emissions would be reduced compared to the Project, the Reduced Acreage Alternative would continue to exceed the SJVAPCD significance threshold for NO_x during construction and decommissioning. Therefore, implementation of the same mitigation measure recommended for the Project would reduce the impact to less than significant.

On-site and off-site emissions of criteria pollutants associated with operation of the Reduced Acreage Alternative would be similar to, but less than, those associated with the Project because the reduced total area of the site would shorten the travel distance necessary to maintain and wash panels. The number of workers commuting to the site also would likely decrease with the smaller acreage, lowering the emissions generated by worker commute vehicles. Similar to the Project, none of the SJVAPCD significance thresholds would be exceeded by the Reduced Acreage Alternative's operational emissions. DEIR, p. 4.4-32.

Biological Resources: Compared to the Project, the Reduced Acreage Alternative would avoid the approximately 20 acres initially identified as habitat for crownscale, a rare plant. Although the crownscale community was observed in winter 2020 to have been tilled, it is expected to re-sprout in spring. If present at the time of construction of this alternative, the rare plant community would remain intact. Other potential impacts to special-status species during construction and to migratory birds during operation and maintenance of the Project, would remain, although be lessened to an unknown degree by the smaller size of the facility. The nature of the impacts would remain the same as the Project; therefore, mitigation measures would be recommended to reduce potential impacts below established thresholds. DEIR, p. 4.5-31.

Cultural and Tribal Resources: Compared to the Project, the Reduced Acreage Alternative would entail less construction and associated ground-disturbing activities. The reduction of the disturbance footprint would result in lessened potential for disturbance of previously unknown cultural resources, including archaeological resources, human remains, and tribal cultural resources. However, the same mitigation measures recommended for the Project also would be recommended to reduce the potential significant impacts of the Reduced Acreage Alternative. DEIR, p. 4.6-19.

Energy: Compared to the Project, the Reduced Acreage Alternative would result in less surface disturbance and reduced construction and decommissioning activities which would require fewer fuel resources. However, the capacity of the alternative also would be reduced, causing a lower production of energy generation. The minimal amount of electricity required during the Reduced Acreage Alternative operation would remain offset by the generation of electricity from the solar panels. Overall, the Reduced Acreage Alternative would result in no significant impacts to energy conservation; impact conclusions would be the same as those identified for the Project. DEIR, p. 4.7-14.

Geology, Soils, and Paleontological Resources: Compared to the Project, the Reduced Acreage Alternative would result in less surface disturbance and reduced construction and decommissioning activities. However, a potential significant impact could result if paleontological resources are encountered and inadvertently destroyed during ground-disturbing activities. Accordingly, the implementation of Mitigation Measure 4.8-7 also would be required for this alternative. Because existing regulatory requirements including the Construction General Permit and the California Building Code would still apply to this alternative and because Mitigation Measure 4.8-7 would reduce this alternative's potential significant impact of damaging significant paleontological resources, the potential impacts related to geology, soils, and paleontological resources would be less than significant. DEIR, p. 4.8-16.

Greenhouse Gas Emissions: Under the Reduced Acreage Alternative, solar project-related development would occur on approximately 498 acres fewer than the Project (approximately 40 percent less than the Project). This would reduce the electricity generating capacity compared to the Project. In addition, the Reduced Acreage Alternative would entail less reduction in carbon sequestration and construction and decommissioning emissions. The land not developed would continue in its existing use as fallowed farm land, and occasionally dry-farmed. Overall, the Reduced Acreage Alternative would result in a reduction in generated GHG emissions relative to the Project due to its smaller size. Similar to the Project, the Reduced Acreage Alternative would have less than significant impacts in regards to generation of GHG emissions and conflicts with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. However, the potential for the Reduced Acreage Alternative to have a reduced generating capacity also would contribute to a reduced overall benefit in terms of GHG emissions if the electricity generated by the alternative were to be used in place of electricity generated by fossil-fuel sources. DEIR, p. 4.9-15.

Hazards and Hazardous Materials: The Reduced Acreage Alternative would consist of less construction disturbance, and a reduction in the number of solar panels, battery enclosures, and associated infrastructure. Vegetation management would be needed on fewer acres than for the Project. The NPDES Construction General Permit and other existing regulatory requirements would still apply to this alternative to reduce potential impacts to less than significant. Overall, there would be a reduction in the amount of hazardous materials required for construction and operation, although the use of hazardous materials during operation under the Project already is not substantial. While smaller quantities of hazardous materials would be used, the impacts of the Reduced Acreage Alternative would be reduced but would be similar in nature and type to those of the Project. DEIR, pp. 4.10-21, 4.10-22.

Hydrology and Water Quality: Compared to the Project, the Reduced Acreage Alternative would result in less surface disturbance and reduced construction and decommissioning activities. Mitigation Measure 4.11-2 also would apply to the Reduced Acreage Alternative to address the availability of water at the time of decommissioning. Overall, the Reduced Acreage Alternative would result in less than significant impacts to hydrology and water quality; impact conclusions would be the same as those identified for the Project. DEIR, pp. 4.11-14, 4.11-15.

Land Use and Planning: The Reduced Acreage Alternative would not physically divide an established community and would not conflict with any applicable land use plan designed to mitigate environmental effects. Therefore, the Reduced Acreage Alternative would have no impact with regard to Land Use and Planning. DEIR, p. 4.12-7.

Mineral Resources: The Reduced Acreage Alternative would not result in the loss of availability of a known mineral resource or a locally-important mineral resource recovery site. Therefore, the Reduced Acreage Alternative would have no impact with regard to Mineral Resources. DEIR, p. 4.13-5.

Noise and Acoustics: Under the Reduced Acreage Alternative, no on-site solar-related development would occur within approximately 0.4-mile of SR 33 north of Manning Avenue, or within approximately 0.5-mile of SR 33 south of Manning Avenue. It also would be further removed south of Manning Avenue along the segment between SR 33 and South Ohio Avenue. Therefore, the extent of the alternative would be farther from nearby sensitive receptors. Noise generated during construction, operation and decommissioning would be similar but slightly less than that associated with the Project as a result of a reduced extent of the alternative area. Impact conclusions and mitigation measure recommendations associated with this alternative would be the same as those that would occur under the Project. Similarly, receptors also would be farther from potential vibration impacts associated with construction under this alternative, resulting in similar, but reduced, less-than significant vibration impacts. DEIR, pp. 4.14-23, 4.14-24.

Population and Housing: The Reduced Acreage Alternative could require a slightly smaller workforce or a slightly shorter construction period during construction and decommissioning; there would be no change in employment levels relative to the Project during the operation and maintenance phase. The Reduced Acreage Alternative is not expected to induce population growth directly or indirectly, and would have a less than significant and similar impact as the Project. This alternative would result in no impact relating to the displacement of people or existing housing. DEIR, p. 4.15-7.

Public Services: Compared to the Project, the Reduced Acreage Alternative would result in incrementally lower demand for fire and emergency services, police, schools, parks, and other public services due to reduced construction and decommissioning activities and, like the Project, would result in no impacts to Public Services. DEIR, p. 4.16-8.

Recreation: The Reduced Acreage Alternative would not increase the use of existing recreational facilities or require the construction or expansion of such facilities. Therefore, the Reduced Acreage Alternative would have no impact with regard to Recreation. DEIR, p. 4.17-3.

Transportation: Due to the reduced size of this alternative, traffic volumes generated by site clearing, construction, operation and maintenance, and decommissioning would be lower than the traffic generated by the Project. Similar to the Project, Mitigation Measure 4.18-1: Construction and Decommissioning Traffic Management Plan, would be required to address potentially significant construction and decommissioning impacts caused by increased truck and passenger vehicle activity on study area roadways. DEIR, p. 4.18-17.

Utilities and Service Systems: The Reduced Acreage Alternative would entail less surface disturbance, require less water to manage construction dust, and result in the generation of less sanitary and solid waste compared to the Project. There would be no conflict with solid waste reduction statutes or regulations. The Reduced Acreage Alternative otherwise would require similar wastewater, stormwater, electricity, and telecommunications facilities as the Project, and would therefore have similar but slightly reduced impacts related to those facilities. DEIR 4.19-12.

Wildfire: The Reduced Acreage Alternative would consist of less construction disturbance, and a reduction in the number of solar panels and associated infrastructure to be constructed. As a result, there would be a minor reduction in the potential for ignition risks on-site during construction and decommissioning. The potential for ignition risks on-site during the operation and maintenance phase would likely be the same as for the Project. Because smaller quantities of hazardous materials (including potentially ignitable materials) would be used, the impacts of the Reduced Acreage Alternative would be reduced, although similar in nature and type to those of the Project. DEIR, p. 4.20-14.

Findings

Based on the whole record, the County finds that the Reduced Acreage Alternative would result in reduced environmental impacts than under the Project. The Reduced Acreage Alternative would reduce impacts to aesthetics, air quality, biological resources, cultural and tribal resources, geology and paleontology, hazards, hydrology and water quality, noise and acoustics, transportation, utilities, and wildfire. The alternative would have similar impacts to agriculture, land use and planning, mineral resources, population and housing, public services, and recreation.

Despite a reduction in some environmental impacts, the significance of impacts and mitigation measures required to mitigate such impacts would remain the same for this alternative as for the Project. Additionally, the alternative also would produce less solar energy than the Project, resulting in a smaller contribution to energy conservation and lessening the reduction in GHG that would result from the operation of the Project.

Distributed Solar Alternative

Description

Under the Distributed Solar Alternative, a number of geographically distributed solar PV systems would be developed on existing rooftops throughout Fresno County. Google's Project Sunroof effort has identified 96 percent of the buildings in Fresno County as "solar viable," where viability is based on each roof having a total potential installation size of at least 2 kW, and each solar panel receiving at least 75 percent of the maximum annual sun in the County based on

National Renewable Energy Lab weather station data (Google 2020a, 2020b, 2017). This Alternative would contribute to grid reliability and resilience, increase energy efficiency and renewable energy, and use smart grid and zero-net energy technologies. Under this Alternative, all panels would be flush-mounted with the roof. No new land would be developed or altered; however, depending on the type of solar modules installed, a similar or greater amount of acreage (i.e., 1,300 acres or more of total rooftop area) may be required to attain Project's 200 MWac of solar PV generating capacity. Vehicle trips needed to support construction and maintenance activities would be dispersed in accordance with the individual site locations. Like the Project, this Alternative would be designed to operate year-round using PV panels to convert solar energy directly to electrical power. Energy generated either would be for on-site use only, or could be shared via a community solar arrangement that lets multiple customers share power from a single local solar source. Power generated by such distributed solar PV systems typically would not require the construction of new electrical substation or transmission facilities.

The Distributed Solar Alternative would be both reasonable and feasible. More than 30,000 Fresno County roofs are large enough to install at least a 20 kW system; more than 4,000 rooftops in the County are large enough to support a 50 kW system (Google 2020b). With tax credits available to incentivize solar development in both the commercial and residential sectors, this Alternative could be cost-effective, and would meet most of the objectives of the Project identified.

Impacts

Aesthetics: Under the Distributed Solar Alternative, the solar panels would potentially be visible from ground level or neighboring properties, depending on rooftop heights. As the solar panels would be located on distributed rooftops throughout Fresno County, the visual change attributable to the geographic disbursement of the panels would be reduced under this alternative. However, this conclusion is partially speculative as the rooftops have not been identified and the visibility of the solar panels is unknown. In addition, as these roof tops are likely to be located in an urban setting, analysis would be required to determine whether the Distributed Solar Alternative would conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts under this alternative would potentially be reduced compared to the Project. DEIR, p. 4.2-27.

Agriculture and Forestry Resources: A number of geographically distributed solar PV systems would be developed on existing rooftops throughout Fresno County and no new land would be developed or altered under the Distributed Solar Alternative. The Project site would continue to be used periodically for dry-farmed agriculture and/or disced and left fallow. Solar PV systems installed, even if on agricultural properties, e.g., existing farmhouses or agricultural structures, would not result in the conversion of any Farmland to non-agricultural use. The Project's less than significant indirect impact to off-site Farmland conversion to non-agricultural uses would be reduced to no impact under this alternative. DEIR, p. 4.3-11.

Air Quality: The Distributed Solar Alternative would avoid or substantially reduce impacts to air quality from ground-disturbance. Vehicle trips would be required during the construction phase to deliver the PV systems to the rooftop locations. Energy generated would be for on-site use only or could be shared via a community solar arrangement that lets multiple customers share power

from a single local solar source. Power generated by such distributed solar PV systems typically would not require the construction of a new electrical substation or transmission facilities and therefore would avoid emissions associated with those components. Similar to the construction phase, vehicle trips needed to support operation and maintenance activities would be dispersed based on the individual site locations. This alternative would result in emissions being dispersed spatially throughout the County, reducing impacts in any one location from exposure to TACs, CO, and other criteria air pollutants when compared to the Project, although likely would result in construction occurring closer to sensitive receptors. This alternative would result in less than significant impacts with respect to consistency with applicable air quality plans, potential to contribute to a new or existing air quality violation, potential to expose receptors to substantial pollutant concentrations, and potential to cause odor impacts. Significantly reduced ground disturbance associated with this alternative would also reduce the risk of exposure to spores that cause Valley Fever. DEIR, pp. 4.4-32, 4.4-33.

Biological Resources: Under the Distributed Solar Alternative, 200 MW of energy would still be generated while avoiding any construction on the Project site, or any substation or transmission line construction. This distributed approach would avoid all ground disturbance, and cause negligible impacts to biological resources. No mitigation measures would be required. DEIR, pp. 4.5-31, 4.5-32.

Cultural and Tribal Cultural Resources: Compared to the Project, the Distributed Solar Alternative would entail a similar or larger work area, but a different distribution of solar modules attached to existing roofs across the County. As the solar modules would be attached to existing buildings, associated ground disturbing activities would be less than required for the Project. However, the installation of solar modules to any architectural historical resources may be considered an impact. This alternative has a smaller ground disturbance footprint and therefore would result in a lower potential for disturbance of previously unknown cultural resources, including archaeological resources, tribal cultural resources, and human remains. Therefore, the same mitigation measures recommended above also would be recommended to reduce the potential significant impacts of this alternative. Additional mitigation measures may be required to reduce the potential significant impacts to architectural historical resources. DEIR, p. 4.6-20.

Energy: Compared to the Project, less energy may be generated from the Distributed Solar Alternative flush-mounted panels as compared to the Project's single-axis tracking system, which is designed to optimize power production of the modules by ensuring proper orientation to the sun both daily and seasonally. However, the minimal amount of electricity required for operation would remain offset by the generation of electricity. The Distributed Solar Alternative would result in less fuel consumption compared to the Project, because on-site construction equipment use would be minimal and vehicle trips needed to support construction and maintenance activities would be dispersed in accordance with the individual site locations. Overall, this alternative would result in no significant impacts to energy; impact conclusions would be the same as those identified for the Project. DEIR, p. 4.7-14.

Geology, Soils, and Paleontological Resources: Under the Distributed Solar Alternative, geographically distributed solar PV systems would be developed on existing rooftops throughout Fresno County. No new land would be developed or altered and, as a result very little if any ground

disturbance would be required. Accordingly, the Distributed Solar Alternative would cause no significant impact to geology, soils, or paleontological resources. DEIR, p. 4.8-17.

Greenhouse Gas Emissions: The Distributed Solar Alternative would involve less construction with no ground-disturbance activities and there would be no reduction in carbon sequestration and GHG emissions generated from construction equipment and vehicle trips would be lower. Energy generated by this alternative would be for on-site use only, or could be shared via a community solar arrangement that lets multiple customers share power from a single local solar source and would therefore not require construction of a new electrical substation or transmission facilities, which would further reduce construction GHG emissions compared to the Project. Vehicle trips needed to support operation and maintenance activities would be dispersed throughout the County based on the individual site locations. Similar to the Project, this alternative would result in less than significant impacts in regards to generation of GHG emissions and conflicts with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. However, it would generate lower GHG emissions when compared to the Project. DEIR, pp. 4.9-15, 4.9-16.

Hazards and Hazardous Materials: Under the Distributed Solar Alternative, new land would be developed or altered. Power generated by the Distributed Solar Alternative would not require the construction of new electrical substation or transmission lines. Therefore, construction equipment required under the Project for site preparation, grading, and building construction would not be necessary; operation would be relatively similar to the Project with the use of vehicles. Operation would require similar vehicles under the Project including light duty trucks (e.g., pickup, flatbed) and other light equipment for maintenance needs. On-site diesel and gasoline storage would not be required for refueling of O&M vehicles. Construction of a substation, transmission lines, or disturbing on-site soil would not be necessary and little to no hazardous materials would be used; the impacts of the Distributed Solar Alternative would be reduced compared to those of the Project. DEIR, p. 4.10-22.

Hydrology and Water Quality: No new land would be developed or altered; however, depending on the type of solar modules installed, a similar or greater amount of acreage (i.e., 1,300 acres or more of total rooftop area) may be required to attain Project's 200 MW of solar PV generating capacity. Overall, Alternative 2 would involve no ground disturbance, and therefore, would have no impact, or a less than significant impact, related to hydrology and water quality. DEIR, p. 4.11-15.

Land Use and Planning: Under the Distributed Solar Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout Fresno County. Installation of rooftop solar would have to be consistent with current zoning as well as existing land use plans, policies, and regulations before it could be approved. The placement of solar panels on other structures throughout the region would result in unknown entitlement requirements, depending on the project location, zoning, land use, and potential environmental impacts on the site and surrounding areas. Nonetheless, to allow such development, the Project proponent would be required to comply with the specific entitlements needed to construct solar PV systems consistent

with this alternative. No impact would result with regard to Land Use and Planning, the same as the Project. DEIR, p. 4.12-8.

Mineral Resources: The Distributed Solar Alternative would not result in the loss of availability of a known mineral resource or a locally-important mineral resource recovery site as no land would be developed. Therefore, the Distributed Solar Alternative would have no impact with regard to Mineral Resources. DEIR, p. 4.13-5.

Noise and Acoustics: Under the Distributed Solar Alternative, vehicle trips needed to support construction and maintenance activities would be dispersed in accordance with the individual site locations. Power generated by such distributed solar PV systems typically would not require the construction of new transmission facilities. Therefore, the extent and intensity of construction-related and operational noise impacts described for the Project would be significantly reduced as construction would be limited to small-scale installations throughout the County; however, these activities would be in more urban settings and could be located closer to sensitive receptors. The Project site would continue to be used periodically for dry-farmed agriculture and/or disced and left fallow. Because there would be limited and isolated changes relative to baseline conditions, the Distributed Solar Alternative would create a marginal and less than significant impact related to both potential noise impacts and potential vibration impacts associated with construction equipment and activities, as well as from operational noise impacts. DEIR, p. 4.14-24.

Population and Housing: Unlike the Project, this alternative would not introduce solar facilities into an undeveloped area and would not result in the temporary or permanent increase in the workforce concentrated at a single construction site. Similar to the Project, the majority of the construction workers would be hired from the existing workforce in the Fresno regional area. Therefore, the Distributed Solar Alternative would result in a less-than-significant impact relating to the potential inducement of population growth and no impact relating to the displacement of people or existing housing. DEIR, pp. 4.15-7, 4.15-8.

Public Services: Under the Distributed Solar Alternative, a number of geographically distributed solar PV systems would be developed on existing rooftops throughout Fresno County, and could occur in different response and service areas than those that serve the Project. Vehicle trips needed to support construction and maintenance activities would be dispersed in accordance with the individual site locations. Power generated by such distributed solar PV systems typically would not require the construction of new electrical substation or transmission facilities. The types of demands on emergency service providers and other services of a Distributed Solar Alternative would be reduced relative to the Project and, like the Project, would result in no impact resulting from a need for new or altered governmental facilities. DEIR, p. 4.16-8.

Recreation: The Distributed Solar Alternative would not increase the use of existing recreational facilities or require the construction or expansion of such facilities. Therefore, the Distributed Solar Alternative would have no impact with regard to Recreation. DEIR, p. 4.17-3.

Transportation: Under the Distributed Solar Alternative, PV systems would be installed on existing rooftops throughout the County. Compared to the Project, this alternative would result in less severe transportation impacts than those identified for the Project due to the fact that vehicle

trips needed to support construction and maintenance activities would be dispersed in accordance with the individual site locations. This dispersion throughout the County would reduce the number of vehicle trips generated on any single roadway segment to a level that would not be noticeable to the average motorist. Furthermore, the Distributed Solar Alternative is not expected to require the construction of a new electrical substation or transmission facilities, thereby reducing the overall number vehicle trips required for site clearing and construction, operation and maintenance, and decommissioning. The impacts associated with this alternative would be less than those associated with the Project. The potential construction and decommissioning impacts caused by increased truck and passenger vehicle activity on study area roadways also would be less than significant, and no mitigation would be required. DEIR, p. 4.18-17.

Utilities and Service Systems: Under the Distributed Solar Alternative, no new land would be developed or altered and stormwater drainage would not be affected. Energy generated either would be for on-site use only or could be shared via a community solar arrangement that lets multiple customers share power from a single local solar source. The installation, operation, maintenance of rooftop solar systems are not expected to generate water demands, solid waste, wastewater or stormwater needs separate from the supporting structure. No impact regarding these considerations would result. The extension of any power or communications infrastructure to serve such systems would be negligible. Potential impacts to wastewater, stormwater, and telecommunication lines would be substantially reduced relative to the Project. DEIR, p. 4.19-13.

Wildfire: Power generated by the Distributed Solar Alternative typically would not require the construction of new electrical substation or transmission lines. Therefore, construction equipment required under the Project for site preparation, grading, and building construction would not be necessary. Although light trucks may be required to transport materials to the various sites, and construction tools could be required that might spark or otherwise cause an ignition, the rooftop locations of the solar installations would not provide vegetation that could provide ready fuel for a fire the way grasses in an agricultural field could. Operation and maintenance activities would require similar vehicles and other light equipment as the Project. On-site diesel and gasoline storage would not be required. Further, because construction of a substation and transmission lines would not be required, the impacts of the Distributed Solar Alternative would be reduced compared with those of the Project. DEIR, p. 4.20-15.

Findings

Based on the whole record, the County finds that the Distributed Solar Alternative would result in reduced environmental impacts than under the Project. The Distributed Solar Alternative would reduce impacts to aesthetics, agriculture, air quality, biological resources, cultural and tribal resources, geology and paleontology, greenhouse gas emissions, hazards, hydrology and water quality, noise and acoustics, population and housing, transportation, utilities, and wildfire. The alternative would have similar impacts to land use and planning, mineral resources, public services, and recreation.

Despite a reduction in some environmental impacts, the significance of impacts and mitigation measures required to mitigate such impacts would remain the same for this alternative as for the Project. Compared to the Project, less energy may be generated from the Distributed Solar

Alternative flush-mounted panels as compared to the Project's single-axis tracking system, which is designed to optimize power production of the modules by ensuring proper orientation to the sun both daily and seasonally.

No Project Alternative

Description

If the No Project Alternative is implemented, the Project site would continue to be used for dry-farmed agriculture and/or left fallow. The Project site is designated "Agriculture" as shown on Fresno County General Plan Countywide Land Use Diagram Figure LU-1a and is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). If the Project were not approved, then other uses consistent with the AE-20 zoning designation could be made on one or more of the parcels that comprise the Project site. Pursuant to Fresno County Ordinance Code Section 816, uses (among others) that are allowed by right without a permit relate to livestock, poultry, and crops; home occupations; agricultural products; apiaries; kennels; and welding and blacksmith shops. No such competing proposals for site use are before the County. Accordingly, rather than speculate as to possible other uses, the analysis of the No Project Alternative in the Draft EIR assumes a no-development/no Project scenario where the existing agricultural use is continued as it exists under pre-Project conditions.

Under a no-development scenario, the property would continue in agricultural use and the solar facility, gen-tie line, and other proposed infrastructure would not be constructed, operated, maintained, or decommissioned. Project-related workers and materials would not travel to the Project site, the site surface would not be disturbed differently than under baseline conditions, and no Project-related vehicles or equipment would generate noise. The existing environmental setting would be maintained. Changes to that setting, including changes to the landscape (visual resources, habitat, and land use/agriculture); Project-related construction noise, traffic, and air emissions would not occur; and environmental benefits relating to maintaining the existing groundcover as it relates to dust control or carbon sequestration, or benefits relating to renewable energy would not be realized from solar development of the site.

Impacts

Because there would be no change in the physical environment relative to baseline conditions, the No Project Alternative would create no adverse impact related to Aesthetics (DEIR, p. 4.2-27), Agriculture or Forestry Resources (DEIR, p. 4.3-11), Air Quality (DEIR, p. 4.4-33), Biological Resources (DEIR, p. 4.5-32), Cultural and Tribal Cultural Resources (DEIR, p. 4.6-20), Energy (DEIR, p. 4.7-15), Geology, Soils, and Paleontological Resources (DEIR, p. 4.8-17), Greenhouse Gas Emissions (DEIR, p. 4.9-16), Hazards and Hazardous Materials (DEIR, p. 4.10-22), Hydrology and Water Quality (DEIR, p. 4.11-15), Land Use and Planning (DEIR, p. 4.12-8), Mineral Resources (DEIR, p. 4.13-5), Noise and Acoustics (DEIR, p. 4.14-24), Population and Housing (DEIR, p. 4.15-8), Public Services (DEIR, p. 4.16-8), Recreation (DEIR, pp. 4.17-3, 4.17-4), Transportation (DEIR, p. 4.18-17), Utilities and Service Systems (DEIR, p. 4.19-13), or Wildfire (DEIR, p. 4.20-15).

However, the No Project Alternative would result in the loss of a new generator of renewable energy resources, thereby slowing the progress of the state's energy goals. As a result, potential environmental benefits of the Project relating to Energy (DEIR, pp. 4.7-11 through 4.7-13) and Greenhouse Gas Emissions would not be realized (DEIR, p. 4.9-14).

Findings

Based on the whole record, the County finds that the No Project Alternative would result in fewer environmental impacts and fewer environmental benefits than the Project. The County also finds that the No Project Alternative would not meet any of the Project objectives; as such, it is not a feasible alternative.

3.4.3 Conclusions Regarding the Evaluated Alternatives

DEIR Table 5-1 compares the conclusions of the impact analyses for both alternatives relative to the conclusions for the Project (DEIR, pp. 5-3, 5-4).

3.4.4 The Environmentally Superior Alternative is the Project

The CEQA Guidelines define the Environmentally Superior Alternative as that alternative with the least adverse impacts to the project area and its surrounding environment. For this Project, the No Project Alternative is environmentally superior because it would not create any of the localized impacts of the Project, even though it would have a less beneficial impact than that of the Project on energy and GHG emissions. The No Project Alternative would fail to meet the basic objectives of the Project, including, but not limited to, the generation of renewable solar electricity from proven technology, construction of a project that would assist the State in achieving RPS and SB 100 GHG reduction goals, and benefitting local communities through the creation of jobs, demand for local goods and services and increased sales and use tax revenue. Since the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives (CEQA Guidelines §15126.6(e)(2)).

Determining an environmentally superior alternative can be difficult because of the many factors that must be balanced. For example, the Distributed Solar Alternative could be preferred because, relative to the Project and Reduced Acreage Alternative, it would have fewer adverse environmental effects. In contrast, the Project could be preferred because, relative to either the Reduced Acreage Alternative or the Distributed Solar Alternative, it would generate the greatest amount of renewable energy, and so would offset the most metric tons of carbon dioxide emissions generated by fossil fuels and provide greater assistance to the State toward meeting the renewable energy generation targets set in SB 100. The County has identified the Project as the Environmentally Superior Alternative because the beneficial effects associated with the greater amount of renewable energy it would produce compared to the other alternatives.

3.4.5 Finding

The County finds that the Project is the Environmentally Superior Alternative, other than the No Project Alternative.

**TABLE 5-1
SUMMARY OF IMPACTS OF THE PROJECT AND ALTERNATIVES**

Resource Area	Project	Reduced Acreage Alternative	Distributed Solar Alternative
Aesthetics	Impacts determined to be Less than Significant.	Impacts would be similar but reduced compared to the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project
Agriculture and Forestry Resources	Impacts determined to be Less than Significant.	Impacts would be the same as the Project. Equal to the Project	No Impacts. Less than the Project
Air Quality	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project
Biological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts to crownscale would be eliminated under this alternative. Other impacts would be similar but reduced compared to the Project. Less than the Project	No Impacts. Less than the Project
Cultural and Tribal Resources	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project regarding previously unknown, buried cultural resources; impacts to architectural historical resources may be greater than the Project. Less than the Project
Energy	Impacts determined to be Less than Significant; beneficial contribution resulting from generation of renewable energy.	Impacts (including beneficial contribution to energy supply) would be similar to the Project but reduced. Greater than the Project	Impacts (including beneficial contribution to energy supply) would be similar to the Project but reduced. Less energy may be generated from the flush-mounted panels as compared to the Project's single-axis tracking system, which is designed to optimize power production of the modules by ensuring proper orientation to the sun. Greater than the Project
Geology, Soils, and Paleontological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	No Impacts. Less than the Project
Greenhouse Gas Emissions	Impacts determined to be Less than Significant; overall beneficial impact from net GHG reduction.	Impacts would be the same as the Project, overall beneficial impact from net GHG reduction would be reduced in comparison to the Project. Greater than the Project	Impacts would be reduced compared to the Project, overall beneficial impact from net GHG reduction would be similar to the Project. Less than the Project

TABLE 5-1 (CONTINUED)
SUMMARY OF IMPACTS OF THE PROJECT AND ALTERNATIVES

Resource Area	Project	Reduced Acreage Alternative	Distributed Solar Alternative
Hazards and Hazardous Materials	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project
Hydrology and Water Quality	Impacts determined to be Less than Significant.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	No Impacts. Less than the Project
Land Use and Planning	No Impacts.	No Impacts. Equal to the Project	No Impacts. Equal to the Project
Mineral Resources	No Impacts.	No Impacts. Equal to the Project	No Impacts. Equal to the Project
Noise and Acoustics	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project
Population and Housing	Impacts determined to be Less than Significant.	Impacts would be the same as the Project. Equal to the Project	No Impacts. Less than the Project
Public Services	No Impacts.	No Impacts. Equal to the Project	No Impacts. Equal to the Project
Recreation	No Impacts.	No Impacts. Equal to the Project	No Impacts. Equal to the Project
Transportation	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	No Impacts. Less than the Project
Utilities and Service Systems	Impacts determined to be Less than Significant with Mitigation Incorporated.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project
Wildfire	Impacts determined to be Less than Significant.	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. Less than the Project	Impacts would be reduced compared to the Project. Less than the Project

RECLAMATION PLAN

**Luna Valley Solar Project
Fresno County, California**



February 2020

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ATTACHMENT

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
Applicant	Luna Valley Solar I, LLC
DC	direct current
kV	kilovolt
Project	Luna Valley Solar Project
PV	photovoltaic

1 CURRENT AND PROPOSED CONDITIONS

1.1 INTRODUCTION

This document has been prepared for the review and approval of Fresno County Department of Public Works and Planning. The objective of this Reclamation Plan is to describe the reclamation activities associated with the Luna Valley Solar Project (Project) following cessation of the Project’s operations or the abandonment of the Project. The facility is intended to operate for 35 years or more. The general decommissioning approach will be the same whether a portion of the Project or the entire Project is decommissioned.

Most parts of the proposed system are recyclable. Modules typically consist of silicon, glass, and an aluminum frame. Tracking systems typically consist of steel and concrete, in addition to motors and control systems. All of these materials can be recycled.

Numerous recyclers for the various materials to be used on the Project site operate in Fresno and other nearby counties. Metal, scrap equipment, and parts that do not have free-flowing oil can be sent for salvage. Equipment containing any free-flowing oil would be managed as waste and would require evaluation. Oil and lubricants removed from equipment would be managed as used oil, which is a hazardous waste in California. Decommissioning would comply with federal, state, county and other local standards and all regulations that exist when the Project is shut down.

1.2 PRESENT USE

The site has historically been used for dry-farmed (non-irrigated) agriculture (low-yield production of winter wheat and oats) and has been used for this purpose for the last 10 years. Agricultural land in this area has been documented to contain relatively high levels of selenium and a water table that does not provide sufficient drainage for commercially irrigated crops. During years in which rainfall is insufficient to produce crops, the land is grazed as rangeland grasses. Currently, some portions of the Project area lie fallow while the majority of the area is used to grow livestock fodder such as alfalfa.

Only one parcel (Assessor’s Parcel Number 028-60-72ST) has a well. The well is located at 36° 36’ 13.22” N/120° 24’ 22.67” W. However, the well is currently non-operational and the water table is estimated at 995 feet below the surface of the ground. All other water used within the Project site parcels is provided from the water district.

Table 1. Historic Land Use

Assessor’s Parcel Number	Historical Ag Use (if none within past 10 years, specify what was last in ag use)	Crop Types (10 years)	Source of water for parcel (irrigation district, well(s), conjunctive system)	Well Onsite?
028-060-34T	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-060-69ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-060-70ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-60-71ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-60-72ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	Yes

Assessor's Parcel Number	Historical Ag Use (if none within past 10 years, specify what was last in ag use)	Crop Types (10 years)	Source of water for parcel (irrigation district, well(s), conjunctive system)	Well Onsite?
028-101-15ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-17ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-19ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-29ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-58ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-65ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-69ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-72ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-74ST	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No
028-101-77	Fallowed Dry Farmed non irrigated	Wheat, alfalfa seed, Grazing	Irrigation District	No

Source: Westland Water District

1.3 PROPOSED ALTERNATIVE USE

Luna Valley Solar I, LLC (Applicant) is proposing to develop, own, and operate the Project in Fresno County, California, located 9 miles west-southwest of the city of Tranquility within the unincorporated area of the town of Levis. The Project consists of constructing a utility-scale alternating current (AC) photovoltaic (PV) solar power generating farm that would produce up to approximately 200 megawatts of energy at the point of interconnection and include battery storage on approximately 1,300 acres of privately-owned agricultural land. The Project would include the construction of access roads, electrical interconnection, and a Project substation.

The Project area is zoned AE-20, Exclusive Agriculture; 20-acre minimum parcel size. Within this zoning district, Fresno County permits utility-scale solar energy uses with an Unclassified Conditional-Use Permit. The Applicant selected the Project area based on its previously disturbed nature and close proximity to electrical infrastructure and designed the Project in accordance with state and county regulations.

1.3.1 Key Components of the Project

Upon completion of construction, the Project is planned to include the following key components:

- Solar field with arrays of PV modules;
- Inverters, combiners, and transformers;
- Overhead and buried conduits;
- On-site medium-voltage (34.5 kilovolt [kV]) collection lines;
- Project substation;

- Aboveground generation-tie line with poles approximately 175 feet in height;
- Energy storage system;
- On-site unpaved access roads;
- Security fencing located along the site perimeter; and
- Construction laydown areas, equipment, and structures
- On-site Operations and Maintenance building.

1.4 DURATION OF ALTERNATE USE

The Project has an expected useful life of 35 years and is expected to be operational in 2023 and remain in operation through 2058. It is possible that the useful life of the Project could be extended through maintenance of existing equipment or with equipment replacement and could remain in operation beyond 2058.

1.5 OWNERSHIP OF THE PROPERTY

The land is currently owned by Westlands Water District, and is under a purchase option agreement with the Applicant, Luna Valley Solar I, LLC who intends to purchase the land prior to starting Project construction.

2 EQUIPMENT DISMANTLING AND REMOVAL

2.1 RECLAMATION TIMELINE

Pre-dismantling activities include de-energizing and isolating the Project from external electrical lines and delineated staging areas. As reclamation and equipment removal can take a year or more, access roads, fencing, and electrical power may temporarily remain in place for use by the reclamation and restoration workers until no longer needed.

2.2 GENERAL ENVIRONMENTAL PROTECTION

Environmental protection and mitigation measures would be implemented during Project reclamation and restoration, similar to measures taken during construction and operations. Reclamation will attempt to maximize the recycling of all facility components. Specific opportunities for recycling (e.g., PV solar modules) are discussed below in the context of various site components. The individual Project components to be reclaimed will be recycled to the maximum extent practical. The general reclamation approach will be the same whether a portion of the Project or the entire Project is reclaimed.

2.3 MANAGEMENT OF HAZARDOUS WASTE AND EXCESS MATERIALS

The management of wastes and excess materials will be in accordance with local, state, and federal laws. Hazardous wastes are not anticipated to be on site. If hazardous wastes do occur on site, they will be removed and disposed of in accordance with local, state, and federal laws.

2.4 EQUIPMENT DISMANTLING AND REMOVAL

2.4.1 Site Plan

A site plan showing the locations of all equipment, structures, above and underground utilities, fencing, and buffer areas has been attached to this document (Attachment 1).

2.4.2 PV Module Collection and Recycling

The PV solar modules and rack supports will be removed in their entirety from the site using cranes, dump trucks, and flat-bed and rear-loader garbage trucks. The support posts will be removed by excavators with attachments. Cranes may be required to remove equipment with concrete foundations. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the on-site equipment being used. The majority will be processed for transportation to an offsite recycling center. All steel, copper, and aluminum will be recycled.

The PV modules will be de-energized and dismantled from the torque tubes. The modules will then be collected into rear-loading trucks and will be redeployed into a secondary market. All salvageable material will be removed from the Project site for resale or scrap.

2.4.3 Electrical Equipment

Electrical equipment including inverters, transformers, cables, overhead lines, and substation infrastructure will be reclaimed in accordance with local, state, and federal laws and all required permits will be obtained, as needed.

The inverters that convert direct current (DC) power to AC power and medium voltage transformers that increase the AC power voltage to 34.5 kV will also be dismantled and removed by cranes and flat-bed trucks. Insulating vegetable oil from the medium voltage transformers will be drained, removed from the site, and recycled or disposed of at an appropriately licensed disposal facility. The underground 34.5 kV cable/collection lines will be cut off and remain in place, or removed and recycled, as well as all AC and DC electrical wiring. All cables and wiring to be left in place will be cut off at a depth of 2 feet below grade.

2.4.4 Roads, Parking Area, and Substation Yard

On-site roads will remain in place to accomplish reclamation. At the time of reclamation, if the landowner determines that some of these roads will be beneficial for future use of the site, those roads may remain after reclamation. Roads that will not be re-used will be restored to preconstruction conditions. For the paved access driveways and parking area, pavement will be broken up and removed to an appropriate disposal site. If soils are significantly compacted, they will be restored using a disking method. The ground surface will be restored and revegetated to pre-construction conditions. Should areas need to be leveled, clean topsoil will be imported to the site by truck.

2.4.5 Other Components

Other components that will be removed during reclamation may include surface drains, road culverts, and fencing. These components will be recovered, used, or recycled as possible; those that cannot be recycled will be disposed of according to local, state, and federal laws. The chain link fence and gates surrounding the Project may be retained for safety and security purposes. Once other major reclamation activities are complete, the fencing will be removed and recycled.

2.5 SITE RESTORATION

The goal of Project restoration is to return the land to a condition where the current practice of dryland farming is possible. Photographs of the existing site are included as Attachment 2. Restoration will include the following actions:

- Project drainage features will be restored using suitable fill material.
- Roads, parking areas, and substation will be removed and restored to their pre-construction conditions and topography.
- Soils will be de-compacted using a disking method, as needed.
- As needed, topsoil will be used to restore suitable conditions for vegetation growth.
- The site will be reseeded using a mix that contains native species if the decision is made to return to rangeland or to winter wheat if the decision is made to return to cropland; the seed mix may be determined in consultation with Fresno County or local experts. If site restoration through reseeded is not feasible due to lack of water/drought or other environmental factors, Luna Valley will work with the County to identify and implement an alternate solution.
- Reseeding will be accomplished by broadcast using manually operated cyclone-type bucket spreaders, mechanical seed spreaders, blowers, hydroseeders, rubber-tired all-terrain vehicles equipped with mechanical broadcast spreaders, or other similar or more effective measures.

3 RECLAMATION COST ESTIMATES

The estimated costs for reclamation of the Project are shown below in Table 1. These costs are based on costs for measures to dismantle the facility, dispose of Project components, and make the Project site suitable for agricultural use following cessation of the Project's operations or the abandonment of the Project.

Table 1. Decommissioning Cost Estimate

Reclamation Item	Cost	Labor				Equipment			
	Total	Employees	Hours	Labor Rate	Subtotal	Type	Hours	Rates	Subtotal
Onsite oils and lubricants removed	\$ 17,500	2	300	\$ 50	\$ 15,000	Container	2	\$1,250	\$ 2,500
Substation components removed	\$ 49,630	4	630	\$ 75	\$ 47,250	Low bed truck	68	\$ 35	\$ 2,380
Electrical conduit removed	\$ 291,325	9	3700	\$ 75	\$277,500	Flat bed truck	395	\$ 35	\$ 13,825
PV modules removed and recycled	\$ 272,175	10	5069	\$ 50	\$253,450	Flat bed truck	535	\$ 35	\$ 18,725
PV modules support H-beams	\$ 303,750	10	4430	\$ 50	\$221,500	Backhoe	470	\$ 175	\$ 82,250
Electrical and electronic devices	\$ 112,750	5	970	\$ 75	\$ 72,750	Backhoe/Crane	100	\$ 400	\$ 40,000
Fencing, gates removed	\$ 151,625	4	1275	\$ 40	\$ 51,000	Backhoe	575	\$ 175	\$100,625
Roads, pathways, and other	\$ 60,800	4	595	\$ 40	\$ 23,800	CAT/backhoe	185	\$ 200	\$ 37,000
Site disced for revegetation	\$ 83,000	4	500	\$ 40	\$ 20,000	CAT/water truck	420	\$ 150	\$ 63,000
Total	\$1,342,555				Labor Total \$982,250				Equipment Total \$360,305

4 NOTIFICATION TO OWNERS OF RECORD

Westland Water District has explicitly given permission for the submission of all documents pertaining to the Conditional Use Permit including this Reclamation Plan. A copy of this signed document has been attached to this Reclamation Plan (Attachment 3).

INTEGRATED PEST MANAGEMENT PLAN

**Luna Valley Solar Project
Fresno County, California**



FEBRUARY 2020



Luna Valley Solar I, LLC

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
Applicant	Luna Valley Solar I, LLC
IPM	Integrated Pest Management
PPE	Personal Protective Equipment
Project	Luna Valley Solar Project
UCUP	Unclassified Conditional Use Permit

1 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

Luna Valley Solar I, LLC (Applicant) is proposing to develop, own, and operate the Luna Valley Solar Project (Project) in Fresno County, California, 9 miles west-southwest of the city of Tranquility within the unincorporated area of the town of Levis (Figure 1). The Project consists of constructing and operating a utility-scale alternating current (AC) photovoltaic solar generating and energy storage facility that would produce up to 200 megawatts of energy at the point of interconnection on the electrical grid located on approximately 1,300 acres of privately-owned agricultural land (Figure 2). The Project would include the construction of access roads, electrical interconnection, and a Project substation.

The Project area is zoned Exclusive Agriculture AE – 20, Exclusive Agriculture; 20-acre minimum parcel size. Within this zoning district, Fresno County permits utility-scale solar energy uses with an Unclassified Conditional-Use Permit (UCUP). The Applicant selected the Project area based on its previously disturbed nature and close proximity to electrical infrastructure and designed the Project in accordance with state and county regulations.

Upon approval, the UCUP is subject to the Conditions of Approval and Mitigation Measures set forth in the Fresno County Board of Supervisor's Resolution in accordance with the California Environmental Quality Act of 1970 (California Public Resources Code § 21000 et seq.) and the California Code of Regulations (Title 14 § 15000 et seq.).

This Integrated Pest Management (IPM) Plan has been prepared to comply with the Project's anticipated Fresno County UCUP. The following pest-control measures were developed for the purpose of minimizing the likelihood of pests within the Project site and maximizing the ability to reduce the current (if present) pest population.

1.2 KEY COMPONENTS OF THE PROJECT

Upon completion of construction, the Project is planned to include the following key components:

- Solar field with arrays of photovoltaic modules that are up to 13 feet in height, arranged in rows with center-to-center spacing of approximately 230 feet, and mounted on single-axis trackers designed to optimize power production of the modules by ensuring proper orientation to the sun both daily and seasonally;
- Approximately 70 power conditioning stations that convert the direct current electricity from the solar array to AC and accumulate the AC electricity to an appropriate collection level voltage for movement to the Project substation and eventual delivery to the electrical grid;
- On-site Project substation and associated control room, located in the southwest corner of the Project site, with transformers, breakers, switches, meters, and other related equipment;
- Energy storage system in the southwest corner of the Project site, adjacent to the Project substation;
- Access roads including interior and perimeter access roads approximately 20 feet wide;
- Perimeter fencing 7 feet tall with one foot of three-strand concertina and access gates around entry points;
- Telecommunications interconnection at the Project substation;
- Meteorological data collection systems mounted at various locations to determine the optimal angle of the solar modules;
- Signage to allow for the identification of the Project owner and for safety and security purposes;

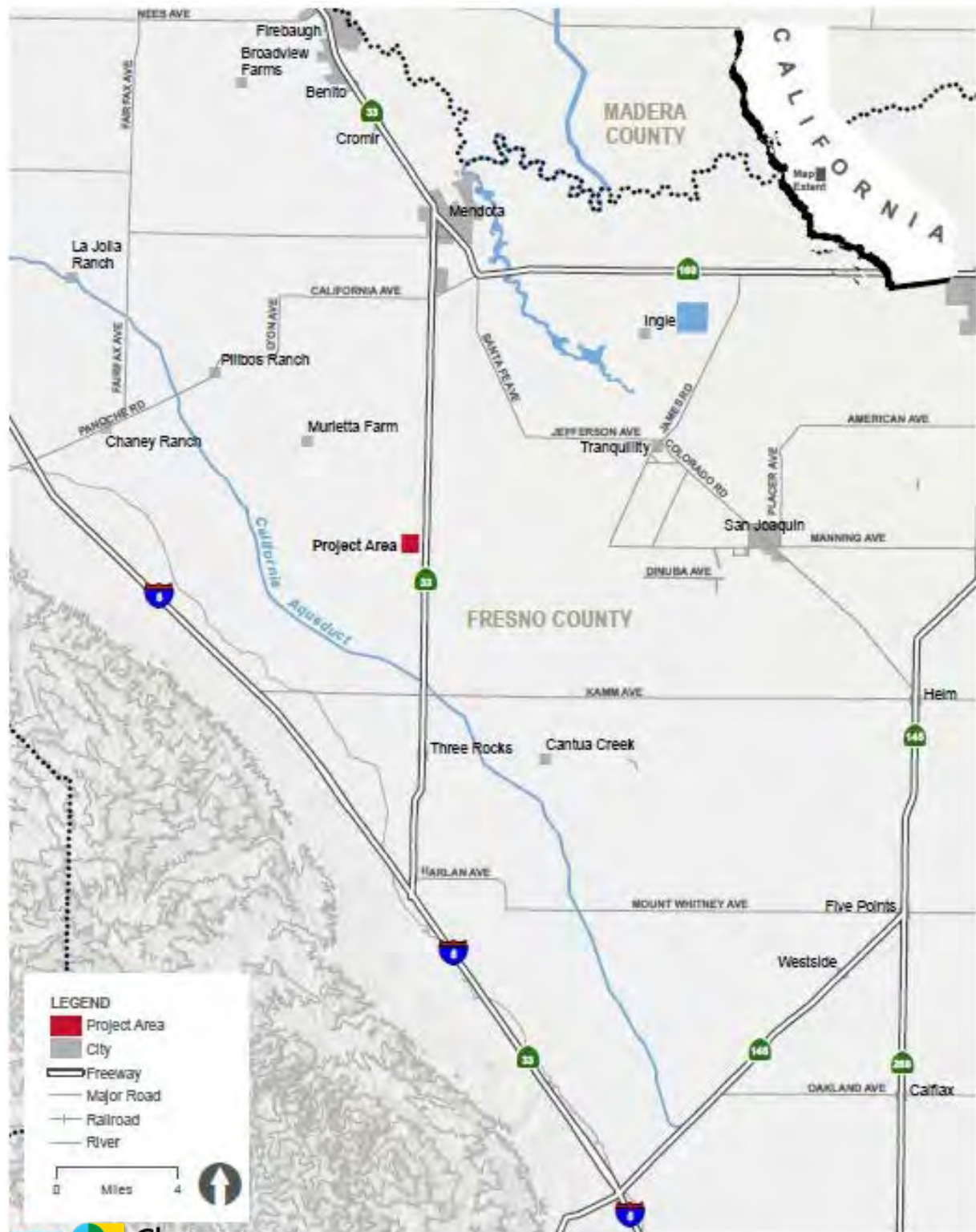
- Lighting to allow for ongoing maintenance and security;
- Stormwater facilities designed to follow the natural drainage pattern; and
- Other infrastructure including an operations and maintenance building and sanitary facilities.

The Project site is within an unincorporated area of the Central Valley and generally bound by flat, agricultural lands and other solar energy facilities. The nearest city is Tranquility, approximately 9 miles to the east-northeast. Interstate 5, paralleled to the east by the California Aqueduct, is approximately 11 miles to the west as well as to the south of Project area. The cities of Mendota and San Joaquin are approximately 10 miles north and east of Project area, respectively. The San Joaquin Airport is roughly 9.5 miles east of the Project area.

More specifically, Highway 33 (S. Derrick Avenue) makes up the eastern boundary of the Project area. The western edge of the Project area is approximately 2,600 feet east of South San Bernardino Avenue, the northern edge is approximately 1,400 feet south of W. South Avenue, and the southern edge is approximately 1,300 feet north of W. Dinuba Avenue. W. Manning Avenue cuts through the approximate middle of the Project area from east to west and S. Ohio Avenue cuts through the approximate middle of the Project area from north to south.

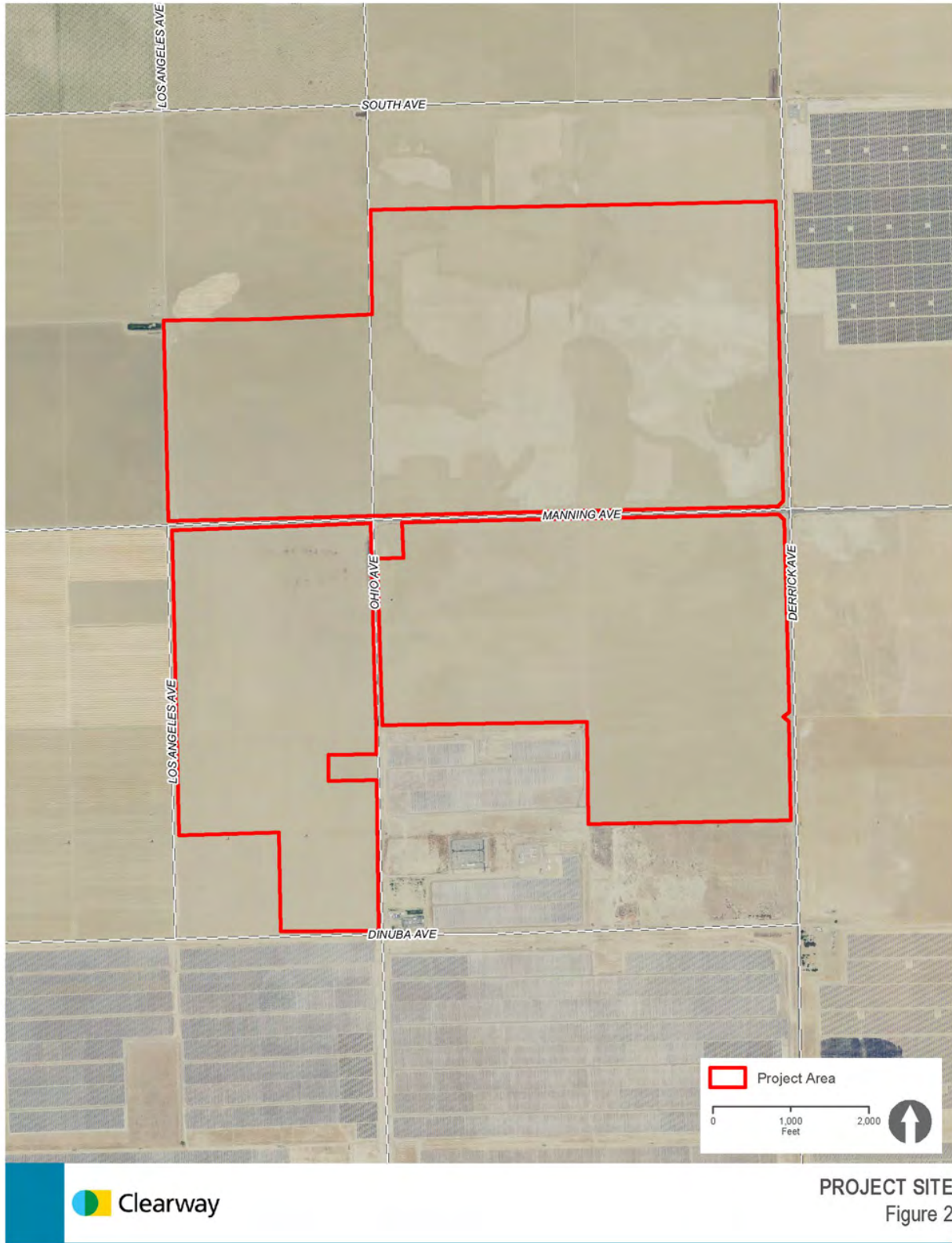
The Project site is entirely within the U.S. Geological Survey 7.5-minute topographic quadrangle of Levis. The Project area is located within Township 15 South, Range 14 East, Sections 23, 24, 25, and 26. The Project site is located approximately within the latitudes of 36.59° and 36.61° and within the longitudes of -120.39° and -120.42° (in decimal degrees). The Project area centroid is located at approximately latitude/longitude 36°36'12"N/120°24'05"W (WGS1984).

Figure 1. Project Location



PROJECT LOCATION
FIGURE 1

Figure 2. Project Site



2 PEST MANAGEMENT GOALS

This IPM Plan has been prepared to comply with the Project's anticipated Fresno County UCUP. The following pest-control measures are based on widely accepted IPM protocols and were developed for the purpose of minimizing the likelihood of pests (including weeds) within the Project site and maximizing the ability to reduce the current (if present) pest population. The IPM Plan will focus on keeping the Project area's pest population under control.

3 STRATEGY

This IPM Plan promotes the use of a range of preventative and non-chemical approaches to control pest populations and stave off infestation. If an infestation with unacceptable impacts occurs, thereby warranting additional treatment, IPM protocol favors the use of least-toxic pesticides. The targeted application of a toxic pesticide is allowed only after all other reasonable non-toxic options are exhausted. This plan outlines preventative best practices and pest control strategies. Provisions for the use of least-toxic pesticides, and toxic chemicals when necessary, are outlined should a pest infestation occur.

4 PERFORMANCE MEASUREMENTS, QUALITY ASSURANCE, AND CONTROL

The environmental performance of the IPM Plan shall be compiled from IPM records and analyzed on an annual basis. An IPM report identifying the types of pest problems encountered on site and the types and quantities of all pesticides used shall be generated by Project personnel for review. The following metrics shall be tracked throughout the year and documented in the report to evaluate the IPM Plan:

1. The severity and location of all major pest infestations
2. The amount of each pesticide product used by volume

Routine inspection and monitoring are to be performed by designated Project personnel. Particular attention will be paid to problem areas, referring to the IPM log for guidance. The overall IPM program will be reviewed on an annual basis.

5 RESPONSIBLE PARTIES

The Operations Manager is responsible for monitoring consistent and correct implementation of the IPM Plan. The Project is responsible for record keeping and performance measurement. The compiled records from all parties will be synthesized as part of an annual IPM Plan review

6 PRACTICES

The following sections include general and specific chemical, manual, and cultural pest control strategies. Pest control chemicals other than glyphosate (e.g. Roundup) and pelargonic acid (e.g. Scythe) can only be applied by a credentialed applicator in the state of California and it is necessary to confirm that the applicator has all the necessary federal, state, and local agency permits.

6.1 WEED CONTROL PRACTICES

Chemical pesticides are seen as a last resort under the tenets of IPM. Mechanical and chemical methods are time consuming and costly. Preventative strategies are the safest, most environmentally sound, and most cost-effective weed control practice.

6.1.1 Weed Prevention

Preventative strategies to control the spread of weed seed within the Project area include the following:

- Clean all vehicles inside and out at a commercial washing station, this will prevent weed seeds that are carried in tire treads, etc. from being carried onto the property.
- If disturbed ground is not otherwise stabilized, revegetation may be used on portions of the disturbed ground with a County approved native perennial seed mix that is certified as a weed free seed by the vendor. This will help prevent any windblown weed seed from landing on bare soil and germinating.
- Limit ground disturbance to reduce the amount of bare soil and potential for the weed seed to germinate.

6.1.2 Mechanical Controls

Mechanical strategies to remove existing and new weed populations include the following:

- Regular inspections of the property should be made to identify weeds before they go to seed.
- Remove weed species when identified. This can be done by pulling the entire plant out of the soil and disposing of it. It is especially important to remove weeds before the seed head matures.
- Handheld string trimmers (Weed Eaters) or mowers can be used in the larger open spaces if needed but those activities should be timed before the weeds develop seed heads.

6.1.3 Chemical Controls

Chemical pesticides are to be used by Project personnel after non-chemical options have been exhausted, with a preference for use of a low risk pesticide. Low risk pesticides are determined by hazard screening to be of "lowest concern," because the product contains:

- No known, likely, or probable carcinogens
- No reproductive toxicants (CA Prop 65 list)
- No ingredients listed by the U.S. Environmental Protection Agency as known, probable, or suspect endocrine disrupters
- Active ingredients have a soil half-life of thirty days or less
- Labeled as not toxic to fish, birds, bees, wildlife, or domestic animals

6.2 GENERAL ANIMAL CONTROL PRACTICES

The most important aspect of animal control is trash management. Good sanitation practices will reduce habitat and food sources for pests. Trash containers should be rodent proof and areas around trash containers should be free of spillage or garbage to prevent the collection of trash or debris on the ground on or around the containers. Trash containers should be kept clean, free of odors, and covered at all times.

The following practices are designed to help prevent unwanted animals from gaining access to buildings on site:

- Monthly visual inspections of outside and interior walls as well as any attic space.
- Maintain the building exterior in good repair with no holes or openings larger than 0.25-inch including, but is not limited to, windows, doors, fans, vents, etc., to keep pests from entering the building.
- Address any deficiencies in the building exterior with corrective measures, i.e., cementing, screening, caulking, installing stripping on door bases, etc.
- Maintain door sweeps on all applicable doors to produce a good seal to the ground.

- Keep grounds free of high weeds, trash, old equipment and debris, as these conditions create ideal harborage for rodents.
- Water used for dust abatement will be minimized, as allowed by Fresno County, and managed to prevent puddles forming that may attract rodents.

6.3 RODENT CONTROL PRACTICES

In addition to the general animal control practices listed above, it is recommended that the following practices be implemented specifically for rodent control:

- Visual surveys should be conducted weekly to determine if rodent infestations are occurring, the source of the problem, and the conditions that encourage the infestation.
- Remove food sources.
- Eliminate places of refuge.
- Openings in building foundations and walls should be closed or screened with wire mesh that has holes not more than 0.25-inch wide. Where pipes enter masonry, force heavy hardware cloth or steel wool into the opening, then fill it with concrete.
- Continuous surveillance is necessary and places where rodents have been gnawing to gain entry to a building should be sealed with metal flashing.
- Doors are particularly vulnerable to rodent entry so ensure that external doors and windows close tightly with no gaps at the bottom.
- Materials stored in the open, in sheds or in buildings should be stacked at least 1 foot above the ground.

If the rodent populations need to be actively managed and the infestation is indoors, snap traps or battery-operated traps that generate high voltage once the rat or mouse is inside are the most efficient control method. Rodent populations are not expected to become an issue at the outdoor solar arrays, there is little in the way of habitat and food and natural predators are likely present. If the above methods of rodent control fail, the last resort is to use a rodenticide.

Rodenticides will be limited to zinc phosphide because of its proven lower risk to the San Joaquin Kit Fox. Bait stations shall be enclosed so the opening is accessible for the target rodent, but the opening should be at an elevated angle so that the bait stays inside the trap at all time.

6.4 CHEMICAL APPLICATION PROCESSES

All chemical application and advice on pest management problems will be made by a licensed pest control company, particularly in the creation of a customized treatment plan which may require detailed knowledge of the biology and ecology of a particular species. No herbicides should be stored on the property and a specialist must prepare the chemicals off-site to limit the chances of a spill. Herbicides are not to be sprayed within the buffer zone on any sensitive resource area without prior authorization from the appropriate regulatory agency.

6.4.1 Contractor Requirements and Spill Control

All contractors responsible for herbicide use, transport, application, and control at the site will hold the appropriate certifications. Such certifications shall be made available. Contractors transporting herbicides to the site shall also have legible Safety Data Sheets and labels on site.

Spill kits will be available on site and must be carried in herbicide contractor vehicles. If a spill or inadvertent release occurs the following protocol should be followed:

- Notify the Operations Manager and the appropriate regulatory agencies immediately.
- Secure the affected area barring pedestrian and vehicle traffic.

- All spill response personnel shall put on the appropriate Personal Protective Equipment (PPE) prior to entering the spill containment area.
- Personnel, while wearing the appropriate PPE and equipped with the necessary tools and equipment, shall stop the herbicide leak or release.
- All materials associated with spill response, including the released herbicide, affected soils and plants, absorptive material, clothing, and PPE shall be removed and containerized according to appropriate regulations and procedures.
- All generated spill response containers shall be transported, following appropriate regulations, and disposed legally at an approved disposal facility.

6.4.2 Application Procedures

Chemical pesticide applications on site will occur using the following general best management practices:

- Time the treatment to coincide with the presence of the pest.
- Use a selective chemical that has the least effect on non-target species and treat only the area affected.
- Spraying must not be carried out in unsuitable weather. Anyone operating sprayers must have access to a wind-speed meter and only spray when the wind speed is less than 10 miles per hour.
- Hours of work must be controlled so that neighbors are not exposed.
- Spray equipment must be frequently checked and properly maintained, both for health and safety reasons and to minimize spray drift.
- Users must wear protective clothing appropriate to the pest chemical application used.
- Ensure that anyone handling toxic chemicals never works alone and that the work area is well-ventilated.
- Require respirators for outdoor spraying or dusting of organic phosphorus compounds.
- Eating, drinking and smoking must be prohibited when using or handling chemicals.
- Users must be familiar with the effects on the body of the chemicals they are likely to be using, and how the chemicals may enter the body.
- Users must be aware of the signs and symptoms of acute poisoning related to chemicals they are using. They must stop work if they are feeling ill and seek medical advice.

7 RECORD KEEPING – IPM LOG

Monitoring the effectiveness of the IPM Plan over time requires diligent tracking of several items: pest populations and locations; management strategies employed; quantities and types of chemicals and products used; and the outcome of pest management activities. The Project Operations Manager shall maintain records in an IPM logbook that include the information below.

1. Notification to neighbors and others who may be affected: date, time method
2. Date, time and location of pesticide application
3. Target pest
4. Identify threshold for treatment (acres or number of animals)
5. Prevention and other non-chemical methods of control used
6. Type and quantity of pesticide used, including trade name and active ingredient
7. Summary of results
8. Name of the pesticide applicator
9. Application equipment used

EXHIBIT 13

From: [Frank Coelho](#)
To: [Shaw, Jeremy](#)
Cc: [John Coelho](#)
Subject: EIR #7813
Date: Thursday, September 24, 2020 10:59:15 AM

Jeremy,

I represent our family who own parcels 028-101-13 and 028-101-14. These two parcels are bordered on two sides (east & north) by the Luna Valley Solar Project EIR #7813. Historically turns roads have been shared equally by our neighboring land owners. We want to make sure the Luna Valley Solar will have set backs for the fence they will be installing around their solar project adjacent to our parcels.

Could you please advise at your earliest convenience what those setbacks will be. I can be reached at (559) 288-1429 or by email.

Thanks Frank