SANTA BARBARA COUNTY PLANNING COMMISSION

Staff Report for the
SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility Project

Hearing Date: November 7, 2018

Staff Report Date: October 30, 2018

Case No.: 17GPA-00000-00006 & 17CUP-00000-00044

Environmental Document: CEQA Supplemental Document to EIR (11EIR-00000-00005 & SCH No. 201121009), CEQA Guidelines Section 15168(c)

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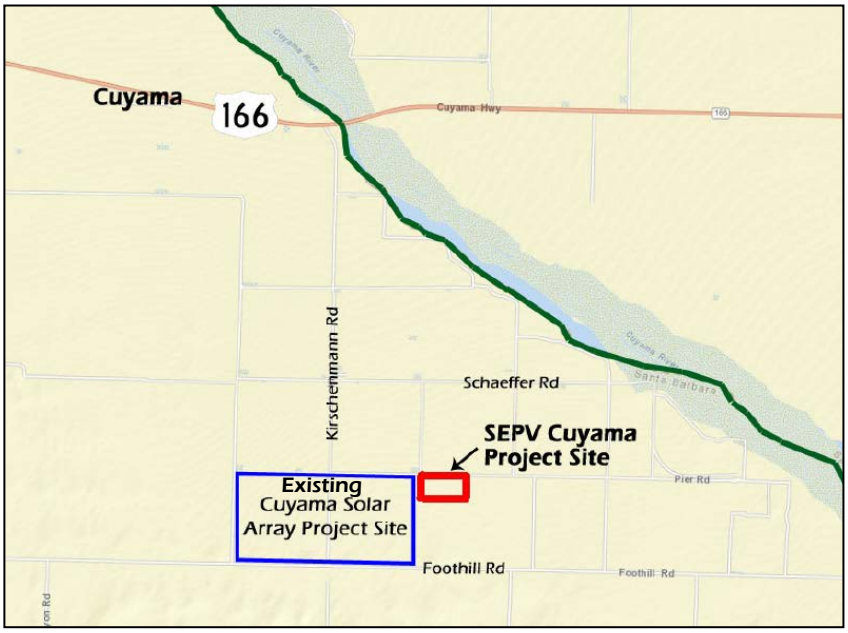

This site is identified as Assessor Parcel Number 149-150-033, located south and southeast of the town of Cuyama and adjacent to the Cuyama Solar Array project site, First Supervisorial District.

Application Complete: May 29, 2018
Processing Deadline: 60 days from acceptance of Supplemental Document to the EIR

1.0 REQUEST

Hearing on request of the applicant, SEPV Cuyama, LLC to consider:

1. Case No. 17GPA-00000-00006 [application filed on November 14, 2017] for the amendment of the Santa Barbara County Comprehensive Plan Land Use Element Map

Comp-9 to add the Utility-Scale Solar Photovoltaic Facility Overlay to Assessor's Parcel Number 149-150-033; and

2. Case No. 17CUP-00000-00044 [application filed on November 14, 2017] for approval of a Conditional Use Permit to allow for the construction and operation of the SEPV Cuyama Solar Facility in compliance with County Land Use and Development Code Sections 35.59 (Utility-Scale Photovoltaic Facilities) and 35.82.060 (Conditional Use Permits).

In addition, determine that the environmental effects of the proposed project were covered in the previously certified Cuyama Solar Facility and Comprehensive Plan/Land Use Development Code Amendments Project EIR (11EIR-00000-00005) pursuant to State CEQA Guidelines Section 15168(c). See Attachment C.

All project documents may be reviewed at the Planning and Development Department, 123 East Anapamu Street, Santa Barbara. Please contact the project planner, Joseph Dargel, in advance at (805) 568-3573 or jdargel@countyofsb.org to ensure that project materials will be available.

The application involves Assessor Parcel No. 149-150-033, with no associated address and located approximately 0.4 miles north of Foothill Road and 0.5 miles east of Kirschenmann Road in the Cuyama Area, 1st Supervisorial District.

2.0 RECOMMENDATION AND PROCEDURES

Follow the procedures outlined below and recommend that the Board of Supervisors conditionally approve Case Nos. 17GPA-00000-00006 and 17CUP-00000-00044 marked "Officially Accepted, County of Santa Barbara October 30, 2018 County Planning Commission Attachments A-I", based upon the project's consistency with the Comprehensive Plan and based on the ability to make the required findings.

Your Commission's motion should include the following:

1. Recommend that the Board of Supervisors make the required findings for approval of the Comprehensive Plan Amendment (17GPA-00000-00006) and Conditional Use Permit (17CUP-0000-00044) as specified in Attachment A of this staff report, including CEQA findings; and

2. Recommend that the Board of Supervisors, after considering the environmental review documents included as Attachments C and D [CEQA Guidelines Section 15168(c) Supplemental Document to the EIR dated October 30, 2018 together with the previously certified EIR, Case No. 11EIR-00000-00005] determine that as reflected in the CEQA findings, the project is within the scope of a previous Program EIR and no subsequent Environmental Impact Report shall be prepared for this project; and

3. Adopt a resolution recommending that the Board of Supervisors approve and adopt a resolution, included as Attachment F to this staff report, amending the Comprehensive Plan to add the Utility-Scale Solar Photovoltaic Facility Overlay to the 20.44-acre Project site (Resolution included as Attachment F and Board of Supervisors draft Resolution is Attachment 1 to Attachment F); and

4. Recommend that the Board of Supervisors approve Conditional Use Permit (17CUP-00000-00044) subject to the conditions included as Attachment B.

Alternatively, refer back to staff if the County Planning Commission takes other than the recommended action for appropriate findings and conditions.

3.0 JURISDICTION

This project is being considered by the County Planning Commission for a recommendation to the Board of Supervisors based on the following sections of the County Land Use and Development Code (LUDC):

LUDC Section 35.80.020 states that the Planning Commission reviews Comprehensive Plan Amendments and provides a recommendation to the County Board of Supervisors who are the final decision makers of the project. LUDC Section 35.80.020, Table 8-1, states the approval of a Conditional Use Permit (CUP) is under the jurisdiction of the Planning Commission. The final decision-maker shall be the Board of Supervisors based on Section 35.80.020 of the LUDC, which states that when two or more discretionary applications are submitted that relate to the same development project and the individual applications are under the separate jurisdiction of more than one review authority, all applications for the project shall be under the jurisdiction of the review authority with the highest jurisdiction. In this case the highest jurisdiction is the Board of Supervisors. When the Board of Supervisors is the review authority for a project, the Planning Commission shall make an advisory recommendation to the Board of Supervisors on each application.

4.0 ISSUE SUMMARY

The proposed project is a request for a 20-acre utility-scale solar photovoltaic facility in the Cuyama Valley Rural Region which is a conditionally allowed use on parcels zoned Agricultural II (AG-II) with the Utility-Scale Solar Photovoltaic Facility Overlay. The project site is not currently located within this overlay designation, therefore, the application includes a request for both a Conditional Use Permit as well as a Comprehensive Plan Amendment to apply the Utility-Scale Solar Photovoltaic Facility Overlay designation to the site.

The Cuyama Solar Facility and Comprehensive Plan/Land Use Development Code Amendments Project Environmental Impact Report (EIR), Case No. 11EIR-00000-00005, was certified by the Board of Supervisors in 2014 as environmental review for the action to allow the Comprehensive Plan Amendment that created the Utility-Scale Solar Photovoltaic Facility Overlay and analyzed on a programmatic scale, the future development of up to 600 acres of utility-scale solar photovoltaic facilities within Cuyama Valley. Also included in this EIR was analysis of the physical development of a 327-acre project known as the Cuyama Solar Array site, which is adjacent to the 20-acre SEPV Cuyama site. Discussions within this staff report and attachments refer to the programmatic portion of the EIR as the "Cuyama Utility-Scale Solar Programmatic EIR." Because a programmatic EIR was completed, certified, and intended to be applied for future utility-scale solar development within the Cuyama Valley Rural Region, a Supplemental Document to the EIR, Case No. 11EIR-00000-00005, has been completed pursuant to CEQA Guidelines Section 15168(c) as environmental review for the proposed SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility project (SEPV Cuyama project).

In review of the potential project impacts, the applicant provided a site specific Biological Report, a Phase I Archaeological Assessment, and a project specific Air Quality/Greenhouse Gas Report. These studies were analyzed in the Supplemental Document to the EIR and no new significant impacts were identified.

5.0 PROJECT INFORMATION

5.1 Site Information

Site Information	
Comprehensive Plan Designation	Inland, Cuyama Valley Rural Region – Agricultural II (A-II)
Ordinance, Zone	Land Use Development Code, Agricultural II (AG-II-40)

Site Information	
Site Size	20.44 acres
Present Use & Development	Undeveloped agricultural land located in the rural area of the County
Surrounding Uses/Zone(s)	*North:* Agriculture (irrigated field crops) / AG-II-100 *South:* Agriculture (dry field crops) / AG-II-40 *East:* Agriculture (irrigated field crops) / AG-II-100 *West:* Utility-Scale Solar Photovoltaic Facility
Access	South of State Highway 166, east of Kirschenmann Road, via existing un-named road along the westerly line of the property
Public Services	Water Supply: Cuyama Community Services District Sewage: n/a Fire: Santa Barbara County Fire Department Station #41 Police Services: Santa Barbara County Sheriff's Department

5.2 Setting

The SEPV Cuyama Solar Facility site is located 2 miles southeast of the town of Cuyama and approximately 1 mile southwest of the Cuyama River, toward the southern edge of the Cuyama Valley floor. The proposed solar facility site is gently sloping, with the prevailing gradient to the north–northeast, toward the Cuyama River. The SEPV Cuyama Solar Facility site is currently undeveloped.

5.3 Description

The request is for a Conditional Use Permit and Comprehensive Plan Amendment to construct and operate a solar photovoltaic (PV) electricity generating facility with the capacity to generate, store and deliver up to 3 megawatts (MWac) of renewable electrical energy during peak periods of production. A Comprehensive Plan Amendment is required to place the parcel with the Utility-Scale Solar Photovoltaic Overlay designation depicted on the Land Use Element Comp-9 Map. The facility, called SEPV Cuyama, would be designed to operate year-round and would generate and store electricity during the daylight hours when local electricity demand from Pacific Gas and Electric (PG&E) customers is typically at its peak. The facility would also include an optional energy storage capability utilizing lithium ion batteries stored in up to three 40-foot long shipping containers located on-site and connected to the PV system with underground electrical conduit. The battery storage system would be designed to charge during off-peak periods and discharge during peak periods. Electricity generated by the project would be interconnected to the PG&E electrical distribution system at an existing PG&E 21 kV line

that runs north-south along the western boundary line of the property. The PG&E Substation is approximately 2.5 miles northwest of the SEPV Cuyama project site.

The major components of the facility would be PV modules, single-axis sun tracking support structures, battery storage and electronic/electrical equipment. The PV modules would be mounted to steel support structures designed and installed to properly position the PV modules to maximize the amount of sunlight that can land upon their surfaces. The single-axis sun tracking arrays (a row of PV modules) would be oriented along a north-south axis to allow the PV modules to rotate from east to west in order to track or follow the sun's path throughout a day. These support structures would be mounted on foundations of steel beams or tubes directly embedded into the ground to a depth of five to eight feet depending upon loading and soil conditions. These structural elements are typically driven into the earth with vibratory or hydraulic press-in methods. The PV modules, at their highest point of the solar tracking during the day, would be less than nine feet above the ground surface. The battery energy storage containers would be 9.5 feet above ground surface.

The direct current (DC) electrical output from the PV modules and battery storage units would be transferred to inverters which convert the DC energy to high quality utility grade alternating current (AC) electricity. Electrical transformers would be used to boost the AC voltage output of the inverters to the 21 kV level required to interconnect to PG&E's existing overhead distribution circuit that runs adjacent to the west side of the project site. The produced energy from the SEPV Cuyama solar plant would be routed through an underground electrical line to customer metering and switchgear units located on four separate poles, then to an existing pole mounted PG&E metering and switchgear unit for interconnection to the 21 kV PG&E overhead line.

The facility would be accessed from the existing un-named road along the westerly line of the property with on-site perimeter and center line compacted dirt roads for fire access and facility operations. A six foot tall chain-link security fence would be installed around the perimeter of the site to restrict public access during construction and operations. A remotely monitored security system would be installed to discourage and record any incidents of vandalism and/or trespassing. The facility would be remotely operated, controlled and monitored and with no requirement for daily on-site employees. Local and remote operations and maintenance staff would be on-call to respond to any alerts generated by the monitoring systems, and would be present on the site periodically to perform maintenance. A maintenance staff of two to three people would be responsible for performing all routine and emergency operational and maintenance activities and would be on-site infrequently for brief periods of time. Such activities include inspections, equipment servicing, site and landscape clearing, and periodic washing of the PV modules if needed (up to four times per year) to increase the performance of the panels.

The proposed solar project site is to the east of the existing 40 MWac Cuyama Solar Array project site. Grading would be minimal and include 3,388 cubic yards of cut and fill. One eucalyptus tree and two scrub pine trees are proposed for removal. The parcel would be served by the Santa Barbara County Fire District. Access would be provided off of the existing un-named road running north-south along the westerly line of the property. The property is a 20.44-acre (net) parcel zoned AG-II-40 and shown as Assessor's Parcel Number 149-150-033, with no associated address and located approximately 0.4 miles north of Foothill Road and 0.5 miles east of Kirschenmann Road in the Cuyama Area, 1st Supervisorial District.

5.4 Background Information

On October 7, 2014, as part of the Cuyama Solar Array project, the County Board of Supervisors adopted a Resolution that amended the County's Comprehensive Plan Land Use Element (Case No. 13GPA-00000-00002) to allow utility-scale solar photovoltaic facilities on up to 600 acres within the Cuyama Valley Rural Region on lands designated Agriculture II (A-II) and zoned Agriculture II (AG-II) and certified the Cuyama Utility-Scale Solar Programmatic EIR (11EIR-00000-00005) as part of that action. At that same hearing, the Board of Supervisor's also adopted an Ordinance (Case No. 10ORD-00000-00001) that amended the LUDC to allow utility-scale solar photovoltaic facilities within the Cuyama Valley Rural Region, subject to specific development standards incorporated into the LUDC and the discretionary approval of a CUP. To track the total acreage of agricultural property converted to utility-scale solar photovoltaic facilities and to limit conversion of properties to a maximum of 600 acres, the amended Land Use Element and LUDC require that approved facilities be located within the Utility-Scale Solar Photovoltaic Facility Overlay designation on the Comprehensive Plan maps.

To date, only one other utility-scale solar photovoltaic facility, the Cuyama Solar Array project site, exists within the county and accounts for 327 acres of land. The approval of the proposed project would bring the total acreage of utility-scale solar facilities in the county to 347 acres.

The Cuyama Utility-Scale Solar Programmatic EIR identified six significant and unavoidable cumulative (Class I) environmental impacts resulting from project implementation in the areas of Visual Resources, Agricultural Resources, and Land Use. The regulatory amendments were adopted as part of the Cuyama Solar Array project and the LUDC was modified to incorporate 17 development standards that were identified as mitigation measures in the certified programmatic EIR for future utility-scale solar photovoltaic facilities. Section 6.3 of this staff report outlines each of the 17 development standards and describes the current project's consistency with each of the standards. Each of the Class I and II impacts analyzed under the

programmatic portion of 11EIR-00000-00005 and their associated mitigation measures are summarized in the Supplemental Document (Attachment C).

6.0 PROJECT ANALYSIS

6.1 Environmental Review

The California Environmental Quality Act (CEQA) requires analysis and disclosure of environmental impacts that could occur as a result of project development. In 2014, the Board of Supervisors certified an EIR (11EIR-00000-00005) that evaluated at a programmatic level application of utility-scale solar photovoltaic facilities overlay on 600 acres within the Cuyama Valley Rural Region. The EIR also evaluated project specific impacts for the Cuyama Solar Array project, a 327-acre solar facility located adjacent to the proposed project.

With respect to the programmatic EIR analysis, the Board of Supervisors adopted a Statement of Overriding Considerations for those identified environmental impacts associated with future utility-scale projects which would have Class I cumulative impacts even after incorporating all feasible mitigation measures. The EIR (11EIR-00000-00005) further concluded that implementation of future utility-scale projects analyzed under the programmatic EIR would have numerous Class II impacts, which are potentially significant impacts that are reduced to less than significant levels after the incorporation of feasible mitigation measures that were incorporated as development standards into the LUDC.

CEQA Guidelines Section 15168(c) applies to subsequent activities in a Program EIR (such as the Cuyama Utility-Scale Solar Programmatic EIR, 11EIR-00000-00005) and states that "[i]f the agency finds that pursuant to Section 15162 [of the CEQA Guidelines], no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required." Section 15162 gives the criteria where a previously certified EIR can be used and when a new EIR must be prepared. Documentation of new and/or unanticipated impacts must be identified if a new EIR is to be prepared.

CEQA is clear in its preference to use previously prepared environmental documents when anticipated project specific impacts have been clearly assessed. Because a Program EIR has already been certified, CEQA Guidelines Sections 15168 and 15162 state that no subsequent EIR or ND shall be prepared for this project unless one or more of the following have occurred: 1) substantial changes are proposed in the project which will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; 2) substantial changes will occur with respect

to the circumstances under which the project is undertaken which will require major revisions to the EIR due to the involvements of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or 3) new information of substantial importance which was not known and could not have been known at the time the previous EIR was certified as complete has become available.

As discussed in the CEQA Guidelines Section 15168(c) Supplemental Document to the EIR (Attachment C), and incorporated herein by reference, there are no substantial changes or changed circumstances under which the proposed project is to be undertaken. No new significant environmental effects or substantial increases in the severity of previously identified significant effects under the approved 11EIR-00000-00005 would result from the proposed project, as analyzed in the Supplemental Document to the EIR (Attachment C). Further, there is no new information that the proposed project will have one or more significant effects not discussed in the approved 11EIR-00000-00005. The project proposes the same uses as previously analyzed, the analysis contained within 11EIR-00000-00005 addresses the cumulative impacts that would be associated with the proposed project, and 11EIR-00000-00005 identified the mitigation measures that would mitigate those impacts to the extent feasible. Therefore, a Supplemental Document to 11EIR-00000-00005 pursuant to CEQA Guidelines Section 15168(c) is the appropriate document for the proposed Conditional Use Permit and General Plan Amendment projects. Because none of the conditions in CEQA Guidelines Section 15162 have occurred, no subsequent EIR or ND shall be prepared for this project.

6.2 Comprehensive Plan Consistency

REQUIREMENT	DISCUSSION
Adequate Services	
Land Use Element, Land Use Development Policy 4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development.	**Consistent:** The subject parcel does not have existing water or sanitary service and the project does not propose to provide service to the lot. Temporary water service for construction of the facility would be provided by the Cuyama Community Services District. Temporary sanitary service would be provided by the applicant during construction. Upon completion of construction the site would be un-staffed and no sanitary services required. Water utilized for periodic cleaning of the solar panels (up to four times per year) would be a de minimis volume and hauled in via truck, as

	needed. The project would be served by Santa Barbara County Fire Department Station #41 and by the Santa Barbara County Sheriff's Department. The proposed solar facility would not have a significant impact on existing fire and police protection and existing service levels would be sufficient to serve the site. The project would not generate solid waste in excess of County thresholds. Therefore, the solar facility would be consistent with this policy.
Aesthetics and Visual Resources	
Land Use Element, Visual Resource Policy 2. In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.	**Consistent:** The proposed project would convert 20 acres of non-irrigated grazing land to a utility-scale solar photovoltaic facility, introducing additional infrastructure and industrial features directly adjacent to an already developed utility-scale solar photovoltaic facility. The proposed utility-scale photovoltaic equipment includes approximately 20 acres of solar panels, and other equipment such as transformers, power inverters, a tracker site controller, weather station and sensors, battery storage equipment, and PG&E metering and switchgear. Conditions of Approval 6, 7, and 8 of Attachment B require aesthetic design treatment, approval by the North Board of Architectural Review committee, low intensity lighting, and low-glare materials. Adherence to these conditions would ensure compatibility of the proposed solar facility with the existing agricultural and utility-scale solar landscape. The solar modules, at their highest point of the solar tracking during the day, would be less than nine feet in height, the equipment pad would be 8 feet in height, and the battery energy storage containers would be 9.5 feet in height.

	The location of the proposed project is adjacent to the existing Cuyama Solar Array site and would therefore be visually compatible with the surrounding development. Additionally, the implementation of Conditions of Approval 6, 7, and 8 of Attachment B, ensures the SEPV Cuyama Solar Facility would be consistent with this visual resource policy.
Scenic Highway Element. This Element contains preservation measures for eligible scenic routes. Such measures include the application of the Design Control Overlay District to require design review of structures or other development, additional grading and landscaping regulations, and control of outdoor signage.	**Consistent:** The California Department of Transportation has designated SR-166 and SR-33 as eligible scenic highways in the County. Eligible highways may become an official State Scenic Highway when a plan of preservation is implemented by the County for this route. The two highways are identified in the General Plan Open Space Element as travel corridors of high scenic value. The SEPV Cuyama Solar site is 1.9 miles from SR-166 and 4.2 miles from SR-33 and with its relative low profile is not readily discernible from such distances. Additionally, it is located adjacent to the Cuyama Solar Array project site and when viewed from the highway, would appear as part of the Cuyama Solar Array project. Conditions of Approval 6, 7, and 8 of Attachment B would require aesthetic design treatments, architectural board review, low intensity lighting, and low-glare materials to help reduce contrasting views from SR-166 and SR-33. The County has previously viewed the importance of renewable energy production policies and mandates to support a finding of policy consistency for renewable energy projects.
Agricultural Resources	
Agricultural Element, Goal I. Santa Barbara	**Consistent:** The SEPV Cuyama Solar site

County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara County. Agriculture shall be encouraged. Where conditions allow (taking into account environmental impacts), expansion and intensification shall be supported. ***Agricultural Element, Policy I.A.*** The integrity of agricultural operations shall not be violated by recreational or other non-compatible uses. ***Agricultural Element, Policy I.E.*** The County shall recognize that the generation of noise, smoke, odor and dust is a natural consequence of the normal agricultural practices provided that agriculturalists exercise reasonable measures to minimize such effects. ***Agricultural Element, Goal II.*** Agricultural lands shall be protected from adverse urban influence. ***Agricultural Element, Policy II.D.*** Conversion of highly productive agricultural lands whether urban or rural, shall be discouraged. The County shall support programs which encourage the retention of highly productive agricultural lands. ***Land Use Element, Regional Goal, Agriculture.*** In the rural areas, cultivated agriculture shall be preserved and, where conditions allow, expansion and intensification should be supported. Lands with both prime and non-prime soils shall be reserved for agricultural uses.	would require conversion of 20 acres of agricultural land to a non-agricultural use. The site is currently vacant and predominantly made up of non-prime soils and is not recognized as farmland of either State or local importance. Mitigation measures identified in 11EIR-00000-00005 to ensure preservation of agricultural lands to the maximum extent feasible have been incorporated as development standards within the LUDC for utility-scale solar photovoltaic facilities. These development standards include the requirement to submit a Demolition and Reclamation Plan and an associated financial assurance to ensure utility-scale solar sites are reclaimed upon cessation of project activities. Conditions of Approval 3 and 4 of Attachment B require submittal of a Demolition and Reclamation Plan and financial assurances consistent with these development standards and would ensure that the project is consistent with these agricultural goals and policies. The project would be located at the southern margin of the larger Bolthouse agricultural operation and project implementation would not compromise the integrity or quality of adjacent agricultural operations. Three standard conditions would be applied to ensure the facility would not interfere with adjacent agriculture. Condition 5 of Attachment B requires that owners of the solar facility be aware that the surrounding agricultural operations have a right to farm. Conditions of Approval 14 and 15 of Attachment B require dust suppression and

Agricultural Element, Goal III. Where it is necessary for agricultural lands to be converted to other uses, this use shall not interfere with remaining agricultural operations.	installation of erosion control measures, respectively. As noted above, the SEPV Cuyama solar facility would be located adjacent to the existing 327-acre Cuyama Solar Array site and with adherence to the project conditions, project impacts would be less than significant. Thus, the project would be compatible with adjacent development and would not interfere with productive agricultural operations. The project would not result in generation of noise, smoke, odor and dust during operation. Further, the facility would not include landscaping, and as required by Condition of Approval 10, a Pest and Weed Management Plan would be implemented so invasive species are not introduced to adjacent agricultural lands. In addition, the facility would tolerate dust, pesticides, and herbicides from nearby agricultural operations since no sensitive receptors would reside at the facility and the solar panels are still effective even with a film of residue on the panels. The project would not use groundwater during operations and therefore would not deplete the over-drafted groundwater basin. The suspension of potential agricultural use on 20 acres of a vacant agriculture parcel for the purpose of developing alternative energy balances the County's goals, policies, and regulations as it will provide a source of renewable energy to the electrical grid, ultimately helping to meet County as well as State goals for renewable energy production. Therefore, the SEPV Cuyama project is consistent with the applicable goals and policies.

Cultural Resources	
Land Use Element, Historical and Archaeological Sites Policies, Policy 1. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological, and other classes of cultural sites.	**Consistent:** A Phase I Cultural Resources Survey performed for the SEPV Cuyama site found no onsite resources and determined that the potential to encounter unknown but potentially significant subsurface prehistoric remains is considered unlikely. During construction, the applicant must comply with standard County procedures, including Conditions 28 and 30 of Attachment B, which protect cultural resources in the event that prehistoric or historic resources are discovered during project construction (i.e., work would be stopped immediately or redirected until a County qualified archeologist and Native American representative are retained by the applicant to evaluate the significance of the find pursuant to Phase 2 investigations of the County Archaeological Guidelines). Additionally, Conditions of Approval 27 and 29 require the presence of an archaeological monitor and approved Native American monitor during brush clearing and grubbing activities as well as a pre-construction conference where an archaeologist will brief all available construction personnel of the possible presence of buried archaeological material. Therefore, the SEPV Cuyama Solar Facility is consistent with this policy.
Energy	
Energy Element, Policy 5.2. Alternative Energy Technologies: The County shall encourage the use of alternative energy technology in appropriate new and existing development. ***Energy and Climate Action Plan, Renewable***	**Consistent:** The Energy Element encourages the use of alternative or renewable energy. The SEPV Cuyama Solar Facility is a utility-scale renewable energy facility. The Cuyama Valley Rural Region is appropriate for this type of development because it contains one of the highest levels of solar insolation in the County.

Energy Goal. To promote the use of alternative energy for economic and environmental benefits, and facilitate opportunities for businesses that develop or market alternative energy technologies.	Development of the site would result in the conversion of approximately 20 acres of currently vacant grazing land to an industrial use. The suspension of potential agricultural use on 20 acres of a vacant agriculture parcel for the purpose of developing alternative energy balances the County's goals, policies, and regulations. The proposed project would therefore be consistent with this policy and goal.
Land Use Element, Land Use Development Policy 15. As the Cuyama Valley Rural Region has the highest level of solar insolation in the County, conversion of agricultural lands for the development of Utility-Scale Solar Photovoltaic Facilities in the Rural Area of the Cuyama Valley Rural Region shall be allowed as a means of balancing Comprehensive Plan goals and policies that encourage the use of renewable energy and preservation of agricultural lands. To limit agricultural conversions, utility-scale solar photovoltaic facilities are limited to 600 acres by the electrical transmission/distribution system capacity available as of the date of adoption of this policy. Implementing Procedures: a. Utility-Scale Solar Photovoltaic Facilities may be conditionally allowed with discretionary approval of a Utility-Scale Solar Photovoltaic Facility Overlay, on Agricultural II (A-II) and Agricultural Commercial (AC) land use designated lands, in the Agriculture II (AG-II) zone, within the Rural Area of the Cuyama Valley Rural Region, consistent with the Uniform Rules for Agricultural Preserves and Farmland	**Consistent:** The proposed project is the second Utility-Scale Solar Photovoltaic Facility proposed in the Cuyama Valley Rural Region and would bring the total acreage dedicated to utility-scale solar to 347 acres. As part of this application, the applicant is requesting a Comprehensive Plan Amendment to apply the Utility-Scale Solar Photovoltaic Facility Overlay designation to the proposed project site, which is zoned Agricultural II in the Cuyama Valley Rural Region and is not encumbered by an Agricultural Preserve Contract. Therefore, the proposed project would be consistent with this policy.

Security Zones, and in conformance with the Land Use Development Code permit approvals and related development standards. b. The extent of such conversion is limited to a maximum of 600 acres on Agricultural II (A-II) and Agricultural Commercial (AC) land use designated lands, in the Agriculture II (AG-II) zone within the Rural Area of the Cuyama Valley Rural Region.	
Geology and Soils	
Land Use Element, Hillside and Watershed Protection Policy 1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain. ***Land Use Element, Hillside and Watershed Protection Policy 2.*** All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.	**Consistent:** The project site is located on a relatively flat, gently sloping property that would require minimal grading. Grading quantities for the proposed project are estimated at 3,388 cubic yards of cut and fill, balanced on-site. Proposed grading is for completion of on-site dirt access roads and the slope and elevation of the proposed solar facility site would not substantially change compared to existing conditions. There are no significant landforms present on the site; however, one eucalyptus tree and two scrub pine trees are proposed for removal. Conditions of Approval 15, 16, 17, and 18 of Attachment B would require technical grading and drainage plans and preparation of erosion controls and Best Management Practices (BMPs). Implementation of these conditions would minimize cut and fill quantities and reduce erosion. The proposed project would therefore be consistent with these policies.
Hydrology and Water Quality	
Land Use Element, Hillside and Watershed	**Consistent:** The proposed project would be subject to erosion and sedimentation control

Protection Policy 4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location. ***Land Use Element, Hillside and Watershed Protection Policy 5.*** Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized immediately with planting of native grasses and shrubs, appropriate nonnative plants, or with accepted landscaping practices. ***Land Use Element, Hillside and Watershed Protection Policy 6.*** Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater recharge. ***Land Use Element, Hillside and Watershed Protection Policy 7.*** Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside	BMPs during construction, including avoidance of grading during rainy season and enforced as part of the County's Grading Permit. Conditions of Approval 16, 17, and 18 of Attachment B, which require on-site containment of sediment and contaminants and participation in the National Pollutant Discharge Elimination System, would ensure application of these BMPs. Development of an erosion and sediment control plan to minimize erosion during construction activities would provide site-specific measures to reduce the occurrence of soil movement and would minimize sediment and polluted runoff from entering nearby tributaries and water bodies. Once operational, the solar facility would comply with regulations requiring development of a long-term Storm Water Quality Management Plan and BMPs. Conditions of Approval 17 and 18 of Attachment B would ensure storm water quality measures would be applied. Therefore, the proposed project would be consistent with applicable erosion and water quality policies.

coastal streams or wetlands either during or after construction.	
Noise	
Noise Element, Policy 1. In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise sensitive uses unless noise mitigation features are included in project designs.	**Consistent:** Long-term operation of the SEPV Cuyama site would not result in noise generation in excess of the 65 dB Day-Night Average Sound Level. Noise levels would be elevated intermittently during construction. Conditions of Approval 11 and 12 of Attachment B would limit construction hours and require a Noise Reduction Plan. Therefore, the project would be consistent with this policy.

6.3 Zoning: Land Use and Development Code Compliance

6.3.1 Compliance with Land Use and Development Code Requirements

REQUIREMENT	DISCUSSION
LUDC Section 35.59.030 Allowed Locations	
Comprehensive Plan Map Overlay. *Utility-scale solar photovoltaic facilities may only be allowed on no more than 600 acres located within the Cuyama Valley Rural Region designated with the Utility-scale Solar Photovoltaic Overlay as designated on the Comprehensive Plan maps.*	**Consistent:** The subject parcel is zoned AG-II-40 under the LUDC. Pursuant to Section 35.21.030, Table 2-1 of the LUDC, a utility-scale solar photovoltaic facility is a conditionally allowed use in the AG-II Zone District. As required by Section 35.59.030 of the LUDC, a request for a Comprehensive Plan Amendment designating the site with the Utility-scale Solar Photovoltaic Overlay is included as part of the proposed project. With approval of this Comprehensive Plan Amendment, the total area of land designated with the Utility-scale Solar Photovoltaic Overlay in the Cuyama Valley Rural Region would be equal to 347 acres. Therefore, the project would be consistent with this development standard.

LUDC Section 35.59.040 Development Standards	
Standard A 1-4. View protection. *Utility-scale solar photovoltaic facilities shall be designed and located in a manner to minimize adverse visual impacts from public viewing areas (e.g., scenic highways, recreational trails, public parks). To the greatest extent feasible, the utility-scale solar photovoltaic facility shall:* 1. *Avoid significant visual impacts to designated or eligible designated scenic highways.* 2. *Apply aesthetic design treatments to and maintain all structures, including fencing, onsite buildings and panel mounting structures where needed, to minimize visual impacts to the existing visual character of the project area. Aesthetic design treatments include fence slats, decorative walls, landscaping, painting and application of other finishes to reduce the visibility of structures and reduce glare.* 3. *Minimize night lighting by only utilizing construction and operational lighting that is of low intensity, low glare design, located at a minimum height, and hooded to direct light downward onto the subject lot and prevent spill-over onto adjacent lots.* 4. *Minimize glare and spectral lighting from solar panels and hardware.*	**Consistent:** The proposed project would convert 20 acres of non-irrigated grazing land to a utility-scale solar photovoltaic facility, introducing additional infrastructure and industrial features directly adjacent to an already developed utility-scale solar photovoltaic facility. The proposed utility-scale photovoltaic equipment includes approximately 20 acres of solar panels, and other equipment such as transformers, power inverters, a tracker site controller, weather station and sensors, battery storage equipment, and PG&E metering and switchgear. Conditions of Approval 6 through 8 of Attachment B require aesthetic design treatment, Board of Achitectural Review approval, low intensity lighting, and low-glare materials. These measures would provide compatibility of the proposed solar facility with the existing agricultural landscape. The solar modules, at their highest point of the solar tracking during the day, would be less than nine feet in height, the equipment pad would be 8 feet in height, and the battery energy storage containers would be 9.5 feet in height. The location of the proposed project is adjacent to the existing Cuyama Solar Array site and would therefore be visually compatible with the surrounding development. Additionally, the implementation of Conditions of Approval 6, 7, and 8 of Attachment B ensures the SEPV Cuyama Solar Facility would be consistent with this development standard.
Standard B 1-3. Protection of agricultural land. *Utility-scale solar photovoltaic facilities shall minimize adverse agricultural impacts by permanently preserving off-site agricultural*	**Consistent:** The proposed project would convert 20 acres of vacant non-irrigated grazing land to a utility-scale solar photovoltaic facility, introducing additional infrastructure and industrial features directly

land if the project requires the conversion of prime agricultural land and/or Important Farmland shown on the Department of Conservation's Important Farmland Maps to non-agricultural use, or impairs agricultural productivity. The applicant of utility-scale solar photovoltaic facilities shall: 1. *Prior to issuance of any grading or building permit, provide written evidence to the Department of the completion of the permanent preservation of off-site agricultural land of equal or better agricultural quality at a ratio of 1:1 for each acre that is either converted or impaired through one of the following methods:* a. *Funding and purchase of agricultural conservation easements.* b. *Purchase of credits from an established agricultural farmland mitigation bank.* c. *Contribution of agricultural land or equivalent funding to an organization that provides for the preservation of farmland.* d. *Participation in any agricultural land mitigation program that provides equal or more effective mitigation than the measures listed above.* 2. *Prior to issuance of any grading or building permit, submit a site-specific Integrated Pest and Weed Management Plan to the Department in a form that is acceptable to the Department.* a. *The Integrated Pest and Weed Management Plan shall:* i. *Require use of County approved herbicides or mechanical weed removal methods or grazing*	adjacent to an already developed utility-scale solar photovoltaic facility. The proposed utility-scale photovoltaic equipment includes approximately 20 acres of solar panels, and other equipment such as transformers, power inverters, a tracker site controller, weather station and sensors, battery storage equipment, and PG&E metering and switchgear. The SEPV site is made of up non-prime soils and is not considered farmland of State nor local importance. The property is currently vacant and not actively utilized for agricultural production. As such, Development Standard B.1 would not apply to the subject parcel; however, Development Standards B.2 and B.3 have been incorporated into the project as Conditions of Approval 3, 4, and 10 of Attachment B. Therefore, the project would be consistent with these development standards.

animals (e.g., goats) depending on which is most appropriate for the suppression or eradication of the weed species and their locations. *ii. Describe when herbicides would be used, factors that would prohibit use of herbicides (such as high wind), and the specific type of herbicides proposed.* *iii. Document measures that would be used for pest control, as applicable; however the use of rodenticides shall be prohibited on the project site.* *b. The plan shall be implemented during facility installation and throughout the life of the facilities.* *3. Prior to issuance of zoning clearance, submit a Demolition and Reclamation Plan with associated financial assurance to the Department in a form that is acceptable to the Department. The financial assurance shall be sufficient to guarantee the removal of the facility, including all of its components, upon the completion of facility operations, in order to allow the land to be utilized for agricultural uses or uses consistent with current land use plans, policies, and zoning requirements in place at the time of completion of facility operations.*	
Standard C 1-2. Sensitive biological resource protection. *Utility-scale solar photovoltaic facilities shall be designed and located in a manner so as to minimize any adverse biological impacts. The utility-scale solar photovoltaic facility shall:*	**Consistent:** Development of the SEPV Cuyama Solar site would result in the conversion of approximately 20 acres of currently vacant grazing land to an industrial use. The project site is an undeveloped parcel surrounded by row crops to the north and east,

1. *Be designed and located in order to avoid any significant adverse impacts to known sensitive natural communities, rare and special-status plant species, special-status wildlife species and their habitats, critical habitat corridors, and nesting birds. Facilities shall also be designed to avoid the removal of any native specimen trees unless determined to be infeasible, in which case a tree replacement plan shall be required in accordance with County standards.* 2. *Minimize the potential for raptor electrocution by utilizing the recommendations contained in the most current "Avian Protection Plan Guidelines" and "Reducing Avian Collisions with Power Lines" as promulgated by the Edison Electric Institute's Avian Power Line Interaction Committee regarding power line spacing and construction and work procedures.*	a recently constructed solar farm to the west, and a private rural residential property to the south. The project site is comprised mostly of annual grassland habitat, dominated by non-native grasses and does not contain any native vegetation or unique or rare plant communities. No native tree specimens occur on the Project site. The project applicant provided a site-specific biological analysis which was found to be sufficient for the proposed project. As part of that analysis, the biologist included five biological resource avoidance recommendations: Condition of Approval 22 of Attachment B would require the implementation of a Worker Environmental Awareness Program to train construction personnel and employees on special status species with potential to occur at the site; Condition of Approval 23 of Attachment B would require pre-construction nesting bird surveys; Condition of Approval 24 of Attachment B would require pre-construction surveys for special status reptiles; Condition of Approval 25 of Attachment B would require pre-construction surveys for special status mammals; and Condition of Approval 26 of Attachment B would require a biological monitor to be present during initial site preparation activities to relocate wildlife out of harm's way. The project does not propose the addition of transmission lines or multiple power lines aligned vertically and therefore consistency with the "Avian Protection Plan Guidelines" is not applicable.

	With the implementation of these conditions noted above, the proposed solar facility would be consistent with this development standard.
Standard D 1-3. Geologic hazards avoidance. *Utility-scale solar photovoltaic facilities shall be designed and located in a manner to minimize adverse geologic impacts. The utility-scale solar photovoltaic facility shall:* 1. *Be sited and designed to avoid significant geologic impacts considering soil types, soil and groundwater conditions and geologic and seismic hazards.* 2. *Avoid areas with slopes that exceed 20 percent, or require cut slopes having a height of 15 feet or greater.* 3. *Control erosion, minimize flooding, and minimize degradation of water quality during facility construction and operation. Measures shall include use of temporary vegetation, seeding, mulching, or other suitable stabilization to minimize impacts to affected areas. All cut and fill slopes shall be stabilized immediately with planting of native grasses and shrubs, appropriate non-native plants, or with accepted landscaping practices. Impacts to surface water due to sedimentation of streams shall be mitigated to the maximum extent feasible through adequate erosion and sediment controls.*	**Consistent:** The project site is located on a relatively flat, gently sloping property that would require minimal grading. Grading quantities for the proposed project are estimated at 3,388 cubic yards of cut and fill, balanced on-site and would be for the construction of on-site dirt access roads. The slope and elevation of the proposed solar facility site would not substantially change compared to existing conditions. There are no significant landforms present on the site; however, one eucalyptus tree and two scrub pine trees are proposed for removal. Local geologic hazards were analyzed in the Cuyama Solar Array EIR, which identified that local faults in the area are not considered active. The closest active fault to the proposed project site is the San Andreas fault, which is located approximately 9 miles to the northeast. As discussed in the EIR, surface fault rupture generally occurs at sites that are traversed by, or lie very near to, a causative fault. The proposed project is not located within a State Earthquake Fault Zone, and there are no mapped faults crossing or adjacent to the site. Conditions of Approval 15, 16, 17, and 18 of Attachment B would require an Erosion and Sediment Control Plan, on-site containment of sediment and contamination, and participation in the National Pollution Discharge Elimination System General Construction Permit and Storm Water Quality Management Plan. Implementation of these conditions

	would ensure that grading and erosion are minimized. The proposed project would therefore be consistent with this development standard.
Standard E. Fire prevention. *Utility-scale solar photovoltaic facilities shall include a fire prevention plan to identify sources of fire hazards and methods to mitigate fire hazards during construction and throughout operation of the project. Prior to issuance of any grading or building permit a County Fire Department-approved plan shall be submitted to the Department.*	**Consistent:** Condition 9 of Attachment B requires the submittal of a Fire Prevention Plan that has been approved by the Santa Barbara County Fire Department prior to the issuance of a Zoning Clearance. Therefore, the proposed project would be consistent with this development standard.
Standard F. Hazardous material avoidance. *Utility-scale solar photovoltaic facilities shall be located to avoid sites that are known to be contaminated or are listed on agency databases as requiring clean-up action. If avoidance is not feasible, then any contamination shall be appropriately evaluated, characterized, and remediated in accordance with County, State Regional Water Quality Control Board, and California Department of Toxic Substances Control standards prior to construction of the utility-scale photovoltaic facilities.*	**Consistent:** The project site is a vacant parcel historically used for agricultural grazing and has no known history of the storage or processing of hazardous materials. A review of the State Water Board geospatial database website known as GeoTracker shows that no contamination from hazardous materials has been recorded at the site. Therefore, the proposed project would be consistent with this development standard.
Standard G. Noise level reduction. *Utility-scale solar photovoltaic facilities shall be designed and located in a manner to avoid any significant adverse construction and operational noise impacts to noise sensitive uses as determined by the Noise Element of the Comprehensive Plan.*	**Consistent:** Long-term operation of the SEPV Cuyama site would not result in noise generation in excess of the 65 dB Day-Night Average Sound Level. Noise levels would be elevated intermittently during construction. Conditions of Approval 11 and 12 of Attachment B would limit construction hours and require a Noise Reduction Plan. Therefore, the project would be consistent with this development standard.

Standard H. Traffic hazard prevention. *Utility-scale solar photovoltaic facilities shall minimize traffic hazards by implementing a project-specific Traffic Control Plan. Prior to the issuance of any zoning clearance, a County Traffic Engineer-approved Traffic Control Plan shall be submitted to identify adequate traffic control measures during construction to avoid significant impacts with vehicles and pedestrians.*	**Consistent:** Condition 13 of Attachment B requires the submittal of a project-specific Traffic Control Plan that has been approved by a County Traffic Engineer prior to the issuance of a Zoning Clearance. Therefore, the proposed project would be consistent with this development standard.
Standard I. Waste reduction. *Utility-scale solar photovoltaic facilities shall minimize waste generated during construction and operation.*	**Consistent:** Conditions 19, 20, and 21 of Attachment B would ensure recycling of construction waste, require adequate receptacles for construction waste, and require the site to be cleared of all excess construction debris. Therefore, waste generated during construction would be minimized and the proposed project would be consistent with this development standard.

6.4 Subdivision/Development Review Committee

The Proposed Project was presented to the Subdivision/Development Review Committee on December 14, 2017. Comments were provided by the County Fire Department and Flood Control and their condition letters are incorporated as part of the conditions of approval for the project (Condition 50 of Attachment B). The Air Pollution Control District also commented on the project and requested an air quality and greenhouse gas analysis be prepared to assess the potential impacts. The applicant provided an air quality and greenhouse gas report, which showed that the project would not exceed County CEQA thresholds. APCD reviewed the report and found it sufficient for the project.

6.5 Design Review

The proposed project received conceptual review by the North Board of Architectural Review (NBAR) on May 18, 2018. The associated NBAR minutes for this meeting are included as Attachment D to this staff report. The NBAR had no comments for the proposed project and

asked that it return for preliminary and final approval on consent, following approval by the Board of Supervisors.

6.6 Senate Bill 18 Consultation

Government Code Section 65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) when amending a comprehensive plan for the purpose of protecting and/or mitigating impacts to tribal cultural resources. On September 26, 2018, Planning and Development sent an invitation for consultation to local Native American tribes, identified by NAHC, in compliance with Senate Bill 18 requirements. Letters accompanied by copies of Phase 1 archaeology reports conducted at the site were sent to the Santa Ynez Band of Chumash Indians, Barbareno/Ventureno Band of Mission Indians, and the Coastal Band of the Chumash Nation. As of the date of this staff report, no requests for consultation have been received. The 90-day response period ends on December 26, 2018.

7.0 APPEALS PROCEDURE

Comprehensive Plan Amendments and Ordinance Amendments recommended for approval or denial by the Planning Commission are automatically forwarded to the Board of Supervisors for final action. Therefore no appeal is required. Pursuant to Government Code Section 65354.5, any interested party may file a written request with the Clerk of the Board for a hearing by the Board of Supervisors within five days after the Planning Commission acts on the proposed Comprehensive Plan Amendment. Whether or not a written request is filed, a public hearing before the Board of Supervisors will be conducted.

ATTACHMENTS

A. Findings
B. Conditions of Approval (17CUP-00000-00044)
C. Supplemental Document to Programmatic EIR (11EIR-00000-00005)
D. Environmental Impact Report (11EIR-00000-00005)
E. BAR Comments and Conceptual Review Checklist
F. Draft General Plan Amendment Resolution
G. Water Availability letter
H. Parcel Exhibit
I. Site Plan

ATTACHMENT A: FINDINGS

1.0 CEQA FINDINGS

1.1 FINDING THAT A PREVIOUS ENVIRONMENTAL DOCUMENT CAN BE USED (PER CEQA SECTION 15162)

1.1.1 RELIANCE ON PREVIOUSLY CERTIFIED PROGRAM ENVIRONMENTAL IMPACT REPORT (EIR), CONSIDERATION OF THE SUPPLEMENTAL DOCUMENT AND FULL DISCLOSURE

The Board of Supervisors has considered the Supplemental Document dated October 30, 2018 (Attachment C) together with the previously certified EIR [11EIR-00000-00005] for the SEPV Cuyama Solar project (17GPA-00000-00006 and 17CUP-00000-00044). The Supplemental Document reflects the independent judgment of the Board of Supervisors and has been completed in compliance with CEQA. The Supplemental Document, together with the EIR [11EIR-00000-00005], is adequate for this proposal. On the basis of the whole record, including the Supplemental Document, the previously certified CEQA document, and any public comments received, the Board of Supervisors finds that the project changes described in the Supplemental Document show that the environment effects of this project were covered in the prior Program EIR and no new environmental effects could occur and no new mitigation measures are required; therefore, the prior Program EIR along with the Supplemental Document are sufficient for this project pursuant to CEQA Guidelines Section 15168(c). As discussed in Section 6.1 of the Planning Commission staff report and the Supplemental Document, both dated October 30, 2018, herein incorporated by reference, no subsequent environmental review shall be prepared according to CEQA Guidelines Section 15162 since there are no substantial changes proposed in the project which will require major revisions to the EIR; no substantial changes have occurred with respect to the circumstances under which the project is undertaken; and there is no new information of substantial importance.

1.1.2 LOCATION OF DOCUMENTS

The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of the Clerk of the Board of Supervisors located at 105 East Anapamu Street, Santa Barbara, CA 93101.

1.1.3 ENVIRONMENTAL REPORTING AND MONITORING PROGRAM

Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091(d) require the County to adopt a reporting or monitoring program for the changes to the project that it has adopted or made a condition of approval in order to avoid or mitigate to the maximum extent feasible the environmental effects. When the Program

EIR (Case No. 11EIR-00000-00005) was certified, the Board of Supervisors also amended the County Land Use and Development Code (LUDC) to incorporate all of the Program EIR mitigation measures as development standards for utility-scale solar projects developed on agricultural lands in the Cuyama Valley Rural Region. The mitigation measures identified in 11EIR-00000-00005 for future development of utility-scale solar projects have been incorporated into the County LUDC Subsection 35.59.040 – Utility-Scale Photovoltaic Facilities. To ensure compliance with adopted mitigation measures during future project implementation, the ordinance was amended to include development standards for each adopted mitigation measure that identify the action required to ensure compliance. Therefore, a separate mitigation monitoring and reporting program is not necessary, and the County Board of Supervisors finds the amendment to the County LUDC sufficient for a monitoring and reporting program.

1.1.4 FINDINGS ADDRESSING SUPPLEMENTA DOCUMENT ISSUE AREAS

The Supplemental Document prepared for the project addressed the following issues: Air, Agricultural, Cultural, Biological, Noise, and Traffic. The Supplemental Document dated October 30, 2018, incorporated herein by reference, finds that the previously certified EIR [11EIR-00000-00005], may be used to fulfill the environmental review requirements of the current project. Since none of the following have occurred, as discussed in Section 6.1 of the staff report to the Planning Commission dated October 30, 2018, incorporated herein by reference, no subsequent environmental review shall be prepared according to CEQA Guidelines Section 15168(c) and15162: there are no substantial changes proposed in the project which will require major revisions to the EIR; no substantial changes have occurred with respect to the circumstances under which the project is undertaken; and there is no new information of substantial importance.

2.0 COMPREHENSIVE PLAN AMENDMENT FINDINGS

2.1 FINDINGS REQUIRED FOR APPROVAL OF AMENDMENTS (§35.104.060).

An application for an Amendment to the Comprehensive Plan, Development Code or Zoning Map may be approved only if the review authority first makes all of the following findings, as applicable to the type of Amendment.

A. Findings for Comprehensive Plan, Development Code and Zoning Map Amendments.

1. The request is in the interests of the general community welfare.

The SEPV Cuyama Solar Facility is a utility-scale renewable energy facility and

the Energy Element of the Comprehensive Plan encourages the development of alternative or renewable energy sources. The Cuyama Valley Rural Region is appropriate for this type of development because it contains one of the highest levels of solar insolation in the County. Development of the site will result in the conversion of approximately 20 acres of currently vacant grazing land to an industrial use. As discussed in Section 6.1 of the Planning Commission staff report, dated October 30, 2018 and incorporated herein by reference, the suspension of potential agricultural use on 20 acres of a vacant agriculture parcel for the purpose of developing alternative energy balances the County's goals, policies, and regulations. As such, the request is in the interests of the general community welfare as it will provide a source of renewable energy to the electrical grid, ultimately helping to meet County as well as State goals for renewable energy production.

2. The request is consistent with the Comprehensive Plan, the requirements of the State planning and zoning laws, and this Development Code.

On October 7, 2014, as part of the Cuyama Solar Array project, the County Board of Supervisors adopted a Resolution that amended the County's Comprehensive Plan Land Use Element (Case No. 13GPA-00000-00002) to allow utility-scale solar photovoltaic facilities on up to 600 acres within the Cuyama Valley Rural Region on lands designated Agriculture II (A-II) and zoned Agriculture II (AG-II). The project site is located within the Cuyama Valley Rural Region on lands designed A-II. The request is consistent with the County's Comprehensive Plan including, but not limited to, the Land Use Element, the County Land Use and Development Code, and State planning and zoning laws as discussed in these Findings and in Section 6 of the staff report, dated October 30, 2018 and incorporated herein by reference.

3. The request is consistent with good zoning and planning practices.

The project is consistent with good zoning and planning practices as it is consistent with local and state planning regulations, as discussed in Section 6 of the staff report, dated October 30, 2018 and incorporated herein by reference. Further, the modification of the Comprehensive Plan Utility-Scale Solar Photovoltaic Facility Overlay to include the 20-acre parcel is consistent with the intent of the overlay, which allows conversion of up to 600 acres of agricultural land within the Cuyama Valley Rural Region to utility-scale solar development. The approval of this Comprehensive Plan Amendment will constitute the second utility-scale solar project in the Cuyama Valley Rural Region and will bring the total acreage of the overlay to 347 acres. This will result in further development

of renewable energy resources in a location that has the highest levels of solar insolation in the County, and therefore is consistent with good zoning and planning practices.

B. Additional finding for Comprehensive Plan Amendments.

1. If the request is for an amendment to the Comprehensive Plan, then the review authority shall also find that the request is deemed to be in the public interest.

The Comprehensive Plan Amendment is in the interest of actively promoting and responding to State and federal mandates to reduce greenhouse gas emissions, including Global Warming Solutions Act of 2006 (AB 32) and the California Renewable Energy Resources Act, which requires all California utilities to procure 33 percent of their electricity from renewable sources by 2020, with intermediate targets of 20 percent by the end of 2013, and 25 percent by end of 2016. The project contributes to achieving renewable energy goals to address public concerns related to greenhouse gas emissions and climate change, energy security, and fossil fuel dependence.

The Comprehensive Plan Amendment will allow for the development of a utility-scale solar photovoltaic facility on 20 acres of land designated A-II and zoned AG-II-40 in the Rural Area of the Cuyama Valley Rural Region. As discussed in 11EIR-00000-00005, development of future utility-scale solar facilities would realize beneficial impacts to greenhouse gases, energy supply, and hydrology and water quality in the Cuyama Valley. Development standards established in the County Land Use and Development Code, along with a discretionary permit process, are intended to reduce adverse impacts to environmental resources and services for projects such as this in the Cuyama Rural Region.

3.0 *CONDITIONAL USE PERMIT FINDINGS*

3.1 FINDINGS REQUIRED FOR ALL CONDITIONAL USE PERMITS.

In compliance with Subsection 35.82.060.E.1 of the County Land Use and Development Code, prior to the approval or conditional approval of an application for a Conditional Use Permit or Minor Conditional Use Permit the review authority shall first make all of the following findings, as applicable:

1. The site for the proposed project is adequate in terms of location, physical characteristics, shape, and size to accommodate the type of use and level of development proposed;

The proposed site is located on 20 acres of agricultural land and is adequate in terms of location, physical characteristics, shape and size to accommodate a 3 MWac solar photovoltaic facility. The site has been selected to accommodate the size and use of the project, including physical characteristics such as topography, existing roadway infrastructure, and proximity to the adjacent 327-acre Cuyama Solar site and associated PG&E infrastructure. Therefore, this finding can be made.

2. Environmental impacts.

a. Within the Inland area significant environmental impacts will be mitigated to the maximum extent feasible.

Section 6.1 of the Planning Commission Staff Report dated October 30, 2018, and incorporated herein by reference, discusses the impact analysis in the Supplemental Document to Environmental Impact Report [11EIR-00000-00005] and analyzes potential impacts associated with the development of the SEPV project. Impacts associated with visual and agricultural resources and land use compatibility as analyzed in the Cuyama Utility-Scale Solar Programmatic EIR could not be mitigated to less than significant levels. Seventeen development standards were identified as mitigation measures in 11EIR-00000-00005 and were incorporated into the LUDC to mitigate impacts associated with the future utility-scale solar development in the Cuyama Valley Rural Region to the maximum extent feasible. The project conditions of approval, included as Attachment B to the Planning Commission staff report dated October 30, 2018, and incorporated herein by reference, will ensure that the impacts assessed under 11EIR-00000-00005 are mitigated as intended by the EIR. These include: implementing aesthetic design treatment features; reducing night time lighting; reducing day time glare; locating utility-scale solar facilities away from scenic or eligibly scenic highways; and requiring preparation of a Demolition and Reclamation Plan and financial assurances necessary to guarantee removal of the facility and allow the use of the land to return to agricultural uses or be consistent with current land use plans, policies, and zoning requirements in place at the time of removal. Therefore, this finding can be made.

3. Streets and highways are adequate and properly designed to carry the type and quantity of traffic generated by the proposed use.

Because the project will be operated and monitored remotely, long term traffic is not expected to increase as a result of the project. During construction, it is expected that a maximum of 33 workers will be employed, and daily construction trips will peak at 35 daily trips. As described in the Traffic Impact Analysis dated

April 19, 2012 for the Cuyama Solar Array project, 378 average daily traffic trips were counted along Kirschemann Road near the project site. Additionally, Traffic Impact Analysis shows the intersection of Kirschemann Road and SR-166 was measured at Level of Service A, which is considered a free-flow condition. Therefore, daily traffic volumes will be well below the roadway operational design standard and this finding can be made.

4. ***There will be adequate public services, including fire protection, police protection, sewage disposal, and water supply to serve the proposed project.***

   The project will not result in an increase in population, and thus will not have a significant impact on existing police protection, fire protection, or health care services. Additionally, the applicant has provided a Can and Will Serve Letter from the Cuyama Community Services District, who will provide metered water delivery to the site for temporary construction activities. Once operational, the project will not result in water demand, will not be connected to sanitary, or have the need for wastewater disposal. Therefore, this finding can be made.

5. ***The proposed project will not be detrimental to the comfort, convenience, general welfare, health, and safety of the neighborhood and will be compatible with the surrounding area.***

   The Project site is located in an agricultural area used for cultivated agriculture purposes and scattered rural residences. Human activity is limited in this area; therefore, noise levels are typically limited. Short-term nuisance factors associated with the project, including construction traffic, construction noise, and construction dust generation will be addressed by proposed conditions of approval.

   During the operational phase, the project will not be detrimental to the comfort, convenience, general welfare, health, and safety of the neighborhood. Operation of the project site will not create Right-to-Farm or other nuisance impacts to adjacent productive agricultural operations because the project will not result in a significant amount of particulates after the construction phase is complete and will include a Pest and Weed Management Plan. Additionally, the project will tolerate dust, pesticides, and herbicides from nearby agricultural operations. Night time lighting and day time glare will be addressed to the extent possible by application of standard project conditions. Specifically, project conditions will require aesthetic design treatments, board of architectural review, low intensity lighting, and low-glare materials and will provide compatibility of the project with the existing agricultural landscape. Additionally, the proposed project does not have the potential to generate factors such as smoke, odors or noise, which

will be incompatible with the surrounding area or that will be detrimental to the comfort, convenience, general welfare, health and safety of the surrounding area. Therefore, this finding can be made.

6. ***The proposed project will comply with all applicable requirements of this Development Code and the Comprehensive Plan, including any applicable community or area plan.***

   As discussed in Sections 6.2 and 6.3 of the Planning Commission Staff Report dated October 30, 2018, and incorporated herein by reference, the proposed project is in compliance with all applicable laws, rules, regulations and development standards of the County's zoning ordinances and Comprehensive Plan. Therefore, this finding can be made.

7. ***Within Rural areas as designated on the Comprehensive Plan maps, the proposed use will be compatible with and subordinate to the rural and scenic character of the area.***

   The project is located adjacent to a 327-acre utility-scale solar photovoltaic facility and will be compatible with the surrounding development. However, as analyzed in the programmatic and project specific EIR (11EIR-00000-00005) and discussed further in the Supplemental Document to the EIR, mitigation measures will require aesthetic design treatments, low-intensity lighting, and reduction of glare, which will minimize the visual intrusion of the proposed project.

   As discussed in Sections 6.2 and 6.3 of the Planning Commission staff report dated October 30, 2018, and incorporated herein by reference, LUDC Development Standards AV-1 through AV-4 address avoidance of significant visual impacts to designated or eligible designated scenic highways through appropriate project siting, aesthetic design treatments, low-intensity lighting, and minimization of glare, which will minimize the visual intrusion of new solar facilities. With the implementation of the proposed conditions of approval, the proposed project is consistent with Development Standards AV-1 through AV-4 and the project is compatible with the rural character of the area, to the maximum extent feasible in consideration of technical requirements. Finally, the proposed project has been designed in a manner that is compatible with the rural and scenic character of the area. Adherence to the project conditions of approval will ensure that the solar arrays will not result in grading scars, will not be prominently visible from SR-166 and SR-33, and will not obstruct scenic views of the mountains located south and west of the project site as seen from these highways. Therefore, this finding can be made.

ATTACHMENT B

CONDITIONS OF APPROVAL

CONDITIONAL USE PERMIT

LAND USE AND DEVELOPMENT CODE, CHAPTER 35

CASE NO. 17CUP-00000-00044

SEPV Cuyama Solar Project Conditional Use Permit

A. A Conditional Use Permit is Hereby Granted:

TO: SEPV Cuyama, LLC.

APN: 149-150-033

PROJECT ADDRESS: Not Assigned

ZONE: AG-II-40

AREA/SUPERVISORIAL DISTRICT: First

FOR: SEPV Cuyama Solar Project

B. This permit is subject to compliance with the following condition(s):

1. Proj Des-01 Project Description. This Conditional Use Permit is based upon and limited to compliance with the project description, the hearing exhibits marked A-I, dated October 30, 2018, and all conditions of approval set forth below, including mitigation measures and specified plans and agreements included by reference, as well as all applicable County rules and regulations. The project description is as follows:

The request is for a Conditional Use Permit and Comprehensive Plan Amendment to construct and operate a solar photovoltaic (PV) electricity generating facility with the capacity to generate, store and deliver up to 3 megawatts (MWac) of renewable electrical energy during peak periods of production. A Comprehensive Plan Amendment is required to place the parcel with the Utility-Scale Solar Photovoltaic Overlay designation depicted on the Land Use Element Comp-9 Map. The facility, called SEPV Cuyama, would be designed to operate year-round and would generate and store electricity during the daylight hours when local electricity demand from Pacific Gas and Electric (PG&E) customers is typically at its peak. The facility would also include an optional energy storage capability utilizing lithium ion batteries stored in up to three 40-foot long shipping containers located on-site and connected to the PV system with underground electrical conduit. The battery storage system would be designed to charge during off-peak periods and discharge during peak

periods. Electricity generated by the project would be interconnected to the PG&E electrical distribution system at an existing PG&E 21 kV line that runs north-south along the western boundary line of the property. The PG&E Substation is approximately 2.5 miles northwest of the SEPV Cuyama project site.

The major components of the facility would be PV modules, single-axis sun tracking support structures, battery storage and electronic/electrical equipment. The PV modules would be mounted to steel support structures designed and installed to properly position the PV modules to maximize the amount of sunlight that can land upon their surfaces. The single-axis sun tracking arrays (a row of PV modules) would be oriented along a north-south axis to allow the PV modules to rotate from east to west in order to track or follow the sun's path throughout a day. These support structures would be mounted on foundations of steel beams or tubes directly embedded into the ground to a depth of five to eight feet depending upon loading and soil conditions. These structural elements are typically driven into the earth with vibratory or hydraulic press-in methods. The PV modules, at their highest point of the solar tracking during the day, would be less than nine feet above the ground surface. The battery energy storage containers would be 9.5 feet above ground surface.

The direct current (DC) electrical output from the PV modules and battery storage units would be transferred to inverters which convert the DC energy to high quality utility grade alternating current (AC) electricity. Electrical transformers would be used to boost the AC voltage output of the inverters to the 21 kV level required to interconnect to PG&E's existing overhead distribution circuit that runs adjacent to the west side of the project site. The produced energy from the SEPV Cuyama solar plant would be routed through an underground electrical line to customer metering and switchgear units located on four separate poles, then to an existing pole mounted PG&E metering and switchgear unit for interconnection to the 21 kV PG&E overhead line.

The facility would be accessed from the existing un-named road along the westerly line of the property with on-site perimeter and center line compacted dirt roads for fire access and facility operations. A six foot tall chain-link security fence would be installed around the perimeter of the site to restrict public access during construction and operations. A remotely monitored security system would be installed to discourage and record any incidents of vandalism and/or trespassing. The facility would be remotely operated, controlled and monitored and with no requirement for daily on-site employees. Local and remote operations and maintenance staff would be on-call to respond to any alerts generated by the monitoring systems, and would be present on the site periodically to perform maintenance. A maintenance staff of two to three people would be responsible for performing all routine and emergency operational and maintenance activities and would be on-site infrequently for brief periods of time. Such activities include inspections, equipment servicing, site and

landscape clearing, and periodic washing of the PV modules if needed (up to four times per year) to increase the performance of the panels.

The proposed solar project site is to the east of the existing 40 MWac Cuyama Solar Array project site. Grading would be minimal and include 3,388 cubic yards of cut and fill. One eucalyptus tree and two scrub pine trees are proposed for removal. The parcel would be served by the Santa Barbara County Fire District. Access would be provided off of the existing un-named road running north-south along the westerly line of the property. The property is a 20.44-acre (net) parcel zoned AG-II-40 and shown as Assessor's Parcel Number 149-150-033, with no associated address and located approximately 0.4 miles north of Foothill Road and 0.5 miles east of Kirschenmann Road in the Cuyama Area, 1st Supervisorial District.

Any deviations from the project description, exhibits or conditions must be reviewed and approved by the County for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

2. **Proj Des-02 Project Conformity**. The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of the structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval thereto. All plans (such as Landscape and Tree Protection Plans) must be submitted for review and approval and shall be implemented as approved by the County.

PROJECT SPECIFIC CONDITIONS

3. **Demolition and Reclamation Plan.** The Project owner/operator shall submit a Demolition and Reclamation Plan to allow the use of the land to return to agricultural uses or be consistent with current land use plans, policies, and zoning requirements in place at the time.

   TIMING: The Owner/Applicant shall submit the Demolition and Reclamation Plan to P&D for review and approval prior to issuance of zoning clearance.

   MONITORING: P&D staff shall perform site inspections throughout demolition and reclamation activities to ensure implementation and compliance of the approved Demolition and Reclamation Plan.

4. **Financial Assurance for Demolition and Reclamation.** The Owner/ Applicant shall submit to the Director:

   a. An itemized cost estimate for removal of all structures and equipment and reclamation of the project site and an estimate from a qualified party of the reclamation value of the solar facility infrastructure. The bases for all estimates shall be identified and documented. The estimates shall be revised and updated and resubmitted to P&D every five years.

b. The Project owner/operator shall submit to P&D a financial assurance mechanism acceptable to P&D for the cost of removal of structures and equipment and reclamation of the project site. The amount of the assurance shall be based on the itemized cost estimate. The financial security shall be in place for the life of the Project. P&D will release the security upon successful completion of structure and equipment removal and site reclamation, as determined by P&D.

TIMING: The financial assurance for demolition and reclamation shall be submitted to P&D for review and approval prior to issuance of zoning clearance. The permittee shall update and resubmit the financial assurance amount to P&D every five years.

MONITORING: P&D staff shall monitor successful completion of structure and equipment removal and site reclamation. County shall release financial assurance upon determination that all structures and equipment have been removed and the site reclaimed pursuant to the approved Demolition and Reclamation Plan.

5. **Standard Condition AG-05. Buyer Notification.** The Owner/Applicant shall provide a signed document indicating the following:

"This property is located adjacent to property zoned for agriculture and is located in an area that has been planned for agricultural uses. The Board of Supervisors has determined that it is in the public interest to preserve agricultural land and operations within the County of Santa Barbara and specifically to protect these lands for exclusive agricultural use. Any inconvenience or discomfort from properly conducted agricultural operations, including noise, odors, dust, and chemicals will not be deemed a nuisance per Section 3-23, Article V, Chapter 3 of the County Code. In the event that the property and/or project is sold, the Owner/Applicant shall notify the future owner of this condition."

TIMING: The Owner/Applicant shall submit a signed copy of the buyer notification prior to zoning clearance.

MONITORING: P&D processing planner shall verify that the notification conforms to permit condition requirements.

6. **Aesthetic Design Treatments.** The exterior of the inverter boxes and the exterior of structures, lighting fixtures and poles, above ground poles/ towers will be factory treated with a non-specular dull finish or using standard environmental coloring to minimize contrast with the existing landscape to the extent feasible. If infeasible, written proof of infeasibility shall be provided to NBAR and subject to NBAR approval. All galvanized surfaces shall be treated to minimize reflective properties using poly bonded vinyl coating, powder coating, or special non-specular dulling treatment. Surfaces shall include, but not limited to fences, PV panel support structures, brackets and pins to the extent feasible. Battery storage containers shall be painted to match the existing surroundings in non-reflective paint.

PLAN REQUIREMENTS: The Owner/Applicant shall prepare an Aesthetic Design Treatment Plan, including sample materials and paint/treatment palettes, and submit that Plan to the North County Board of Architectural Review (NBAR) and P&D staff for review and approval.

TIMING: The Owner/Applicant shall submit the Aesthetic Design Treatment Plan to P&D staff and NBAR for review and approval prior to issuance of zoning clearance.

MONITORING: P&D staff shall ensure the plan is implemented prior to issuance of occupancy permits.

7. **Low Intensity Lighting**. All construction and operational lighting shall include use of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject lot and prevent spill-over onto adjacent lots.

   PLAN REQUIREMENTS: The Owner/Applicant shall prepare a lighting plan depicting the low-intensity lighting specifications noted above.

   TIMING: The lighting plan shall be submitted to P&D staff for review and approval prior to issuance of zoning clearance.

   MONITORING: P&D staff shall confirm implementation of the low-intensity lighting plan prior to issuance of occupancy permits.

8. **Minimize Glare**. Solar panels and hardware shall be designed to minimize glare and spectral highlighting to the extent feasible.

   PLAN REQUIREMENTS: This site plan shall include the specifications above.

   TIMING: The Owner/Applicant shall submit site plans shall to P&D staff for review and approval prior to issuance of zoning clearance.

   MONITORING: P&D staff shall confirm implementation of approved solar equipment prior to issuance of occupancy permits.

9. **Fire Prevention Plan.** The Owner/Applicant shall submit a Fire Prevention Plan to P&D that has been approved by the Santa Barbara County Fire Department to identify sources of fire hazards and methods to mitigate for fire hazards during construction and throughout operation of the project.

   TIMING: Prior to issuance of a zoning clearance, the Owner/Applicant shall submit the Plan as approved by County Fire Department to the P&D permit processing planner.

   MONITORING: P&D compliance monitoring staff shall confirm compliance in the field.

   PLAN REQUIREMENTS: This condition shall be included on building and grading plans.

10. **Pest and Weed Management Plan.** The Owner/Applicant shall submit a Pest and Weed Management Plan to P&D for review and approval so invasive species are not introduced to adjacent agricultural lands during construction and throughout operation of the project.

    TIMING: Prior to issuance of a zoning clearance, the Owner/Applicant shall submit the Plan to the P&D permit processing planner for review and approval. The Plan shall be implemented during construction and throughout operation of the facility.

    MONITORING: P&D compliance monitoring staff shall confirm compliance in the field.

    PLAN REQUIREMENTS: This condition shall be included on building and grading plans.

11. **Standard Condition Noise-02 Construction Hours.** The Owner/Applicant, including all contractors and subcontractors, shall limit noise generating construction activity (those activities exceeding 65 dBA (L_{eq} 10-min) within 1,600 feet of sensitive receptors, including associated outside activity areas), including equipment maintenance and site preparation, to the hours between 7 a.m. and 4 p.m., Monday through Friday. No noise generating

construction activities shall occur on weekends or State holidays. Non-noise generating construction activities such as interior plumbing, electrical, painting, module installation and dust control activities are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein.

PLAN REQUIREMENTS: The Owner/Applicant shall provide and post signs stating these restrictions at construction site entries. The 1,600 foot limit shall be printed on approved grading and building plans.

TIMING: The Owner/Applicant shall provide grading and building plans indicating the 1,600 foot limit to P&D staff for review and approval prior to issuance of zoning clearance. Signs shall be posted prior to commencement of construction and maintained throughout construction.

MONITORING: The Owner/Applicant shall demonstrate that required signs are posted prior to grading/building permit issuance and pre-construction meeting. Building inspectors and P&D permit compliance staff shall confirm compliance in the field and respond to complaints.

12. **Noise Reduction Plan.** The Applicant, in conjunction with a qualified acoustical consultant, shall develop a Noise Reduction Plan for the site acceptable to P&D to ensure that construction noise does not exceed 65 dBA (L_{eq} 10-min) at residences, including associated outside activity areas, located within 1,600 feet of the site. The plan shall specify the type, location, and length of noise barriers.

    PLAN REQUIREMENTS: The Owner/Applicant shall submit the Noise Reduction Plan for the site to P&D. The 1,600-foot noise mitigation zone shall be clearly shown on all approved grading and building plans. The plans shall incorporate requirements of the P&D approved Noise Reduction Plan.

    TIMING: The Owner/Applicant shall submit the Noise Reduction Plan to P&D staff for review and approval prior to issuance of zoning clearance. Noise Reduction Plan measures shall be implemented prior to commencement of construction activities within 1,600 feet of residences and remain in the designated location during construction activities within the 1,600-foot zone.

    MONITORING: The Owner/Applicant shall demonstrate that the Noise Reduction Plan is fully implemented prior to commencement of construction activities within 1,600 feet of residences. P&D staff shall perform site inspections throughout the construction phase to ensure compliance.

13. **Traffic Control Plan.** The Owner/Applicant shall prepare and implement a traffic control plan to reduce construction-related impacts on roadway operation, safety hazards, alternative transportation, parking, and emergency access. Construction traffic control plans typically include the following.

    1. A street layout showing the location of construction activity and surrounding streets to be used as detour routes, including special signage.
    2. A tentative start date and construction duration period for each phase of construction.
    3. The name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction.

4. Written approval to implement traffic control from local agencies with jurisdiction, as needed.

Additionally, the construction traffic control plan will include the following stipulations.

1. Provide access for emergency vehicles at all times.
2. Avoid creating additional delay at intersections currently operating at congested conditions, either by choosing routes that avoid these locations or limiting construction activities to nonpeak hours.
3. Maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified.
4. Provide adequate off-street parking areas at designated staging areas for construction-related vehicles.
5. Maintain pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction encroaches on a sidewalk, a safe detour will be provided for pedestrians at the nearest crosswalk. If construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway.
6. Use traffic controls that include flag persons wearing Occupational Safety and Health Administration–approved vests and using a "Stop/Slow" paddle to warn motorists of construction activity.
7. Maintain access to transit services and ensure that public transit vehicles are detoured.
8. Post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area.
9. Post construction warning signs in accordance with local standards or those set forth in the California MUTCD (Caltrans 2010) in advance of the construction area and at any intersection that provides access to the construction area.
10. During lane closures, notify local police and fire departments of construction locations to ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary.
11. Provide written notification to contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites. Submit a copy of all such written notifications to the local agencies with jurisdiction.
12. Repair or restore the road right-of-way to its original condition or better upon completion of work.

PLAN REQUIREMENTS: A Construction Traffic Control Plan shall be prepared and submitted to P&D and Public Works.

TIMING: The Owner/Applicant shall submit the Traffic Control Plan to P&D and Public Works for review and approval prior to issuance of zoning clearance.

MONITORING: The Owner/Applicant shall demonstrate to P&D staff Traffic Control Plan implementation. Field inspection will be conducted by P&D staff to ensure that the plan is being implemented throughout the construction phase.

14. **Standard Condition Air-01: Dust Control.** The Owner/Applicant shall comply with the following dust control components at all times including weekends and holidays:

a. Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.

b. During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.

c. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site.

d. Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph.

e. When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays.

f. Order increased watering as necessary to prevent transport of dust off- site.

g. Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed.

h. If the site is graded and left undeveloped for over four weeks, the Owner/Applicant shall immediately:

   i. Seed and water to re-vegetate graded areas; and/or

   ii. Spread soil binders; and/or

   iii. Employ any other method(s) deemed appropriate by P&D or APCD.

PLAN REQUIREMENTS: These dust control requirements shall be noted on all grading and building plans.

PRE-CONSTRUCTION REQUIREMENTS: The contractor or builder shall provide P&D monitoring staff and APCD with the name and contact information for an assigned onsite dust control monitor(s) who shall have the responsibility to:

a. Assure all dust control requirements are complied with including those covering weekends and holidays.

b. Order increased watering as necessary to prevent transport of dust offsite.

c. Attend the pre-construction meeting.

TIMING: The dust monitor shall be designated prior to issuance of grading permit. The dust control components apply from the beginning of any grading or construction throughout all development activities until Final Building Inspection Clearance is issued.

MONITORING: P&D processing planner shall ensure measures are on plans. P&D grading and building inspectors shall spot check; Grading and Building Department shall ensure compliance onsite. APCD inspectors shall respond to nuisance complaints.

15. Erosion and Sediment Control Plan. Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of

the grading period and until re-graded areas have been stabilized by structures, long-term erosion control measures or permanent landscaping. The Owner/Applicant shall submit the SWPPP or ESCP) using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite, and implement BMPs to prevent all non-stormwater discharges (dust suppression, dewatering, wastewater, etc.). The SWPPP or ESCP shall be a part of the Grading Plan submittal and will be reviewed for its technical merits by P&D. Information on these requirements can be found on the County web site re: Grading Ordinance Chapter 14 (http://sbcountyplanning.org/building/grading.cfm) refer to Erosion and Sediment Control Plan Requirements; and in the California Green Code for SWPPP (projects < 1 acre) and/or SWMP requirements. Example SWPPP and typical design for site-appropriate BMPs are available from Caltrans (SWPPP-WPCP Templates) and the California Stormwater Quality Association (California Stormwater BMP Handbook – Construction).

PLAN REQUIREMENTS: The grading and drainage plans SWPPP and/or ESCP shall be submitted for review and approved by P&D prior to approval of land use clearances. The plan shall be designed to address erosion, sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized.

TIMING: The SWPPP/ESCP measures shall be implemented prior to the commencement of grading and remain in place throughout the year, as appropriate**.** The SWPPP/ESCP requirements for the rainy season shall be implemented between November 1st and April 15th of each year; all other pollution control measures shall be implemented year round.

MONITORING: P&D staff shall perform site inspections throughout the construction phase.

16. **Standard Condition WatConv-01: Sediment and Contamination Containment.** The Owner/Applicant shall prevent water contamination during construction by implementing the following construction site measures:

    1. All entrances/exits to the construction site shall be stabilized using methods designed to reduce transport of sediment off site. Stabilizing measures may include but are not limited to use of gravel pads, steel rumble plates, temporary paving, etc. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. Entrances/exits shall be maintained until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.

    2. Apply concrete, asphalt, and seal coat only during dry weather.

    3. Store, handle and dispose of construction materials and waste such as stockpiles of soil or gravel, paint, mortar, concrete slurry, fuels, wastewater, contaminated runoff, etc. in a manner which controls pollutant discharges, prevents any discharges from the construction site, and protects from exposure of construction materials and waste to storm water.

PLAN REQUIREMENTS: The Owner/Applicant shall ensure all above construction site Best Management Practices are printed as notes on plans.

TIMING: Stabilizing measures shall be in place prior to commencement of construction. Other measures shall be in place throughout construction.

MONITORING: The Owner/Applicant shall demonstrate compliance with these measures to P&D compliance monitoring staff as requested during construction.

17. **Standard Condition WatConv-07: Construction General Permit.** The Owner/Applicant will submit proof of exemption or a copy of the NOI to obtain coverage under the Construction General Permit of the NPDES issued by the RWQCB.

    TIMING: Prior to issuance of grading permit the Owner/Applicant will submit proof of exemption or a copy of the NOI and will provide a copy of the required SWPPP to Planning and Development. The Owner/Applicant will keep a copy of the SWPPP on the Project site during grading and construction activities.

    MONITORING: The Planning and Development permit processing planner will review the documentation prior to approval of the grading permit. Planning and Development compliance monitoring staff will inspect the site during construction for compliance with the SWPPP.

18. **Standard Condition NPDES-23: SWQMP-Operation.** The Owner/Applicant shall submit and implement a Storm Water Quality Management Plan (SWQMP) designed to prevent the entry of pollutants from the project site into the drainage system after development. The SWQMP shall identify:

    1. A combination of structural and non-structural BMPs from the California Storm Water BMP Handbook for New Development and Redevelopment (California Storm Water Quality Association), or other approved methods;
    2. Potential pollutant sources that may affect the quality of the storm water discharges;
    3. Design and placement of structural and non-structural BMPs to address identified pollutants;
    4. Inspection and maintenance program;
    5. Method for ensuring maintenance of all BMPs over the life of the project.

    PLAN REQUIREMENTS: The Owner/Applicant shall (1) submit the SWQMP to P&D for review and approval prior to final plan approval; (2) include design and field components on land use, grading and building plans as applicable; (3) post performance securities prior to final plan approval to ensure installation and maintenance.

    TIMING: SWQMP measures shall be constructed and operational prior to Final Building Inspection Clearance. The Owner/Applicant shall maintain the SWQMP components for the life of the project and keep a record of maintenance and submit the maintenance record to P&D compliance monitoring staff annually between October 1 and 31. The Owner/Applicant shall record a buyer notification that states: "IMPORTANT: BUYER NOTIFICATION" and contains the maintenance requirement language above.

    MONITORING: The Owner/Applicant shall demonstrate to Public Works, Water Resources Division that SWQMP components are in place prior to Final Building Inspection Clearance. The installation security shall be released upon satisfactory installation of all items in approved plans and the maintenance security shall be released after five consecutive years of satisfactory maintenance and maintenance reporting. P&D compliance monitoring

staff and Public Works-Water Resources Division staff will review required maintenance records.

19. **Standard Condition SolidW-02. Solid Waste-Recycle.** The Owner/Applicant and their contractors and subcontractors shall separate demolition and excess construction materials onsite for reuse/recycling or proper disposal (e.g., concrete, asphalt, wood, brush). The Owner/Applicant shall provide separate onsite bins as needed for recycling.

    PLAN REQUIREMENTS: The Owner/Applicant shall print this requirement on all grading and construction plans. Owner shall provide P&D with receipts for recycled materials or for separate bins.

    TIMING: Materials shall be recycled as necessary throughout construction. All materials shall be recycled prior to Final Building Inspection Clearance.

    MONITORING: The Owner/Applicant shall provide P&D compliance staff with receipts prior to Final Building Inspection Clearance.

20. **Standard Condition SolidW-03. Solid Waste-Construction Site.** The Owner/Applicant shall provide an adequate number of covered receptacles for construction and employee trash to prevent trash & debris from blowing offsite, shall ensure waste is picked up weekly or more frequently as needed, and shall ensure site is free of trash and debris when construction is complete.

    PLAN REQUIREMENTS: All plans shall contain notes that the site is to remain trash-free throughout construction.

    TIMING: Prior to building permit issuance, the Owner/Applicant shall designate and provide P&D with the name and phone number of a contact person(s) responsible for trash prevention and site clean-up. Additional covered receptacles shall be provided as determined necessary by P&D.

    MONITORING: Permit compliance monitoring staff shall inspect periodically throughout grading and construction activities and prior to Final Building Inspection Clearance to ensure the construction site is free of all trash and debris.

21. **Standard Condition Aest-09 Construction Clean-up.** The developer shall clear the project site of all excess construction debris.

    PLAN REQUIREMENT: This requirement shall be noted on final building plans.

    TIMING: Debris clearance shall occur prior to Final Building Inspection Clearance.

    MONITORING: P&D compliance monitoring staff shall site inspect prior to Final Building Inspection Clearance.

22. **BR-1. Worker Environmental Awareness Program.** The applicant shall prepare a Worker Environmental Awareness Program that shall be presented to all construction personnel and employees before any ground-disturbing activities commence at the site. This presentation shall include information on special status species with potential to occur at the site, including habitat needs, protection status, and required mitigation measures. Each worker shall be provided with a hand-out of pertinent information.

    TIMING: Training shall be presented to all construction personnel and employees before any ground-disturbing activities commence at the site.

MONITORING: Sign-in sheets documenting the trainings shall be maintained by the applicant and submitted to the County monthly.

23. **BR-2. Conduct Nesting Bird Surveys.** If seasonal avoidance of nesting birds is not feasible and construction activities are scheduled to occur during the nesting season (March 15 to August 15 or as determined by the County), a qualified biologist shall conduct a preconstruction survey of the project site and the area within 100 feet of the site, including denuded areas, within seven days prior to the start of ground-disturbing activities. A qualified biologist shall also conduct periodic surveys of the project site, during the nesting season, after the start of construction and at weekly intervals, until such time that no potential nesting habitat remains onsite (e.g. vegetation clearing has been completed). If nesting birds are found within the survey area, an appropriate buffer around the nest shall be identified by the qualified biologist to ensure compliance with Fish and Game Code Sections 3503 and 3513, and no new activities would be allowed within the buffer until the young have fledged from the nest, as determined by the qualified biologist, or until the nest fails for reasons unrelated to the project. Preconstruction survey reports shall be submitted to the County.

    PLAN REQUIREMENTS: The Owner/Applicant shall retain a qualified biologist to conduct nesting surveys prior to the start of construction. This condition shall be included on grading plans, and the results of the survey shall be submitted to P&D prior to initiation of grading activities. The name and contact information for the qualified biologist shall be provided to P&D prior to the survey.

    TIMING: The surveys shall be conducted no sooner than 7 days prior to the start of construction. P&D shall be notified prior to the survey of the proposed survey date. The nesting bird surveys shall be submitted to P&D staff for review and approval prior to the initiation of grading activities.

    MONITORING: P&D shall review the results of the survey prior to initiation of grading activities, and P&D staff shall confirm compliance in the field prior to initiation of grading activities.

24. **BR-3. Preconstruction Survey for Special Status Reptiles**. Preconstruction surveys for the presence of San Joaquin coachwhip and California glossy snake shall be conducted immediately prior to start of ground or vegetation disturbing construction activities during spring and summer months (April through August). The surveys shall be conducted by qualified biologists and shall include complete visual coverage of the ground surface to be disturbed. If special status species are found, a qualified biologist with approval from CDFW (Memorandum of Understanding or other written approval) shall move them to the nearest safe location.

    PLAN REQUIREMENTS: The Owner/Applicant shall retain a qualified biologist to conduct reptile surveys prior to the start of construction. This condition shall be included on grading plans, and the results of the survey shall be submitted to P&D prior to initiation of grading and vegetation disturbing activities. The name and contact information for the qualified biologist shall be provided to P&D prior to the survey.

    TIMING: The surveys shall be conducted immediately prior to the start of ground or vegetation disturbing construction activities. The reptile survey(s) shall be submitted to P&D permit compliance staff upon completion.

MONITORING: P&D permit compliance staff shall confirm compliance in the field at the preconstruction meeting and shall review the results of the survey(s) when provided by the owner/applicant.

25. **BR-4. Preconstruction Survey for Special Status Mammals**. Within 30 days prior to start of construction, a preconstruction survey shall be conducted throughout the project site for mammal dens suitable for use by American badger and/or San Joaquin kit fox. The survey shall be conducted such that complete visual inspection of the ground surface is completed. If no dens suitable for badger or kit fox are identified, construction may commence after acceptance of a preconstruction survey report by the County. If dens suitable for either species are located, the dens shall be monitored with tracking medium and/or remote cameras for three days to determine if they are occupied, and by which species. Occupied American badger dens shall be protected by a 50-foot buffer. Active badger maternity dens shall be protected by a 100-foot buffer. Badger dens or other dens suitable for use by kit fox but showing no sign of current or past use by kit fox may be excavated by a qualified biologist when not occupied (refer to USFWS 2011 Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox prior to or during Ground Disturbance). If San Joaquin kit fox or sign of kit fox is detected in the Study Area, the applicant shall consult with CDFW and USFWS for appropriate protection measures.

    PLAN REQUIREMENTS: The Owner/Applicant shall retain a qualified biologist to conduct special status mammal surveys prior to the start of construction. This condition shall be included on grading plans, and the results of the survey shall be submitted to P&D prior to initiation of grading and vegetation clearance activities. The name and contact information for the qualified biologist shall be provided to P&D prior to the survey.

    TIMING: The survey shall be conducted no sooner than 30 days prior to the start of construction. P&D shall be notified prior to the survey of the proposed survey date. The survey shall be submitted to P&D staff for review and approval prior to the initiation of grading and vegetation clearance activities.

    MONITORING: P&D permit compliance staff shall review the results of the survey prior to initiation of grading and vegetation clearance activities and shall confirm compliance in the field.

26. **BR-5. Biological Monitoring**. A biological monitor shall be present during initial site preparation activities (e.g., grading, mowing, and removal of large waste debris) to relocate wildlife out of harm's way. The monitor shall be qualified to identify, capture and relocate non-listed special status species that are found during construction. If species listed under FESA or CESA are found, all work shall stop and the applicant shall consult with CDFW and/or USFWS, as appropriate. The Biological Monitor shall have the authority to temporarily stop work if special status species are encountered.

    PLAN REQUIREMENTS: This condition shall be included on grading plans, and the results of the monitoring shall be submitted to P&D. The name and contact information for the qualified biologist shall be provided to P&D prior to the preconstruction meeting.

    TIMING: Results of the biological monitoring shall be provided to P&D permit compliance staff within 30 days of completion of initial site preparation activities.

    MONITORING: P&D permit compliance staff shall review the monitoring report and shall confirm compliance in the field.

27. **CUL 1: Archaeological Monitoring.** The applicant shall fund and arrange for a qualified archaeologist and an approved Native American monitor to be present during and/or immediately following brush clearing and grubbing activities for the entire project area.

    PLAN REQUIREMENTS: This condition shall be included on grading plans, and the results of the monitoring shall be submitted to P&D. The name and contact information for the qualified archaeologist and Native American monitor shall be provided to P&D prior to the preconstruction meeting.

    TIMING: Results of the archaeological monitoring shall be provided to P&D permit compliance staff within 30 days of completion of brush clearing and grubbing activities for the entire project area.

    MONITORING: P&D permit compliance staff shall review the monitoring report and shall confirm compliance in the field.

28. **CUL 2: Unanticipated Archaeological Resources Discovery.** If archaeological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until a County of Santa Barbara approved archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological resources shall be considered significant. If the resource is determined to be significant, the archaeologist shall prepare a research design for recovery of the resources in accordance with state CEQA guidelines. The Owner/Applicant shall retain a P&D approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of Phase 2 investigations of the County Archaeological Guidelines and funded by the Owner/Applicant.

    PLAN REQUIREMENTS: This condition shall be printed on all building and grading plans.

    MONITORING: P&D permit processing planner shall check plans prior to issuance of zoning clearance and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

29. **CUL 3: Archaeological Preconstruction Conference.** Prior to the beginning of construction activities, an archaeologist will brief all available construction personnel of the possible presence of buried archaeological material within the project area, the nature of cultural materials that could be exposed during grading and excavation, and the legal and conditional requirements to stop work in the vicinity of the discovery, along with the consequences of not doing so. An archaeologist should be on call to respond to such discoveries within 24 to 48 hours, however unlikely that may be.

    PLAN REQUIREMENTS: This condition and the name and contact information for the on-call archaeologist shall be included on grading plans.

    TIMING AND MONITORING: The applicant/owner shall provide the name and contact number for the "on-call" archaeologist prior to the preconstruction meeting.

30. **CUL 4: Unanticipated Discovery of Human Remains.** In the unlikely event human remains are encountered, construction in the area of the finding will cease and the Santa Barbara County Coroner will be contacted to determine the origin of the remains. In the event the remains are Native American in origin, the Native American Heritage Commission

will be contacted to determine necessary procedures for protection and preservation of the remains, including reburial, as provided in the State of California Environmental Quality Act (CEQA) Guidelines, Section 15064.5(e), "CEQA and Archaeological Resources," CEQA Technical Advisory Series, and consistent with the applicable sections of the California Health and Safety Code (Sections 7050.5 et seq.).

PLAN REQUIREMENTS: This condition shall be included on grading plans.

CONDITIONAL USE PERMIT CONDITIONS

31. **Rules-01 Effective Date-Not Appealable to CCC.** This Conditional Use Permit shall become effective upon the date of the expiration of the applicable appeal period provided an appeal has not been filed. If an appeal has been filed, the planning permit shall not be deemed effective until final action by the final review authority on the appeal. No entitlement for the use or development shall be granted before the effective date of the planning permit. [LUDC §35.82.020].

32. **Rules-05 Acceptance of Conditions**. The Owner/Applicant's acceptance of this permit and/or commencement of use, construction and/or operations under this permit shall be deemed acceptance of all conditions of this permit by the Owner/Applicant.

33. **Rules-12 CUP Expiration**. The Owner/Applicant shall obtain the required zoning clearance within the 18 months following the effective date of this Conditional Use Permit. If the required zoning clearance is not issued within 18 months following the effective date of this Conditional Use Permit, or within such extended period of time as may be authorized in compliance with Section 35.84.030 of the Land Use Development Code, and an application for an extension has not been submitted to the Planning and Development Department, then Conditional Use Permit shall be considered void and of no further effect.

34. **Rules-17 CUP-Void**. This Conditional Use Permit shall become void and be automatically revoked if the development and/or authorized use allowed by this Conditional Use Permit is discontinued for a period of more than 12 months, or within such extended period of time as may be authorized in compliance with Section 35.82.060(G)(4) of the Land Use Development Code. Any use authorized by this Conditional Use Permit shall immediately cease upon expiration or revocation of this Conditional Use Permit. Any zoning clearance approved or issued pursuant to this Conditional Use Permit shall expire upon expiration or revocation of the Conditional Use Permit. Conditional Use Permit renewals must be applied for prior to expiration of the Conditional Use Permit. [LUDC §35.82.060 & §35.84.060].

35. **Rules-21 CUP Revisions-Change of Use**. Any change of use in the proposed structure shall be subject to appropriate environmental analysis and review by the County including Building Code compliance.

36. **Rules-23 Processing Fees Required**. Prior to issuance of zoning clearance, the Owner/Applicant shall pay all applicable P&D permit processing fees in full as required by County ordinances and resolutions.

37. Rules-37 Time Extensions-All Projects. The Owner / Applicant may request a time extension prior to the expiration of the permit or entitlement for development. The review authority with jurisdiction over the project may, upon good cause shown, grant a time extension in compliance with County rules and regulations, which include reflecting changed circumstances and ensuring compliance with CEQA. If the Owner / Applicant requests a time extension for this permit, the permit may be revised to include updated language to standard conditions and/or mitigation measures and additional conditions and/or mitigation measures which reflect changed circumstances or additional identified project impacts.

COUNTY RULES AND REGULATIONS

38. Rules-03 Additional Permits Required. The use and/or construction of any structures or improvements authorized by this approval shall not commence until the all necessary planning and building permits are obtained. Before any Permit will be issued by Planning and Development, the Owner/Applicant must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Applicant has satisfied all pre-construction conditions. A form for such clearance is available from Planning and Development.

39. Rules-04 Additional Approvals Required. Approval of this Conditional Use Permit is subject to the Board of Supervisors approval of the required Comprehensive Plan amendment to apply the Utility-Scale Solar Photovoltaic Facility Overlay to the subject site (APN 149-150-033).

40. Rules-08 Sale of Site. Any sale, lease or financing of the project site and any portions thereof shall be in compliance with the exhibit(s), project description and the conditions of approval including all related covenants and agreements.

41. Rules-09 Signs. No signs of any type are approved with this action unless otherwise specified. All signs shall be permitted in compliance with Land Use Development Code.

42. Rules-20 Revisions to Related Plans. The Owner/Applicant shall request a revision for any proposed changes to the approved Storm Water Quality Management Plan (SWQMP) and Storm Water Pollution Prevention Plan (SWPPP). Substantial conformity shall be determined by the Director of P&D.

43. Rules-25 Signed Agreement to Comply. Prior to issuance of zoning clearance, the Owner/Applicant shall provide evidence that they have recorded a signed Agreement to Comply with Conditions that specifies that the Owner of the property agrees to comply with the project description, approved exhibits and all conditions of approval. Form may be obtained from the P&D office.

44. Rules-29 Other Dept Conditions. Compliance with Departmental/Division letters required as follows:

a. Fire Department, dated September 17, 2018; and
b. Flood Control, dated January 26, 2018.

45. **Rules-30 Plans Requirements**. The Owner/Applicant shall ensure all applicable final conditions of approval are printed in their entirety on applicable pages of grading/construction or building plans submitted to P&D or Building and Safety Division. These shall be graphically illustrated where feasible.

46. **Rules-31 Mitigation Monitoring Required.** The Owner/Applicant shall ensure that the project complies with all approved plans and all project conditions including those which must be monitored after the project is built and occupied. To accomplish this, the Owner/Applicant shall:
    a. Contact P&D compliance staff as soon as possible after project approval to provide the name and phone number of the future contact person for the project and give estimated dates for future project activities;
    b. Sign a separate Agreement to Pay for compliance monitoring costs and remit a security deposit prior to approval of zoning clearance as authorized by ordinance and fee schedules. Compliance monitoring costs will be invoiced monthly and may include costs for P&D to hire and manage outside consultants when deemed necessary by P&D staff (e.g. non-compliance situations, special monitoring needed for sensitive areas including but not limited to biologists, archaeologists) to assess damage and/or ensure compliance. In such cases, the Owner/Applicant shall comply with P&D recommendations to bring the project into compliance. The decision of the Director of P&D shall be final in the event of a dispute. Monthly invoices shall be paid by the due date noted on the invoice;
    c. Note the following on each page of grading and building plans "This project is subject to Mitigation Compliance Monitoring and Reporting. All aspects of project construction shall adhere to the approved plans, notes, and conditions of approval;
    d. Contact P&D compliance staff at least two weeks prior to commencement of construction activities to schedule an on-site pre-construction meeting to be led by P&D Compliance Monitoring staff and attended by all parties deemed necessary by P&D, including the permit issuing planner, grading and/or building inspectors, other agency staff, and key construction personnel: contractors, sub-contractors and contracted monitors among others.

47. **Rules-32 Contractor and Subcontractor Notification.** The Owner/Applicant shall ensure that potential contractors are aware of County requirements. Owner / Applicant shall notify all contractors and subcontractors in writing of the site rules, restrictions, and Conditions of Approval and submit a copy of the notice to P&D compliance monitoring staff.

48. **Rules-33 Indemnity and Separation**. The Owner/Applicant shall defend, indemnify and hold harmless the County or its agents or officers and employees from any claim, action or proceeding against the County or its agents, officers or employees, to attack, set aside, void, or annul, in whole or in part, the County's approval of this project. In the event that the County fails promptly to notify the Owner / Applicant of any such claim, action or proceeding, or that the County fails to cooperate fully in the defense of said claim, this condition shall thereafter be of no further force or effect.

49. **Rules-35 Limits-Except DPs.** This approval does not confer legal status on any existing structures(s) or use(s) on the property unless specifically authorized by this approval.

Memorandum

DATE: September 17, 2018

TO: Joe Dargel
Energy, Minerals & Compliance Division
Planning and Development
County of Santa Barbara - Santa Barbara

FROM: Glenn Fidler, Captain
Fire Department

SUBJECT: APN: 149-150-033; Permit: 17GPA-00006 and 17CUP-00044
Site: Foothill Road, Cuyama
Project: General Plan Amendment and Conditional Use Permit – New Utility-Scale Solar Project

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The above project is located within the jurisdiction of the Santa Barbara County Fire Department.

The Fire Prevention Division must be notified of any changes to the project proposal. A change in the project description may cause additional conditions to be imposed.

NO CONDITIONS FOR GENERAL PLAN AMENDMENT

CONDITIONS FOR CONDITIONAL USE PERMIT

1. The area under the arrays shall remain vegetation free to remove any chance of a malfunctioning system spreading fire throughout the system.

2. Access shall be as shown on plans dated June 6, 2018.
   - Access way shall be unobstructed.
   - A minimum of 15 feet of vertical clearance shall be provided and maintained for the life of the project for emergency apparatus access.

3. Portable fire extinguishers are required and shall be in accordance with the current adopted Santa Barbara County Code Chapter 15.

4. Stationary lead-acid battery systems having an electrolytic capacity of more than 50 gallons used for facility standby power, emergency power or uninterrupted power supplies shall be in accordance with current-adopted California Fire Code, Section 608.

5. Address numbers shall be a minimum height of 12 inches.
   - Address number locations shall be approved by the fire department.
   - Address numbers shall be a color contrasting to the background color.
   - The address numbers shall be elevated at least three feet from the ground for clear visibility and easy directional identification.

- The numbers shall be visible from the access road when travelling in either direction.
- If the driveway is over 150 feet in length or the building is obstructed from view at the access road and/or driveway, numbers shall be posted at all road and driveway intersections as is necessary.

6. Access way entrance gates shall conform to current fire department requirements.

7. When access ways are gated, a fire department approved Knox locking system shall be installed. Reference Santa Barbara County Development Standard #7.*

ADVISORY

CONDITIONS FOR THE PROPOSED PROJECT
General Information

8. All standard fire department conditions and current codes shall apply at time of development.

9. Fire Protection Certificates(s) will be required.

10. Recorded addressing is required by the fire department.*

As always, if you have any questions or require further information, please call me at 805-681-5528 or 805-681-5523.

GF:mkb

*Information is posted at sbcfire.com. Select Doing Business/Planning and Engineering. To have information provided, telephone 805-681-5523.

Santa Barbara County Public Works Department
Flood Control ♦ Water Agency ♦ Project Clean Water

1/26/2018

Joseph Dargel, Planner
County of Santa Barbara
Planning & Development Department
123 E. Anapamu St.
Santa Barbara, CA 93101

Re: 17CUP-00000-00044; SEPV Cuyama Solar
APN: 149-150-033; Cuyama

Dear Mr. Dargel:

The District recommends that approval of the above referenced project be subject to the following conditions:

1. General
   a. The applicant shall comply with the Santa Barbara County Flood Control District Standard Conditions of Approval dated January 2011 (http://www.countyofsb.org/uploadedFiles/pwd/Water/Development/StdConditions Jan2011.pdf)
   b. The applicant shall provide a site plan of the proposed development following the guidelines provided in the Standard Conditions of Approval.
2. Design
   a. The applicant shall submit all improvement plans, grading plans, drainage plans, drainage studies, and landscape plans the District for review and approval.
      i. Project plans show the limits of the FEMA Special Flood Hazard Area (floodplain).
      ii. All development within the floodplain shall meet the requirements of the Chapter 15A (Floodplain Management) of the County Ordinance.
   b. The applicant shall acquire and submit all required data, forms and certifications as described in the Standard Conditions of Approval.
   c. The applicant shall sign the Agreement for Payment of Plan Check Fees (attached to the Standard Conditions of Approval) and pay the appropriate plan check fee deposit at the time of the initial submittal of maps, plans and studies.

Naomi Schwartz Building
Scott D. McGolpin, Public Works Director
130 E. Victoria Street, Suite 200, Santa Barbara, California 93101
PH: 805 568-3440 FAX: 805 568-3434 http://cosb.countyofsb.org/pwd/water/
Thomas D. Fayram, Deputy Public Works Director

d. The applicant shall submit the scour calculations and pile/post depth for the solar arrays located within the Special Flood Hazard Area. Provide this on both drainage report and plans.
e. The applicant shall submit to the District electronic drawings in PDF format of the approved Final Map, grading plans, improvement plans, drainage plans, and drainage studies on a compact disc.

3. Prior to Occupancy Clearance
   a. The applicant shall submit an Elevation Certificate (FEMA Form 086-0-33) to the District's Floodplain Manager for any proposed structures located within a Special Flood Hazard Area.

Sincerely,

SANTA BARBARA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

By: Y. Thierumaran

Yoganathan Thierumaran, P.E., CFM
Development Review Engineer

Cc: Earl McDonell, 263 Jupiter Drive, Nipomo, CA 93444
Carina Styer, 1560 Ewing Road, Arroyo Grande, CA 93420
SEPV Cuyama LLC, San Vicente Blvd Suite 41, Los Angeles, CA 90049

ATTACHMENT C

SUPPLEMENTAL DOCUMENT TO 11EIR-00000-00005

CASE NOS. 17GPA-00000-00006 & 17CUP-00000-00044

TO: Board of Supervisors

FROM: Joseph Dargel, Planner, Planning and Development

DATE: October 30, 2018

RE: SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility Project;
Case Nos. 17GPA-00000-00006 &17CUP-00000-00044, AP No. 149-150-033

CEQA DETERMINATION:
Finding that CEQA §15168(c) (Program EIR – Use with Later Activities) applies to the SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility Project, Case Nos. 17GPA-00000-00006 and 17CUP-00000-00044. CEQA §15168(c) allows for supplemental information to be prepared when the environment effects of the project were covered in a prior Program EIR and no new environmental effects could occur and no new mitigation measures are required and none of the conditions described in Section 15162 calling for preparation of an Environmental Impact Report (EIR) have occurred. The Cuyama Utility-Scale Solar Programmatic EIR (11EIR-00000-00005), is hereby amended by this 15168(c) letter for the SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility Project.

INTRODUCTION:
CEQA Guidelines Section 15168(c) (Program EIR) applies to the SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Project, Case Nos. 17GPA-00000-00006 and 17CUP-00000-00044. CEQA Guidelines Section 15168(c)(2) states that "*if the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the Program EIR, and no new environmental document would be required.*" Furthermore, CEQA Section 15168(c)(4) allows a written checklist or similar device to be prepared when a subsequent activity involves site specific operations, to determine whether the environmental effects of the operation were covered in the Program EIR. For the proposed project, this Supplemental Document to the previously adopted Program EIR (11EIR-00000-00005) has been prepared. None of the applicable conditions of Section 15162 calling for a subsequent EIR or negative declaration have occurred, as indicated by the County analysis and determination provided below. Specifically, Section 15162(a), Subsequent EIRs and Negative Declarations, of the CEQA Guidelines states:

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

There are no substantial changes or changed circumstances under which the proposed project is to be undertaken. No new significant environmental effects or a substantial increase in the severity of previously identified significant effects under the certified Program EIR (11EIR-00000-00005) have been found with the proposed project as analyzed in this Supplemental Document. Furthermore, there is no new information that the proposed project will have one or more significant effects not discussed in the certified Program EIR. When compared to the analysis completed in the certified Program EIR, there are no new significant environmental effects or a substantial increase in the severity of a previously identified significant effect.

LOCATION:
The SEPV Cuyama Solar Facility site is located 2 miles southeast of the town of Cuyama and approximately 1 mile southwest of the Cuyama River, toward the southern edge of the Cuyama Valley floor in the First Supervisorial District. The site is bounded by the 327-acre Cuyama Solar Array site to the west and active agricultural lands to the north, east, and south. The proposed solar facility site is located to the south of Highway 166 and to the west of Highway 33. Surrounding topography is gently sloping, with the prevailing gradient to the north–northeast, toward the Cuyama River. The SEPV Cuyama Solar Facility site is zoned agricultural but is not currently used for active agricultural operations.

BACKGROUND:
On October 7, 2014, the County Board of Supervisors adopted a Resolution that amended the County's Comprehensive Plan Land Use Element (Case No. 13GPA-00000-00002) to allow utility-scale solar photovoltaic facilities on up to 600 acres within the Cuyama Valley Rural Region on lands designated Agriculture II (A-II) and zoned Agriculture II (AG-II) and certified the Cuyama Utility-Scale Solar Programmatic EIR (11EIR-00000-00005) as part of that action. At that same hearing, the Board of Supervisor's also adopted an Ordinance (Case No. 10ORD-00000-00001) that amended the County Land Use and Development Code (LUDC) to allow utility-scale solar photovoltaic facilities within the Cuyama Valley Rural Region, subject to specific development standards incorporated into the LUDC and the discretionary approval of a CUP. To track the total acreage of agricultural property converted to utility-scale solar photovoltaic facilities and to limit conversion of properties to a maximum of 600 acres, the amended Land Use Element and LUDC require that approved facilities be designated with a Utility-Scale Solar Photovoltaic Facility Overlay on the Comprehensive Plan maps and required a Comprehensive Plan Amendment for each utility-scale solar photovoltaic project.

To date, only one other utility-scale solar photovoltaic facility exists within the county and accounts for 327 acres of land. The approval of the proposed project would bring the total acreage of utility-scale solar facilities in the county to 347 acres.

PROPOSED PROJECT:
The proposed project includes a request for a Comprehensive Plan Amendment (17GPA-00000-00006) and Conditional Use Permit (17CUP-000000-00044) to amend the Comprehensive Plan Land Use Element maps to add the Utility-Scale Solar Photovoltaic Facility Overlay designation to the parcel and to allow construction of a utility-scale solar photovoltaic and battery energy storage facility at the site. The summarized project description is as follows:

The project is a request to allow the installation of a 3 megawatt utility-scale solar photovoltaic facility with on-site battery energy storage on a 20-acre parcel within the Cuyama Valley Rural Region. The major components of the facility would be photovoltaic (PV) modules, single-axis sun tracking support structures, battery storage and electronic/electrical equipment. The PV modules would be mounted to steel support structures designed and installed to properly position the PV modules to maximize the amount of sunlight that can land upon their surfaces. The PV modules, at their highest point of the solar tracking during the day, would be less than nine feet above the ground surface. The battery energy storage containers would be 9.5 feet above ground surface. Electricity generated by the project would be interconnected to the PG&E electrical distribution system at an existing PG&E 21 kV line that runs north-south along the western boundary line of the property. The facility would be accessed from existing un-named road along the westerly line of the property with on-site perimeter and center-line compacted dirt roads for fire access and facility operations. A six foot tall chain-link security fence with barbed wire would be installed around the perimeter of the site to restrict public access during construction and operations. The facility would be remotely operated, controlled and monitored and with no requirement for daily on-site employees. Necessary periodic maintenance activities include inspections, equipment servicing, site and landscape clearing, and washing of the PV modules if needed (up to four times per year) to increase the performance of the panels. Grading would include 3,388 cubic yards of cut and fill. One eucalyptus tree and two scrub pine trees are proposed for removal. The parcel would be served by the Santa Barbara County Fire District. The existing setting is a vacant lot historically used for agricultural grazing. The project is located adjacent and to the east of the 327-acre, 40 megawatt Cuyama Solar Array site. The property is a 20.44-acre (net) parcel zoned AG-II-40 and shown as Assessor's Parcel Number 149-150-033, with no associated address and located approximately 0.4 miles north of Foothill Road and 0.5 miles east of Kirschenmann Road in the Cuyama Area, 1st Supervisorial District.

PROJECT IMPACT ANALYSIS:

The programmatic and project-specific EIR certified as part of the Cuyama Solar Facility and Comprehensive Plan/Land Use Development Code (CP/LUDC) Amendments project identified 15 significant and unavoidable cumulative (Class I) environmental impacts resulting from project implementation in the areas of Visual Resources, Agricultural Resources, and Land Use. Six of the Class I significant impacts were associated with the programmatic EIR which analyzed impacts associated with future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. The regulatory amendments were adopted as part of the Cuyama Solar Facility and CP/LUDC Amendments project and the LUDC was modified to incorporate 17 development standards that were identified as mitigation measures in the certified EIR for future utility-scale solar photovoltaic facilities.

COMPREHENSIVE PLAN AMENDMENT:

The proposed Comprehensive Plan Amendment would apply the Utility-Scale Solar Photovoltaic Facility Overlay designation to the site and would allow development of a utility-scale solar facility on the 20-acre site. Additional environmental review is not required because the environment effects of the project were covered in a prior Program EIR and no new environmental effects could occur and no new mitigation measures are required and none of the conditions described in Section 15162 have occurred.

1. AESTHETICS AND VISUAL RESOURCES

Impacts Anticipated in Programmatic EIR: Section 3.1 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in four significant and unavoidable impacts (Class I) to aesthetic/visual resources as they relate to scenic vistas, recreational resources, visual character, increased night lighting, and increased daytime glare. Section 4.3.1 of the EIR also identified that cumulative impacts to aesthetics and visual resources resulting from the future build-out of utility-scale solar projects are cumulatively considerable (Class I). No feasible mitigation measures exist to mitigate these impacts to less than significant levels; however, 11EIR-00000-00005 identified several mitigation measures (Development Standards AV-1 through AV-4) that were incorporated into the LUDC as development standards to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard AV-1 avoids siting of future utility-scale solar facilities in areas where there would be a significant visual impact on viewers from designated or eligibly designated scenic highways as determined by the North Board of Architectural Review (NBAR). Development Standard AV-2 requires aesthetic design treatments for utility-scale solar PV facilities as determined by NBAR. Development Standard AV-3 reduces night lighting of future solar facilities. Development Standard AV-4 reduces glare from proposed facilities by requiring minimization of glare and spectral highlighting on solar panels and facility hardware. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to aesthetics/visual resources would occur as a result of the proposed utility-scale solar and battery energy storage project. The proposed project is located on a vacant 20-acre parcel and includes the construction of PV modules, single-axis sun tracking support structures, battery storage and electronic/electrical equipment. Existing development on adjacent parcels to the west include 327 acres of utility-scale solar development, undeveloped agricultural parcels to the north and east, and agricultural parcels to the south with single-family dwellings. Project conditions of approval, including design review by the NBAR, and adherence to the development standards related to solar array development, would ensure the project conforms with the scale and character of the existing

community. Due to the project's proximity to the existing Cuyama Solar Array site, the proposed project would be visually subordinate to the surrounding development. The proposed project would not cause greater impacts or additional impacts to biological resources than those that were identified in the EIR. The EIR identified the impacts to aesthetics and visual resources as significant and unavoidable, but was overridden by the Board of Supervisors upon certification of 11EIR-00000-00005. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain cumulatively considerable (Class I).

2. AGRICULTURAL

Impacts Anticipated in Programmatic EIR: Section 3.2 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in one significant and unavoidable impact (Class I) to agricultural resources as they relate to productivity of agricultural land, whether the converted land is considered prime or non-prime. Section 4.3.2 of the EIR also identified that a cumulative impact to agricultural resources resulting from the conversion of agricultural land for future build-out of utility-scale solar projects is cumulatively considerable (Class I). No feasible mitigation measures exist to mitigate this impact to a less than significant level; however, 11EIR-00000-00005 identified two mitigation measures (Development Standards AG-1 and AG-2) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard AG-1 requires permanent preservation of off-site agricultural land of equal or better agricultural quality at a ratio of 1:1 for each acre that is either converted or impaired when prime agricultural land is developed for utility-scale solar use. Development Standard AG-2 requires a Demolition and Reclamation Plan with associated financial assurance sufficient to guarantee the removal of the facility, including all of its components, upon the completion of facility operations, in order to allow the land to be utilized for agricultural uses. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to agricultural resources would occur as a result of the proposed utility-scale solar and battery energy storage project. The proposed project is located on a vacant 20-acre parcel and includes the construction of PV modules, single-axis sun tracking support structures, battery storage and electronic/electrical equipment. The project's consistency with Development Standards AG-1 and AG-2 would ensure that impacts to agricultural resources are mitigated to the extent feasible, as intended by 11EIR-00000-00005. The proposed project would allow temporary suspension of potential agricultural uses on 20 acres. The impacts of suspending the potential for agricultural uses on up to 600 acres in the Cuyama Valley for the purpose of reduction of GHG emissions and promotion of alternative energy production were fully analyzed in 11EIR-00000-00005. The SEPV Cuyama Solar project is predominantly comprised of non-prime soils and is not considered farmland of State or local

importance, therefore Development Standard AG-1 does not apply. The site is not encumbered by an agricultural preserve contract, is currently vacant, and not actively utilized for agricultural production. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to agricultural resources than those that were identified in the EIR. The EIR identified the impacts to agricultural resources as significant and unavoidable, but was overridden by the Board of Supervisors upon certification of 11EIR-00000-00005. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain cumulatively considerable (Class I).

3. LAND USE

Impacts Anticipated in Programmatic EIR: Section 3.9 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in one significant and unavoidable land use impact (Class I) as they relate to incompatible development with surrounding land uses and one less than significant land use impact (Class III) as they relate to growth inducement. Cumulative land use impacts were identified as less than cumulatively considerable with mitigation (Class II). No feasible mitigation measures exist to mitigate the Class I impact to a less than significant level; however, 11EIR-00000-00005 identified 11 mitigation measures (Development Standards AG-1 and AG-2, AV-1 through AV-4, GEO-3, HAZ-1 and HAZ-2, NOI-1, and TT-1) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standards AG-1 and AG-2, AV-1 through AV-4 are described above under aesthetic and visual resources and agricultural resources. Development Standard GEO-3 requires minimizing grading and alteration of lands in order to reduce erosion. Development Standard HAZ-1 requires preparation and implementation of a Fire Prevention Plan. Development Standard HAZ-2 requires the avoidance or remediation of sites impacted with environmental contaminants. Development Standard NOI-1 requires facilities to be designed and constructed to avoid significant long-term operational noise impacts to residences or other sensitive receptors. Development Standard TT-1 requires implementation of a traffic control plan. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project land use impacts would occur as a result of the proposed utility-scale solar and battery energy storage project. The proposed project, together with the existing 327-acre Cuyama Solar Array project, would constitute a cumulative total of 347 acres of utility-scale solar photovoltaic facility development in the Cuyama Valley Rural Region. The programmatic EIR analyzed conversion of up to 600 acres of agricultural land to utility-scale solar. The proposed project would allow temporary suspension of potential

agricultural uses on 20 acres. The impacts of suspending the potential for agricultural uses on up to 600 acres in the Cuyama Valley for the purpose of reduction of GHG emissions and promotion of alternative energy production were fully analyzed in 11EIR-00000-00005. The SEPV Cuyama Solar project is predominantly comprised of non-prime soils and is not considered farmland of State or local importance. The site is not encumbered by an agricultural preserve contract, is currently vacant, and not actively utilized for agricultural production. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional land use impacts than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

4. BIOLOGICAL

Impacts Anticipated in Programmatic EIR: Section 3.4 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in six less than significant impacts with mitigation (Class II) to biological resources as they relate to: unique, rare, or threatened plant species; unique, rare, threatened, or endangered wildlife species and/or habitat that support these species; migratory species; native specimen trees; spread of non-native vegetation; and indirect impacts to biological resources related to water quality impacts. Cumulative impacts to biological resources were identified as less than cumulatively considerable with mitigation (Class II). 11EIR-00000-00005 identified three mitigation measures (Development Standards BIO-1 through BIO-3) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard BIO-1 requires site-specific biological studies for avoidance or otherwise mitigation of impacts to sensitive plant species. Development Standard BIO-2 requires the preparation and implementation of an Integrated Weed Management Plan to prevent the spread of non-native vegetation. Development Standard Bio-3 requires adherence to the latest Avian Power Line Interaction Committee Guidelines, which does not apply to the proposed project. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to biological resources would occur as a result of the proposed utility-scale solar and battery energy storage project. The project applicant completed a biological assessment[1] of the 20-acre parcel, which supports that no new environmental impacts are caused by the proposed project and no new mitigation measures are necessary. As identified in the site biological survey, the project site is comprised mostly of

[1] Althouse and Meade, Inc. Biological and Environmental Services, "Biological Report for SEPV Cuyama Solar Project" dated November 2017 and revised May 2018

annual grassland habitat, dominated by non-native grasses and does not contain any native vegetation or unique or rare plant communities. No native tree specimens occur on the Project site. No indications of special status mammals utilizing habitats were identified at the site. Five biological resource avoidance recommendations were incorporated into the project Conditions of Approval to avoid biological resources. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to biological resources than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

5. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts Anticipated in Programmatic EIR: Section 3.3 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in one less than significant air quality and greenhouse gas emissions impact (Class III) related to construction and operations of future solar facilities and one beneficial impact (Class IV) for the reduction of greenhouse gases. Cumulative impacts to air quality and greenhouse gas emissions were identified as less than cumulatively considerable (Class III).

Changes in Project Impacts: No changes in project impacts to air quality and greenhouse gas emissions would occur as a result of the proposed utility-scale solar and battery energy storage project. The project applicant completed an air quality/greenhouse gas report[2] for development of the 20-acre parcel, which supports that no new environmental impacts are caused by the proposed project and no new mitigation measures are necessary. Cumulative impacts would remain less than cumulatively considerable (Class III).

6. GEOLOGY AND SOILS

Impacts Anticipated in Programmatic EIR: Section 3.6 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in three less than significant impacts with mitigation (Class II) to geology and soils as they relate to: exposure to landslides, earthquakes, liquefaction, soil creep, mudslides, or ground failure; extensive grading; and erosion of soils. Cumulative impacts to geology and soils were identified as less than cumulatively considerable with mitigation (Class II). 11EIR-00000-00005 identified three mitigation measures (Development Standards GEO-1 through GEO-3) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard GEO-1 requires avoidance of sites with significant geologic

[2] OB-1 Air Analyses, "Air Quality/Greenhouse Gas Report, SEPV Cuyama Solar Project" dated March 2018

hazards. Development Standard GEO-2 requires avoidance of sites that are located on slopes exceeding 20% grade and minimizing cut slopes over 15 feet. Development Standard GEO-3 requires minimizing grading and alteration of lands in order to reduce erosion. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to geology and soils would occur as a result of the proposed utility-scale solar and battery energy storage project. The project site is located on a relatively flat, gently sloping property that would require minimal grading. Grading quantities for the proposed project are estimated at 3,388 cubic yards of cut and fill, balanced on-site. Proposed grading is for completion of on-site dirt access roads and the slope and elevation of the proposed solar facility site would not substantially change compared to existing conditions. There are no significant landforms present on the site. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to geology and soils than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

7. HAZARDS

Impacts Anticipated in Programmatic EIR: Section 3.7 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in two less than significant hazard impacts with mitigation (Class II) as they relate to the potential increase in fire hazards and potential impacts from prior use, storage, or discharge of hazardous materials on lands subject to future solar facilities. The EIR also identified two less than significant hazard impacts (Class III) as they relate to potential impacts from former oil or gas pipelines or well facilities and potential impacts from prior use, storage, or discharge of hazardous materials on lands subject to future solar facilities. Cumulative hazard impacts were identified as less than cumulatively considerable with mitigation (Class II). 11EIR-00000-00005 identified three mitigation measures (Development Standards HAZ-1 and HAZ-2) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard HAZ-1 requires the preparation and implementation of a fire prevention plan to reduce potential for fire. Development Standard HAZ-2 requires avoidance or remediation of sites impacted with environmental contaminants. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project hazard impacts would occur as a result of the proposed utility-scale solar and battery energy storage project. The project site is a vacant parcel historically used for agricultural grazing and has no known history of the storage or processing

of hazardous materials. A review of the State Water Board geospatial database website known as GeoTracker shows that no contamination from hazardous materials has been recorded at the site. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional hazards impacts than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

8. HYDROLOGY AND WATER QUALITY

Impacts Anticipated in Programmatic EIR: Section 3.8 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in three less than significant hazard impacts with mitigation (Class II) as they relate to site construction and operation related impacts to water quality in drainage facilities and surface waters as well as increased flooding from future solar facilities. Cumulative impacts to hydrology and water quality were identified as less than cumulatively considerable with mitigation (Class II). In order to mitigate these impacts, 11EIR-00000-00005 identified one mitigation measure (Development Standards GEO-2) that was incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard GEO-3 requires avoidance of sites that are located on slopes exceeding 20% grade and minimizing cut slopes over 15 feet. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to hydrology and water quality would occur as a result of the proposed utility-scale solar and battery energy storage project. The project site is located on a relatively flat, gently sloping property that would require minimal grading. Grading quantities for the proposed project are estimated at 3,388 cubic yards of cut and fill, balanced on-site. Proposed grading is for completion of on-site dirt access roads and the slope and elevation of the proposed solar facility site would not substantially change compared to existing conditions. There are no significant landforms present on the site. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to hydrology and water quality than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

9. NOISE

Impacts Anticipated in Programmatic EIR: Section 3.10 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in two less than significant noise impacts with mitigation (Class II) as they relate to long-term operational noise impacts and short-term increase in construction noise. Cumulative noise impacts were identified as less than cumulatively considerable with mitigation (Class II). In order to mitigate these impacts, 11EIR-00000-00005 identified one mitigation measure (Development Standard NOI-1) that was incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard NOI-1 requires facilities to be designed and constructed to avoid significant long-term operational noise impacts to residences or other sensitive receptors. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project noise impacts would occur as a result of the proposed utility-scale solar and battery energy storage project. As identified in the EIR, both short-term construction and long-term operational noise impacts of future solar facilities would be mitigated to less than significant levels with the implementation of Development Standard NOI-1, which requires facilities to be designed and constructed to avoid significant long-term operational noise impacts to residences or other sensitive receptors. The nearest potential sensitive receptor to the SEPV Cuyama site is located approximately 500 feet away short-term noise impacts related to construction of the facility would be considered less than significant. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional noise impacts than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

10. TRAFFIC

Impacts Anticipated in Programmatic EIR: Section 3.11 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in two less than significant traffic impacts with mitigation (Class II) as they relate to traffic congestion and traffic hazards to motor vehicles, bicyclists, or pedestrians. Cumulative traffic impacts were identified as less than cumulatively considerable with mitigation (Class II). In order to mitigate these impacts, 11EIR-00000-00005 identified one mitigation measure (Development Standard TT-1) that was incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard TT-1 requires implementation of a project-specific traffic control plan. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project traffic impacts would occur as a result of the proposed utility-scale solar and battery energy storage project. Both short-term and long-term traffic impacts related to the future development of solar facilities in the Cuyama Valley were analyzed in 11EIR-00000-00005. Project impacts would be less than significant with the implementation of mitigation measure Development Standard TT-1. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to traffic than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

11. ENERGY AND PUBLIC SERVICES

Impacts Anticipated in Programmatic EIR: Section 3.12 of the EIR determined that the development of future utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region would result in two less than significant hazard impacts with mitigation (Class II) as they relate to solid waste disposal services, landfill capacity, and stormwater drainage facilities. The EIR also identified two less than significant impacts (Class III) as they relate to police, fire, healthcare services, and sewer system facilities. Cumulative impacts to energy and public services were identified as less than cumulatively considerable with mitigation (Class II). In order to mitigate these impacts, 11EIR-00000-00005 identified two mitigation measures (Development Standards GEO-3 and EPF-1) that were incorporated into the LUDC to reduce potential impacts associated with future development of utility-scale solar photovoltaic facilities in the Cuyama Valley Rural Region. Development Standard GEO-3 minimizes grading and alteration of natural drainages, watersheds, and hillsides to control erosion and minimize flooding and environmental degradation. Development Standard EPF-1 requires minimizing solid waste and implementing recycling efforts. Please refer to the EIR for a full discussion of these impacts.

Changes in Project Impacts: No changes in project impacts to energy and public services would occur as a result of the proposed utility-scale solar and battery energy storage project. Project impacts would be less than significant with the implementation of mitigation measures Development Standards GEO-3 and EPF-1. The proposed project conditions of approval would ensure adherence to the development standards related to solar array development and would mitigate impacts associated with the project as intended by 11EIR-00000-00005. The proposed project would not cause greater impacts or additional impacts to energy and public services than those that were identified in the EIR. No new impacts associated with the proposed development would occur and no new mitigation measures would be required. Cumulative impacts would remain less than cumulatively considerable with mitigation (Class II).

PLANNING AND DEVELOPMENT DEPARTMENT FINDINGS:

It is the finding of the Planning and Development Department that the previous environmental document may be used to fulfill the environmental review requirements of the current project. Because the current project meets the conditions for the application of State CEQA Guidelines Section 15168(c), no new EIR or Negative Declaration shall be prepared for the project. The Board of Supervisors adopted Findings of Overriding Consideration for significant impacts associated with build-out under the programmatic EIR which could not be reduced to less than significant levels through incorporation of mitigation measures identified in 11EIR-00000-00005. Identified mitigation measures would reduce all remaining Class I impacts associated with the project to less than significant levels (Class II). As noted above, the project would be constructed within the Cuyama Valley Rural Region as analyzed in the programmatic EIR and the project would not cause greater impacts or additional impacts than what were identified in 11EIR-00000-00005 and no new mitigation measures are necessary. Discretionary processing of the SEPV Cuyama Utility Scale Photovoltaic and Battery Storage Facility project, Case Nos. 17GPA-00000-00006 and 17CUP-00000-00044 may now proceed with the understanding that any substantial changes in the proposal may be subject to further environmental review.

Attachments:

1. Biological Report for SEPV Cuyama Solar Project, revised May 2018
2. Air Quality/Greenhouse Gas Report, SEPV Cuyama Solar Project, dated March 2018

Biological Report

for

SEPV Cuyama Solar Project

17CUP-00004
Santa Barbara County, California

Prepared for

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November 2017
Revised May 2018

1100.03

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Cover Page: View south of west side of Study Area, facing south. April 11, 2018.

SYNOPSIS

- This biological report examines a 20.4-acre Study Area located in unincorporated Santa Barbara County, California. The Study Area includes Assessor's Parcel Number (APN 149-150-033).
- The proposed project is a solar energy generation facility on approximately 20 acres of land in the Cuyama Valley.
- Habitat types identified and mapped in the Study Area consist of California annual grassland and alkali goldenbush scrub.
- Seasonally timed botanical surveys conducted in 2018 identified 44 species, subspecies, and varieties of vascular plants in the Study Area. Four special status plant species have a low potential to occur within the Study Area. Special status species were not detected during the spring botanical survey and are not expected to occur.
- Wildlife species detected in the Study Area include 2 reptiles, 14 birds, and 6 mammals. Three animal species have a high potential to occur in the Study Area (short-eared owl, loggerhead shrike, and San Joaquin coachwhip), one species has a moderate potential to occur (California glossy snake), and five species have a low potential to occur in the Study Area (giant kangaroo rat, short-nosed kangaroo rat, California condor, American badger and San Joaquin kit fox). Special status animals were not detected in the Study Area.
- Mitigation recommendations are provided to reduce potential impacts to nesting birds and special status species.

1 INTRODUCTION

1.1 Purpose

This report provides information regarding biological resources on the proposed SEPV Cuyama Solar photovoltaic electricity generating facility in northern Santa Barbara County, California. The report evaluates the potential for sensitive biological resources to occur on the approximately 20.4-acre site (Study Area). A habitat inventory and the results of database and literature searches of special status species reports within a nine 7.5-minute quadrangle search area of the Study Area are included. Special status species that could occur in the Study Area or could be affected by the proposed project are discussed and lists of plant and animal species that were identified in the Study Area are provided. Potential impacts are discussed, and recommended mitigation measures are provided.

1.2 Location

The Study Area is located in the Cuyama Valley of northern Santa Barbara County (Figure 1). Specifically, the Study Area is situated 0.5 miles east of Kirschenmann road, approximately 1.9 miles south of the intersection of Kirschenmann Road and Highway 166, and 1.0 mile southwest of the Cuyama River. The Study Area is approximately 20.4 acres in size. The site is within the Cuyama USGS 7.5-minute quadrangle on Assessor's Parcel Number (APN) 149-150-033, at an elevation of approximately 2,420 feet above mean sea level. Coordinates for the center of the site are 34.904516, -119.584449.

1.3 Project Description

SEPV Cuyama, LLC proposes to develop a solar energy generation facility on approximately 20 acres of land in an unincorporated area of Santa Barbara County. The project, SEPV Cuyama, will utilize solar photovoltaic ("PV") modules mounted on single-axis sun tracking support structures to generate 3 megawatts (MW) of renewable electrical energy. Electricity generated by the project will be interconnected to the PG&E electrical distribution system at an existing PG&E 21 kV line that runs north-south along the western boundary line of the property. A Site Plan is included in Section 8 for reference.

2 REGULATORY FRAMEWORK

2.1.1 Federal Regulations

Endangered Species Act. The federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a 'take' under the Endangered Species Act. Take of a federally listed threatened or endangered species is prohibited without a special permit. The Endangered Species Act allows for take of a threatened or endangered species incidental to development activities once a habitat conservation plan has been prepared to the satisfaction of the USFWS and an incidental take permit has been issued. The Endangered Species Act also allows for the take of threatened or endangered species after consultation has deemed that development activities will not jeopardize the continued existence of the species. The federal Endangered Species Act also provides for a Section 7 Consultation when a federal permit is required, such as a Clean Water Act Section 404 permit.

"Critical Habitat" is a term within the federal Endangered Species Act designed to guide actions by federal agencies (as opposed to state, local, or other agency actions) and defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species."

Migratory Bird Treaty Act. All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act, as amended under the Migratory Bird Treaty Reform Act of 2004. The Migratory Bird Treaty Act is generally protective of migratory birds.

2.1.2 State Regulations

California Environmental Quality Act (CEQA). CEQA requires that biological resources be considered when assessing the environmental impacts that are the result of proposed actions. The lead agencies determine the scope of what is considered an impact and what constitutes an "adverse effect" on a biological resource.

California Fish and Game Code. The California Fish and Game Code regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act, Streambed Alteration Agreement regulations, and California Native Plant Protection Act. Fish and Game Code states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized.

California Endangered Species Act. The California Endangered Species Act (CESA), similar to the federal Endangered Species Act, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation "rare species" applies only to

California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the California Endangered Species Act. State threatened and endangered animal species are legally protected against "take." The CESA authorizes California Department of Fish and wildlife (CDFW) to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. Section 2080 of the CESA prohibits the take of species listed as threatened or endangered pursuant to the Act. Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: 1) the taking is incidental to an otherwise lawful activity; 2) the taking will be minimized and fully mitigated; 3) the applicant ensures adequate funding for minimization and mitigation; and 4) the authorization will not jeopardize the continued existence of the listed species.

California Native Plant Protection Act. Section 1900-1913 of the California Fish and Game Code contains the regulations of the Native Plant Protection Act of 1977. The intent of this act is to help conserve and protect rare and endangered plants in the state.

Natural Community Conservation Planning (NCCP) Act of 1991. The NCCP Act is designed to conserve natural communities at the ecosystem scale while accommodating compatible land use. CDFW is the primary state agency that implements the NCCP. The NCCP plan provides for the comprehensive management and conservation of multiple wildlife species. It identifies and provides for regional protection of natural wildlife diversity while allowing for compatible and appropriate development and growth.

3 METHODS

3.1 Literature Review

Relevant literature, including relevant plans, policies, and biological information, was reviewed to determine what biological resources may occur near or in the project area. Research included:

- Review of agency plans pertaining to special-status species;
- Queries of special-status species occurrence records in agency databases;
- Review of literature and consultant reports on biological resources in the region.

We conducted a search of the California Natural Diversity Database (CNDDB April 2018 data) and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California for special status species known to occur in the nine USGS 7.5-minute quadrangles surrounding the Study Area: Wells Ranch, Elkhorn Hills, Maricopa, New Cuyama, Cuyama, Ballinger Canyon, Salisbury Potrero, Fox Mountain, Cuyama Peak.

Additional special status species research consisted of reviewing previous biological reports for the area and searching online museum and herbarium specimen records for locality data within Santa Barbara County. We reviewed online databases of specimen records maintained by the Museum of Vertebrate Zoology at the University of California, Berkeley, the California Academy of Sciences, and the Consortium of California Herbaria. Additional special status species with potential to occur on or near the Study Area were added to our special status species review list (refer to Table 3 and Table 4).

Special status species lists produced by database and literature searches were cross-referenced with the described habitat types in the Study Area to identify all potential special status species that could occur on or near the Study Area. Each special status species that could occur on or near the Study Area is individually discussed (refer to Sections 4.5.4 and 4.6.3).

After review of the literature, the following criteria were used to determine the potential for special-status species to occur within the project area:

- ***Present:*** The species was observed in the project area during field surveys.
- ***High Potential:*** High habitat quality combined with CNDDB occurrences or other records indicate the species is likely to occur on the project site. Individuals may not have been observed in the project area during field surveys; however, the species likely occurs in the project vicinity and could move into the project site in the future.
- ***Moderate Potential:*** CNDDB occurrences or surveys have recorded the species within 10 miles of the project area and suitable habitat is present. The species could be present, at least seasonally or as a transient.
- ***Low Potential:*** Marginally suitable habitat may occur in the project area, but individuals were not observed during surveys and are not expected to be present.
- ***No Potential:*** Species, sign, or habitat were not observed on the site during surveys and suitable habitat is not present.

3.2 Mapping

Mapping efforts utilized hand notation on recent land survey and aerial photos. Maps were created using aerial photo interpretation, field notation, and GPS data imported to ArcGIS 10, a Geographic Information System (GIS) software program. Data were overlaid on a 2016 National Agriculture Imagery Program (NAIP) aerial of San Luis Obispo/Santa Barbara County (USDA 2016). Biological resource constraints were mapped in the field on site. Hand notation on field maps was incorporated into point and polygon layers and overlaid on high resolution aerial photographs.

3.3 Biological Surveys

The Study Area was surveyed for biological resources on October 12, 2017, March 15, 2018, and April 10 – 12, 2018 (Table 1). On October 12, 2017, a preliminary fall survey was conducted by Althouse and Meade, Inc. Principal Biologist Jason Dart, Biologist Lisa Gadsby, and Wetland Scientist Jacqueline Tilligkeit. Spring surveys were conducted in March and April 2018 by Jason Dart and Biologists Dustin Groh and Kristen Andersen.

TABLE 1. BIOLOGICAL SURVEY DATA

Survey Date	Biologist(s)	Weather Observations	Activities
October 12, 2017	Jason Dart Lisa Gadsby Jacqueline Tilligkeit	60-80 °F, clear, zero to 5 mph winds.	Habitat assessment; preliminary plant and wildlife surveys.
March 15, 2018	Jason Dart Kristen Anderson	60-65 °F, sunny, cool.	Botanical survey; rare plant reference site visit.
April 10, 2018	Dustin Groh Kristen Andersen	70 °F, clear, winds up to 20 mph.	Small mammal trapping; botanical survey; general wildlife survey
April 11, 2018	Dustin Groh Kristen Andersen	50-65 °F, clear, winds up to 35 mph.	Small mammal trapping; botanical survey; general wildlife survey
April 12, 2018	Dustin Groh Kristen Andersen	42-50 °F, partly cloudy, winds up to 30 mph.	Small mammal trapping; botanical survey; general wildlife survey

3.3.1 Botanical

Each habitat type occurring in the Study Area was inspected, described, and catalogued (Section 4.2). All plant species observed in the Study Area were identified and recorded by a qualified botanist (Sections 4.7). This survey was floristic in nature and followed a complete survey protocol which consists of a 100 percent visual examination of the Study Area using pedestrian transects. Transects were oriented north-south, with the surveyor examining a 20-foot-wide area. A species list was compiled while traversing the Study Area, and fluctuations in plant communities or habitat types were noted. Transects were utilized to map boundaries of different vegetation types, describe general conditions and dominant species, compile species lists, and

evaluate potential habitat for special status species. Identification of botanical resources included field observations and laboratory analysis of collected material (Table 5). Botanical surveys were conducted according to agency guidelines (USFWS 2000, CDFG [CDFW] 2009, and CNPS 2001). Botanical surveys were appropriately timed to identify all special status plant species known from the region (refer to Section 4.5, and Table 3) that have potential to occur in the Study Area. Botanical nomenclature used in this document follows the Jepson Manual, Second Edition (Baldwin et al. 2012). We also provide Jepson Manual First Edition names in brackets where nomenclature has recently changed.

3.3.2 Wildlife

Wildlife documentation included observations of animal presence and wildlife sign such as nests, tracks, and scat. Observations of wildlife were recorded during field surveys in all areas of the Study Area (Table 6). Birds were identified by sight, using 10-power binoculars, or by vocalizations. Reptiles and amphibians were identified by sight; traps were not used. Mammals recorded in the Study Area were identified by sight, tracks, scat, and small mammal traps.

A two-night small mammal trapping survey was conducted from April 10 to April 12 (Scientific Collecting Permit SC-008180). The trap effort targeted common small mammal species expected to be on site, with the goal of compiling a species list for the Study Area. Traps were set on site on the evenings of April 10 and April 11 and checked on the mornings of April 11 and April 12. Forty-seven large Sherman traps were placed in a grid covering the entire site. Each trap was spaced approximately 100-200 feet apart (Figure 5). Traps were baited with a mixture of oats, seeds and peanut butter. A small ball of fiber fill was placed in each trap to provide insulation. All small mammals captured were identified to species and immediately released. Small mammals were not marked for recapture. See Section 4.8 for a list of species trapped and Appendix C for trapping data sheets.

4 RESULTS

4.1 Existing Conditions

The Study Area is an undeveloped parcel of land surrounded by row crops to the north and east, a recently constructed solar farm to the west, and a private rural residential property to the south. The site is relatively disturbed, with scattered trash and debris such as old tires, wood pallets, barbed wire, and other items observed throughout the site. Two abandoned RVs, a deteriorated car, three trailers, and miscellaneous vehicle parts were also observed. Topography is relatively flat, with elevations ranging from approximately 2,408 to 2,428 feet (734 to 740 meters) above mean sea level. The site is open with overall low-lying vegetation and shrubs. The eastern portion of the site has a higher percentage of shrub cover and is dominated by goldenbush (*Isocoma acradenia*), bursage (*Ambrosia acanthocarpa*), and Russian thistle (*Salsola tragus*). Rodent activity was evident throughout the Study Area, indicated by the presence of small burrows, tracks, and tail drags. Two mammal dens were located in April 2018 that showed sign of use by coyote. Three trees are present in the Study Area: two planted pine trees and one small blue gum eucalyptus. Discussion of the habitats and plant and wildlife resources observed in the Study Area are further described in the following subsections.

4.2 Habitat Types

Table 2 lists two habitat types described and mapped within the Study Area (see Figure 4 in Section 8.0). Most of the Study Area, approximately 17.3 acres, is mapped as California annual grassland habitat. The remaining area consists of approximately 3.1 acres of shrub dominated habitat described as alkali goldenbush scrub.

TABLE 2. HABITAT TYPES.

Habitat Type	Location	Approximate Acreage
California Annual Grassland	17.3	Throughout Study Area
Alkali Goldenbush Scrub	3.1	3.0-acre patch at east side, 0.1-acre patch in western third

4.2.1 California annual grassland

Most of the Study Area is comprised of California annual grassland habitat dominated by non-native grasses such as bromes (*Bromus diandrus, B. hordeaceus, B. madritensis* ssp. *rubens*) and wild oats (*Avena fatua*). The California annual grassland habitat type comprises an estimated 17.3 acres (85%) of the site. Annual forbs were generally uncommon except for a dense late season cover of fiddleneck (*Amsinckia* ssp.) and vinegar weed (*Trichostema lanceolatum*). The grassland habitat shows some signs of past grazing, likely from horses, and mowing, but it does not appear to have been tilled in the last decade. Some ground and vegetation disturbance from mowing, vehicles, and deposition of various materials around the site has occurred. The lack of farming, very sandy soils, and scattered shrubs provide good habitat for kangaroo rats, rabbits, and other small mammals. Small mammal burrows were observed throughout the grassland habitat, with an

increase in burrow precincts in the eastern portion of the Study Area, where the habitat transitions to alkali goldenbush scrub. As noted above, the grassland habitat is somewhat disturbed from deposition of vehicles, trash, lumber and other materials. Two pine trees and one small blue gum eucalyptus were planted on the site. Evidence of roosting raptors (pellets, feathers, and prey remains) was observed underneath both pine trees. One deteriorated stick nest was also present in each of the pine trees. Both stick nests appeared to be old raven (*Corvus corax*) nests, based on the size and presence of twine, wire, and other debris woven in the nests. Open grassland can also provide nesting habitat for ground nesting birds, such as short-eared owl and western meadowlark.

4.2.2 Alkali goldenbush scrub

Alkali goldenbush scrub is a general habitat type designation for the region of the Study Area that supported alkali goldenbush as the dominant species. Two patches of goldenbush scrub were mapped in the Study Area, an eastern patch covering approximately 3.0 acres and a smaller western patch covering approximately 0.1 acres. The eastern patch had goldenbush shrubs covering approximately 30 to 50 percent of the area. Also present was the native annual bursage that grows to a subshrub height of two to three feet and represented about 25 percent cover, and the invasive annual Russian thistle which grows to a height up to three feet and dies back in the summer becoming tumbleweeds. Together the shrubs formed a patchy mosaic of shrub canopy interspersed with small bare sandy areas, annual grasses, and fiddleneck. This portion of the Study Area provides appropriate habitat and soil substrate for small mammal burrows. It is in this eastern portion of the Study Area where burrows are more abundant. Shrubs also provide potential nesting habitat for several observed bird species. The small western patch of goldenbush scrub was a single-species stand of alkali goldenbush with a shrub density of over 50 percent cover. It appears from the review of past aerial photographs that the shrub cover has developed rather recently, probably within the last 5 to 7 years, and prior to that time, the site was mostly disturbed from mowing and, over 20 years ago, by dry farming. The goldenbush scrub habitat in the eastern portion of the site has developed due to lack of mowing and tilling disturbance, but it has been affected by a low level of disturbance from deposition of trash and equipment on the site.

4.3 Potential Wetlands and Jurisdictional Waters

A Delineation of Potentially Jurisdictional Wetlands and Waters report has been prepared for the project (Althouse and Meade, Inc. 2017). The wetland study yielded negative results for jurisdictional wetlands and waters within the Study Area.

4.4 Habitat Connectivity and Wildlife Movement

Wildlife corridors and habitat connectivity are important for the movement of wildlife between different populations and habitats. The Cuyama Valley may function as a wildlife corridor between the conserved lands of the Carrizo Plain National Monument and Los Padres National Forest (Anderson, et al. 2009). The Cuyama River, which is located approximately 1.0 mile northeast of the Study Area, also acts as a wildlife corridor providing connectivity between the interior and coastal area. The Study Area is surrounded by high-intensity farming and is not specifically part of a known wildlife movement corridor.

4.5 Special Status Plant Species

The CNDDB and the CNPS On-line Inventory of Rare and Endangered Plants of California contain records for 38 special status plant species within the designated nine USGS 7.5-minute quadrangle search area (refer to Appendix A). Appropriate habitat and soil conditions are present in the Study Area for four special status plants (Table 3). Figure 2 in Section 8 depicts the current GIS data for special status plants mapped in the vicinity of the Study Area by the CNDDB.

4.5.1 Introduction to California Rare Plant Ranks

Plant species are considered rare when their distribution is confined to localized areas, when there is a threat to their habitat, when they are declining in abundance, or are threatened in a portion of their range. The California Rare Plant Rank (CRPR) categories range from species with a low threat (CRPR 4) to species that are presumed extinct (CRPR 1A). The plants of CRPR 1B are rare throughout their range. All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable.

4.5.2 Introduction to CNDDB Definitions

"Special Plants" is a broad term used to refer to all the plant taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFW April 2018). Special plants include vascular plants, high priority bryophytes (mosses, liverworts, and hornworts), and lichens.

4.5.3 Potential Special Status Plant List

Table 3 lists four special status plant species that could potentially occur in the Study Area. Federal and California State status, global and State rank, and CNPS rank status for each species are given. Also included are typical blooming periods, habitat preference, potential to occur on site, whether the species was detected in the Study Area, and effect of proposed activity.

TABLE 3. POTENTIAL SPECIAL STATUS PLANT LIST.

	Common Name *Scientific Name*	Fed/State Rank Global/State Rank CRPR	Blooming Period	Habitat Preference	Potential to Occur	Detected Within Study Area?	Effect of Proposed Activity
1.	**Salinas Milk-vetch** *Astragalus macrodon*	None/None G4/S4 4.3	April – July	Eroded pale shales or sandstone, or serpentine alluvium; 300-950 m.	Low. Soil type is unlikely to support Salinas Milk-vetch.	No	No Effect
2.	**California Jewelflower** *Caulanthus californicus*	FE/CE G1/S1 1B.1	February – April	Sandy soils in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland; 70-1000 m.	Low. Appropriate grassland habitat characteristics are not expected to be present in the Study Area.	No	No Effect
3.	**Kern Mallow** *Eremalche parryi* ssp. *kernensis*	FE/None G3G4T2/S2 1B.1	March - May	On dry, open sandy to clayey soils in chenopod scrub and valley and foothill grassland; 100-1000 m.	Low. Sandy soils in grassland habitat are present, however there are no historic records in the Cuyama Valley south of Hwy 166.	No	No Effect
4.	**San Joaquin Woollythreads** *Monolopia congdonii*	FE/None G2/S2 1B.2	February – May	Sandy grassland, alkali sinks; 90-700 m.	Low. Sandy soil is present in grassland habitat; however, the site is likely too overgrown for this species, and there are no recent records from the Cuyama area.	No	No Effect

California Geographic Subregion Abbreviations:

CCo: Central Coast	SnFrB: San Francisco Bay	SLO: San Luis Obispo	CW: Central West
SCo: South Coast	TR: Transverse Ranges	SN: Sierra Nevada	SW: South West
SCoR: South Coast Ranges	WTR: Western Transverse Ranges	SnJt: San Jacinto Mtns	DMoj: Mojave Desert
SCoRO: Outer South Coast Ranges	SnJV: San Joaquin Valley	SnBr: San Bernardino	PR: Peninsular Range
SCoRI: Inner South Coast Ranges	ScV: Sacramento Valley	Teh: Tehachapi Mtn Area	

State/Rank Abbreviations:

FE: Federally Endangered	PT: Proposed Federally Threatened	CT: California Threatened
FT: Federally Threatened	CE: California Endangered	Cand. CE: Candidate for California Endangered
PE: Proposed Federally Endangered	CR: California Rare	Cand. CT: Candidate for California Threatened

California Rare Plant Ranks (CRPR):

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California, but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 4: Plants of limited distribution - a watch list

CRPR Threat Ranks:

0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

4.5.4 Discussion

Based on an analysis of known ecological requirements for the special status plant species reported from the region (see Appendix C), and the habitat conditions that were observed in the Study Area, it was determined that four special status plant species have a low potential to occur in the Study Area: Salinas milk-vetch, California jewelflower, Kern mallow, and San Joaquin woollythreads. Three of these species are federal and/or state listed as endangered. We discuss the four species below and describe preferred habitat, range restrictions, known occurrences in the region, habitat suitability in the Study Area, and results of spring 2018 botanical surveys.

A. Salinas Milk-vetch (*Astragalus macrodon*) is a CRPR 4.3 species San Benito County south to San Luis Obispo County and east to Kern County and endemic to California. It is known to occur in cismontane woodland, chaparral and grassland habitats often on sandstone, shale, or serpentinite substrates between 250 to 950 meters elevation. It is a perennial herb that typically blooms between April and July. There are no known records of Salinas milkvetch in the Cuyama Valley, although it is reported from the north slope of the Sierra Madre Mountains (Smith 1970), and there are specimens documenting localities in the Caliente Mountains and Carrizo Plain to the north (Consortium of California Herbaria 2017). The soil type in the Study Area may not be suitable for Salinas milk-vetch. However, a few individuals of a small perennial milk-vetch were observed in the Study Area that were in vegetative condition in October 2017, therefore the potential for Salinas milk-vetch to occur in the Study Area is low. This plant was identified during our spring 2018 botanical survey as blackhair locoweed (*Astragalus lentiginosus* var. *nigricalycis*), a common species. Another common perennial milkvetch species, *Astragalus oxyphysus*, was also identified onsite. Salinas milk-vetch was not observed during our 2018 botanical survey.

B. California Jewelflower (*Caulanthus californicus*) is federally and state listed as endangered and has a CRPR of 1B.1. The species is known from the southern San Joaquin Valley and Western Transverse Ranges. It is an annual herb that occurs in sandy soils of grassland, chenopod scrub, and pinyon and juniper woodland habitats, at elevations from 70 to 1000 meters. It typically blooms from February to May. There are several CNDDB occurrences of the species within five miles of the site. The two nearest occurrences, both located approximately 2.4 miles from the site (CNDDB 32 and 40), are historical and the CNDDB notes that the populations are now extirpated due to agriculture. Current records (2015) indicate existing populations of the species are located within 3.5 to 5.0 miles of the site (CNDDB 22 and 56). These locations are in Santa Barbara Canyon southeast of the Cuyama Valley floor in a natural habitat area along the Cuyama River floodplain. Habitat in the Study Area evaluated in October 2017 was overgrown and not likely to support this endangered species, therefore potential to occur is low. California jewelflower was not observed at local reference site locations during appropriately timed surveys in March and April 2018, though Coulter's jewelflower was in bloom within one mile of reference site occurrences (CNDDB 22 and 56), along the west side of Santa Barbara Canyon Road. California jewelflower was not observed during our 2018 botanical survey.

C. Kern Mallow (*Eremalche parryi* ssp. *kernensis*) is federally listed as endangered and has a CRPR of 1B.1. The species is known from the southern San Joaquin Valley and southern end of the inner South Coast Ranges. It is an annual herb that occurs on sandy to clay soils in chenopod scrub, pinyon and juniper woodlands, and valley and foothill grasslands at an

elevation range of 70 to 1290 meters. It typically blooms from March to May. The closest known record of Kern mallow is approximately 4.5 miles northeast of the Study Area (CNDDB 68). This record is 60 years old (1957) and no current information is available regarding its status. As with California jewelflower, habitat in the Study Area evaluated in October 2017 was generally too overgrown for this endangered species that usually prefers gravel barrens in floodplains and desert scrub; therefore, potential to occur is low. Kern mallow was not observed during our April 2018 botanical survey during a time when it was confirmed in bloom at a reference site in the Caliente Range.

D. San Joaquin Woollythreads (*Monolopia congdonii*) is federally listed as endangered and has a CRPR of 1B.2. The species is known from the San Joaquin Valley and Carrizo Plain. It is an annual herb that occurs on sandy soils in chenopod scrub and valley and foothill grassland habitats at an elevation range of 60 to 800 meters. It typically blooms from February to May. The closest known record of San Joaquin woollythreads is approximately 2.0 miles north of the Study Area (CNDDB 93). This is a historical record from 1935 and the CNDDB notes that the population may be extirpated. Records from 2015 indicate an existing population of the species is located approximately 4.5 miles southeast of the site (CNDDB 27) in Santa Barbara Canyon. Although the sandy soil in the Study Area may be appropriate for San Joaquin woollythreads, the overgrown nature of the grassland community is not suitable for this species, therefore, potential to occur is low. San Joaquin woollythreads was not observed during our 2018 botanical surveys, but it was observed at a reference site in March 2018.

4.6 Special Status Animal Species

The CNDDB contains records for 23 special status animals within the designated search area. Two additional species were added to the list based on Althouse and Meade, Inc. biologists' knowledge of wildlife in the area; these species are marked with an asterisk (Appendix B). The search area includes the nine USGS 7.5-minute quadrangles that include and surround the Study Area (see Section 3.0). Appropriate habitat conditions may be present in the Study Area for nine special status animals (Table 4). Figure 3 in Section 8 depicts the current GIS data for special status animals mapped near the Study Area by the CNDDB. There is no USFWS designated Critical Habitat for any animal species within a 5-mile radius of the Study Area.

4.6.1 Introduction to CNDDB Definitions

"Special Animals" is a general term that refers to all the animal taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFW April 2018). The Special Animals list is also referred to by the CDFW as the list of "species at risk" or "special status species." These taxa may be listed or proposed for listing under the California and/or Federal Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Animals listed as California Species of Special Concern (SSC) may or may not be listed under California or Federal Endangered Species Acts. They are considered rare or declining in abundance in California. The Special Concern designation is intended to provide the California Department of Fish and Wildlife, biologists, land planners and managers with lists of species that require special consideration during the planning process to avert continued population declines and potential costly listing under federal and state endangered species laws. For many species of

birds, the primary emphasis is on the breeding population in California. For some species that do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected are those species considered by CDFW as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the California Endangered Species Act (CESA) or the Federal Endangered Species Act (FESA). Fully Protected species may not be taken or possessed at any time and no provision of the California Fish and Game code authorizes the issuance of permits or licenses to take any Fully Protected species.

4.6.2 Potential Special Status Animals List

Table 4 lists nine special status animal species reported from the region with potential to occur in the Study Area. Federal and California State status, global and State rank, and CDFW rank for each species are given. Typical nesting or breeding period, habitat preference, potential habitat on site, whether the species was detected in the Study Area, and effect of proposed activity are also provided. A comprehensive list of special status animal species reviewed is included as Appendix B.

TABLE 4. POTENTIAL SPECIAL STATUS ANIMAL LIST.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
1.	**California Glossy Snake** *Arizona elegans occidentalis*	None/None G5T2/S2 SSC	May - July	Arid scrub, rocky washes, grassland, chaparral. Nocturnal. Feeds on small mammals, birds, and other reptiles.	Moderate. Appropriate habitat and food sources present. Nearest CNDDB record is 2 miles north.	No	Potential Adverse Effect Can be Mitigated
2.	**Short-eared Owl*** *Asio flammeus*	None/None G5/S3 SSC (nesting)	March 15 through August 15	Inhabits grasslands and open areas with low vegetation. Feeds on small mammals. Nests on dry ground in tall grasses. May be winter residents or year-round in southern portion of range.	High. Appropriate nesting and foraging habitat is present. Known nesting site 0.75 mile west of site in 2017.	No	Potential Adverse Effect Can be Mitigated
3.	**San Joaquin Coachwhip** *Coluber flagellum ruddocki*	None/None G5T2T3/S2? SSC	Late spring - Summer	Open, dry, treeless areas, including grasslands and saltbush scrub; takes refuge in burrows and under shaded vegetation	High. Appropriate habitat present and species known to occur within 1 mile (L. Gadsby 2017).	No	Potential Adverse Effect Can be Mitigated

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
4.	**Giant Kangaroo Rat** *Dipodomys ingens*	FE/SE G1G2/S1S2 None	Winter - Spring	Sandy loamy soil on level and gently sloping ground with annual grasses, forbs, and scattered shrubs.	Low. Appropriate habitat is present however no sign of species observed. Nearest CNDDB record is 3 miles northwest and is from 1916 (CNDDB 38).	No	No Effect
5.	**Short-nosed Kangaroo Rat** *Dipodomys nitratoides brevinasus*	None/None G3T1T2/S1S2 SSC	Spring - Summer	Grasslands with scattered shrubs, desert shrub association on powdery soils.	Low. Appropriate habitat present. Nearest CNDDB record is 15 miles north, however species also described in Cuyama Valley (USFWS 1998).	No	No Effect
6.	**California Condor** *Gymnogyps californianus*	FE/SE G1/S1 SSC	March 15 through August 15	Wide-ranging over Coast Ranges from Ventura to Big Sur. High Mtn Condor Lookout located in Pozo.	Low. Potential to occur is very low but may occur on a transient basis. Appropriate nesting habitat is not present in the Study Area	No	No Effect
7.	**Loggerhead Shrike*** *Lanius ludovicianus*	None/None G4/S4 SSC (nesting)	March 15 through August 15	Open areas with low vegetation and scattered shrubs. Nests in dense shrubs near open habitat.	High. Appropriate nesting and foraging habitat is present. Species observed on site.	Yes (non-nesting)	Potential Adverse Effect Can be Mitigated

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
8.	**American Badger** *Taxidea taxus*	None/None G5/S3 SSC	February - May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Low. Species may travel through or forage at site. No sign of badger (dig outs, dens) observed in Study Area. Nearest CNDDB record is 3.2 miles north.	No	Potential Adverse Effect Can be Mitigated
9.	**San Joaquin Kit Fox** *Vulpes macrotis mutica*	FE/ST G4T2/S2 None	December - July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Low. Species could be transient in the area. No sign of species detected in Study Area in 2017 or 2018.	No	Potential Adverse Effect Can be Mitigated

Habitat characteristics are from the Jepson Manual and the CDNNB.
*not listed in the CNDDB or CNPS for the search area, but possibly for the location.

Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened
CE: California Endangered
CT: California Threatened
Cand. CE: Candidate for California Endangered
Cand. CT: Candidate for California Threatened
SSC: CDFW Species of Special Concern
FP: CDFW Fully-Protected

4.6.3 Discussion

Based on an analysis of known ecological requirements for the 25 special-status wildlife species reported or known from the region, and the habitat conditions that were observed in the Study Area, it was determined that three species have a high potential to occur (short-eared owl, loggerhead shrike, and San Joaquin coachwhip), one species has a moderate potential to occur (California glossy snake), and five species have a low potential to occur in the Study Area (giant kangaroo rat, short-nosed kangaroo rat, California condor, American badger and San Joaquin kit fox).

Species with a moderate to high potential to occur are further discussed below; species with a low potential to occur are discussed only if they are federally or state listed. Additionally, six species that have no potential to occur but have current or candidate federal and/or state listing status (tricolored blackbird, Nelson's antelope squirrel, Swainson's hawk, Tipton kangaroo rat, Kern primrose sphinx moth, blunt-nosed leopard lizard) warrant further discussion. We discuss a total of 13 species below and describe habitat, range restrictions, known occurrences, and survey results for the Study Area.

A. Tricolored Blackbird (*Agelaius tricolor*) is a California Species of Special Concern (nesting colonies) and is also a candidate for listing as Endangered under the California Endangered Species Act. Tricolored blackbirds occur predominately in the Central Valley of California and in smaller disjunctive nesting colonies southwest of the Cascade Sierra axis and at higher elevations only in northwestern California (Shuford et al. 2008). Within its restricted range, the tricolored blackbird will migrate during the breeding season, moving north after the first nesting efforts, and in winter moving to lower elevations (Shuford et al. 2008). The breeding season is generally from April to July, but in the Central Valley there has been active breeding reported in October and November. Historically, the tricolored blackbird nested in emergent wetlands, marshes and swamps making their nests in tall, dense cattails, tules, tall herbs, thickets of willows and blackberries. The species also requires foraging space with an abundance of insect prey that can sustain the nesting colony (CNDDB 2017, Shuford et al. 2008, Weintraub et al. 2016). Tricolored blackbird nesting colonies are known to be located in the Cuyama Valley, where they are associated with agricultural ponds. The two closest reported occurrences of tricolored blackbird nesting colonies are both located approximately 1.6 miles from the Study Area (CNDDB 722 and 723). This species was also observed off-site during our April 2018 survey, at a livestock watering source within approximately 2 miles of the Study Area. There is no suitable nesting habitat (e.g., stock ponds or aquatic habitat) within or immediately adjacent to the Study Area; therefore, there is no potential for nesting to occur on the site.

B. Nelson's Antelope Squirrel (*Ammospermophilus nelson*) is a state-listed threatened species with a range that is restricted to the San Joaquin Valley, where it inhabits is grassland and desert scrub habitats with sparse to moderate shrub cover. Populations now exist primarily in marginal habitats of low foothills and mountains of the western edge of the San Joaquin Valley. The species rarely digs their own burrows and instead utilize burrows of other mammals, especially kangaroo rats, and live in small colonies of about six to eight individuals. The closest reported occurrence of Nelson's antelope squirrel is approximately 2.6 miles northwest of the Study Area and is noted to be historical specimens from 1916 (CNDDB 101). Suitable grassland habitat, with interspersed shrubs, is present within the Study Area; however, due to the only nearby record being historical and the fact that no antelope squirrels were observed

during the October 2017 and spring 2018 site visits, the species is considered to have no potential to occur within the Study Area.

C. California Glossy Snake (*Arizona elegans occidentalis*) is a subspecies of the glossy snake and is considered a California Species of Special Concern by CDFW. The subspecies' range extends from Baja California, Mexico, north to the central San Joaquin Valley. The California glossy snake is found in a variety of habitats, including grasslands, shrublands, chaparral, and woodlands where it feeds on lizards and small mammals. The species is nocturnal and primarily spends daylight hours in mammal burrows or under rocks. The nearest reported occurrence of California glossy snake is approximately 2.0 miles north of the Study Area (CNDDB 68). Appropriate habitat and prey base for the California glossy snake are present in the Study Area; however, it was not observed during spring 2018 wildlife surveys. Because there are nearby records and appropriate habitat, there is a moderate potential for the species to occur in the Study Area even though it was not observed during surveys in spring 2018.

D. Short-eared Owl (*Asio flammeus*) is a California Species of Special concern as well as one of the most globally widespread of all owls (Peeters 2007). The short-eared owl can be active by day and night, and usually roosts and nests on the ground, concealed by tall grass or other vegetation. It is a year-round resident in select areas of California, where its breeding range fluctuates with prey availability. In drought years, when prey availability is reduced, the breeding range contracts (Shuford et al. 2008). In winter, the California population of short-eared owls inflates dramatically with the influx of migrants. In the winter it often roosts communally and may sometimes roost in trees. Short-eared owl prey commonly includes small mammals such as vole, shrew, pocket gopher, and pocket mice and occasionally small birds. The CNDDB does not document any nesting occurrences of short-eared owl within the 9-quad search area surrounding the site; however, a nesting occurrence of the species was documented in 2017 at a location approximately 0.75 miles west of the study area (L. Gadsby 2017). Short-eared owls were not observed in the Study Area during the 2017 and 2018 site visits. Raptor pellets observed on the ground could have been from short-eared owls. Due to appropriate nesting and foraging habitat being present, and the known nesting site located just west of the Study Area, there is a high potential for short-eared owl to nest and/or forage in the Study Area.

E. Swainson's Hawk (*Buteo swainsoni*) is a state-listed threatened species that breeds in California and winters in Mexico and South America. It typically nests in solitary trees near pastures or agricultural fields. In the Central Valley, trees most commonly used for nesting include Fremont's cottonwood (*Populus fremonti*), willows (*Salix* sp.), sycamores (*Platanus* sp.), valley oaks (*Quercus lobata*), and walnut (*Juglans* sp.), with introduced species such as eucalyptus, pines, and redwoods being used occasionally (Woodbridge 1998). The nearest reported occurrence of nesting Swainson's hawk is approximately 3.4 miles northeast of the Study Area (CNDDB 1722). There are numerous records of the species being observed in the Cuyama Valley as migrant and winter transients (eBird 2017). The eucalyptus tree on site is small (less than 20 feet tall) and is not suitable for Swainson's hawk nesting. Both pine trees showed signs of dilapidated raven nests in 2017, and one occupied raven nest in April 2018; no raptor nests were present in any trees on the site. Feathers and pellets under the trees indicate roosting in the trees by barn owls. Architecture of onsite tree branching is not likely suitable for large raptors such as Swainson's hawks to build and maintain a nest, therefore we consider the Study Area to have no potential for nesting Swainson's hawks. Swainson's hawks

were not observed nesting or foraging within or near the Study Area in April 2018 and are not expected to occur in the Study Area.

F. Giant Kangaroo Rat (*Dipodomys ingens*) is both state and federally listed as endangered. Historically, the species occurred throughout the western San Joaquin Valley; however, current populations are known only from six geographic regions within the valley: the Panoche Region in western Fresno and Eastern San Benito Counties; Kettleman Hills in Kings County; San Juan Creek Valley in San Luis Obispo County; western Kern County in the area of the Lokern, Elk Hills, and other uplands around McKittrick, Taft, and Maricopa; Carrizo Plain Natural Area in eastern San Luis Obispo County; and the Cuyama Valley in Santa Barbara and San Luis Obispo Counties. These major units are fragmented into more than 100 smaller populations, many of which are isolated by several miles of barriers such as steep terrain with plant communities unsuitable as habitat, or agricultural, industrial, or urban land without habitat for this species (USFWS 1998). Habitat for giant kangaroo rats includes annual grassland and alkalai scrub habitats with few to no shrubs. The species is nocturnal and primarily feeds on the seeds of grasses and shrubs. They will maintain distinctive pits which they use to dry seeds before caching them in their underground burrows. Long-term occupancy of a site by giant kangaroo rats results in a mima-mound topography, with burrow systems located in mounds a few to several centimeters higher than the intervening ground (Williams 1996). The nearest documented occurrence of CNDDB is an historical record from 1916 that is located approximately 3.0 miles northwest of the Study Area. The nearest modern record is from 1989 and is located approximately 6 miles east of the Study Area (CNDDB 147). Marginal quality habitat for giant kangaroo rat is present within the Study Area. Rodent presence was evident within the Study Area, however none of the distinctive characteristics of giant kangaroo rat presence, such as mima-mounds, haystacking of vegetation, or seed caches were present. Giant kangaroo rat has a low potential to occur in the Study Area due to historic populations in the valley and potentially suitable habitat onsite. Small mammal trapping in the Study Area detected only the common Heermann's kangaroo rat (*Dipodomys heermanii*) onsite, and an analysis of eight kangaroo rat skulls collected from owl pellets in the Study Area also did not detect giant kangaroo rat. Giant kangaroo rat is not expected to occur within the Study Area.

G. Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*) is both state and federally listed as endangered. The species is known from the Tulare Basin and occurs in Valley sink scrub, Valley saltbush scrub, and annual grassland. The Tipton kangaroo rat primarily feeds on seeds but will also eat herbaceous vegetation and insects (USFWS 2008). The nearest reported occurrence of the species is approximately 17.4 miles northeast of the Study Area (CNDDB 87). Suitable habitat is present within the Study area and rodent presence was evident, however the species is not known to occur within the Cuyama Valley. Tipton kangaroo does not have potential to occur within the Study Area.

H. Kern Primrose Sphinx Moth (*Euproserpinus euterpe*) is federally listed as threatened. It is a day-flying moth with an adult flight period of late February to early April. Habitat for the species is desert scrub, particularly in and around washes, where its hostplant, the evening primrose (*Camissonia contorta epilobioides*), grows (Black and Vaughan 2005). Adults will nectar on a variety of flowering species and the female will lay eggs on the underside of evening primrose and filaree (*Erodium cicutarium*) leaves. The larvae on evening primrose feed on the flowers and apical growth areas of the plant; those on filaree do not feed and starve

(Black and Vaughan 2005). A pupation chamber is constructed in the soil near the surface or under rocks (Black and Vaughan 2005). The larvae may emerge as adults the following spring or may remain in a pupae stage for a number of years (USFWS 1984). Prior to 2002 the Kern primrose sphinx moth was only known from the northwest portion of the Walker Basin in Kern County. In 2002 the species was discovered within the Carrizo Plain National Monument and in 2005 was documented in Cuyama Valley. Due to the sensitivity of the localities, the CNDDB suppress the exact location of species records within Cuyama Valley, indicating only that there are 10 localities documented within the valley, seven of which are noted to be within washes. Although adult nectar sources are available within the Study Area, foraging habitat quality for Kern primrose sphinx month is low within the Study Area due to the lack of wash habitat, and the lack of the larval food plant *Camissonia contorta epilobioides* indicates there is no breeding habitat on site.

I. Blunt-nosed Leopard Lizard (*Gambelia sila*) is federally and state listed as endangered and is considered a Fully Protected species by the CDFW. The species known from the San Joaquin Valley and nearby valleys and foothills, including the Cuyama Valley. Blunt-nosed leopard lizards (BNLL) may occur in non-native grassland, valley needlegrass grassland, valley sink scrub, and saltbush scrub habitats. Flat areas with open space are preferred, with densely vegetated areas being avoided (Calherps 2017). The species feeds primarily on insects and other lizards and will utilize small rodent burrows for shelter from predators and temperature extremes. Blunt-nosed leopard lizards are generally active from early spring to mid-summer, although hatchlings may be active up to mid-October depending on weather (USFWS 1998). The CNDDB reports several records of BNLL within five miles of the Study Area; however, they date to 1979. Storrer Environmental Services (2018) cited a report that documented BNLL from within four miles of the Study Area in 1983. The nearest modern record from the vicinity is from 2007, located approximately 8.3 miles northwest of the Study Area (CNDDB 414). The blunt-nosed leopard lizard historically occupied the Cuyama Valley but has since been almost entirely extirpated by intensive agriculture. Although no regional assessment has been completed for presence of BNLL, it appears from a records search that it persists on a heavily grazed floodplain south of Highway 166 and west of New Cuyama and could potentially persist in small pockets along the Cuyama River southeast of the Study Area. The Study Area was historically farmed and is currently bounded by agricultural development, either active cropland or recently dry farmed grain, and a solar farm. The grassland and scrub habitats onsite have developed over the last 20 years without routine grazing and are too overgrown to support BNLL, which only occurs on sparsely vegetated landscapes.

J. California Condor (*Gymnogyps californianus*) is listed as endangered under both the California and Federal Endangered Species Acts. It requires vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in rocky walls provide nesting sites. The California condor feeds on carrion and may forage up to 100 miles from its roosting site. Due to the relatively small size of the Study Area, it is unlikely for a condor to land and forage at the site. The nearest potential nesting area is located approximately 16 miles southwest of the site at the Sisquoc-San Rafael Condor Area. No suitable nesting habitat is present at or surrounding the site; therefore, there is no potential for the species to nest in the Study Area.

K. Loggerhead Shrike (*Lanius ludovicianus*) is a California Species of Special Concern and resident in arid regions of San Luis Obispo County and elsewhere in California. It requires

open areas with appropriate perches for hunting, and shrubby trees or bushes for nesting. They feed on arthropods, reptiles and amphibians, small rodents, and birds, and often store prey for later consumption by impaling it on thorns, plant stems, or barbed wire for storage (Shuford and Gardali 2008). The CNDDB does not report any nesting occurrences of loggerhead shrike within the 9-quad search area for the project, however observations on eBird document species presence in the Cuyama Valley during breeding season, including a nesting pair approximately 3.6 miles west of the site. Suitable foraging and nesting habitat is present and one adult loggerhead shrike was observed in the Study Area during the site survey on October 12, 2017. There is a high potential for the species to forage and nest in the Study Area. Nesting bird surveys conducted in March and April 2018 did not detect loggerhead shrike nesting in the Study Area.

L. San Joaquin Coachwhip (*Coluber flagellum ruddocki*) is a California Species of Special Concern known to occur in the Sacramento Valley, San Joaquin Valley and in the South Coast Ranges. The San Joaquin whipsnake occurs in open, dry, treeless areas, including grassland and saltbush scrub and typically takes refuge in rodent burrows, under shaded vegetation, and under surface objects. The nearest CNDDB record of San Joaquin coachwhip is approximately 8.4 miles northwest of the Study Area; however, the species was observed in 2017 approximately 0.8 mile west of the site (Gadsby 2017). Appropriate habitat for San Joaquin coachwhip is present and there is a high potential for the species to occur in the Study Area. Wildlife surveys conducted in March and April 2018 did not detect San Joaquin coachwhip in the Study Area.

M. San Joaquin Kit Fox (*Vulpes macrotis mutica*) is federally listed as endangered and state listed as threatened. The SJKF is one of two subspecies of the kit fox, *Vulpes macrotis*, which is the smallest canid species in North America. It is endemic to the San Joaquin Valley and a few adjacent valleys in the central region of California (Cypher et al. 2013). The SJKF is primarily nocturnal and typically occurs in annual grassland or mixed shrub/grassland habitats throughout low, rolling hills and in valleys. They need loose sandy soils in order to dig their burrows and a prey population of black-tailed jackrabbits, rodents, desert cottontails, insects, some birds, reptiles and vegetation (CNDDB 2017). The most suitable habitat for SJKF has low precipitation, sparse vegetation coverage with high densities of kangaroo rats (*Dipodomys* spp.). For the SJKF to succeed in an area it needs large expanses of non-fragmented suitable habitat. This type of habitat is decreasing rapidly by conversion into agricultural land or degraded by urban development (Cypher et al. 2013). The CNDDB reports several occurrences of San Joaquin kit fox within a 5-mile radius of the Study Area; however, the records are dated from 1975-1979. One additional record of San Joaquin kit fox provided by Storrer Environmental Services (2018) was reported approximately 6.25 miles northeast of the Study Area in May of 2007. Multiple dens of suitable size were observed with kit fox scat found in the vicinity. An adult kit fox was observed at this site during subsequent spotlighting surveys. Much of the land in the Cuyama Valley since the earlier records has been converted to agriculture. Due to the lack of observations of kit fox in the vicinity in recent years, it is unlikely that the species would occur within the Study Area. No sign of kit fox, such as scat, tracks, or appropriate sized dens were observed during the October 2017 site visit, while three larger dens were observed during the April 2018 site visit that were attributed to coyote. These larger dens did not show any sign of current or past kit fox use but do qualify as potential kit fox dens under the USFWS definition (USFWS 2011). These dens showed sign of small mammal use and had recent coyote sign on the apron. Despite the 2007 record of kit fox in

the New Cuyama area, we consider the potential for occurrence within the Study Area to be low.

4.7 Botanical Survey Results

A spring botanical survey conducted in March and April 2018 identified 44 taxa of vascular plants in the Study Area (Table 5). No special status plant species were identified in the Study Area. Several reference sites were used to define the stage of special status plants of known historical occurrences within the nine USGS 7.5-minute quadrangle area and with potential to occur within the Study Area. Of the four special status plant species with potential to occur, San Joaquin woollythreads was observed in a at a reference site in Lost Hills, California in late March 2018. In April 2018, California jewelflower was not observed at a local reference site in Santa Barbara Canyon, south of the Study Area. However, four individuals of Coulter's jewel flower (*Caulanthus coulteri*) were observed in full bloom along the west side of Santa Barbara Canyon Road near this reference site. Kern mallow was observed in April 2018 at a reference site on Caliente Ridge in San Luis Obispo County. Salinas milk-vetch was observed in flower in April 2018 in northern Carrizo Plain in San Luis Obispo County. Special status plants were not detected in the Study Area during appropriately timed botanical surveys in spring 2018.

TABLE 5. VASCULAR PLANT LIST.

Common Name	Scientific Name	Special Status	Origin
Trees - 3 Species			
Italian cypress	*Cupressus sempervirens*	None	Planted
Blue-gum	*Eucalyptus globulus*	None	Planted
Bishop pine	*Pinus muricata*	None	Planted
Shrubs - 4 Species			
Mt. Diablo milk vetch	*Astragalus oxyphysus*	None	Native
Interior goldenbush	*Ericameria linearifolia*	None	Native
Rabbitbrush	*Ericameria nauseosa*	None	Native
Alkali goldenbush	*Isocoma acradenia* var. *bracteosa*	None	Native
Forbs - 24 Species			
Tumbleweed	*Amaranthus albus*	None	Introduced
Annual bursage	*Ambrosia acanthicarpa*	None	Native
Common fiddleneck	*Amsinckia intermedia*	None	Native
Menzies' fiddleneck	*Amsinckia menziesii*	None	Native
Black hair milk vetch	*Astragalus lentiginosus* var. *nigricalycis*	None	Native
Coyote brush	*Baccharis pilularis*	None	Native

Common Name	Scientific Name	Special Status	Origin
Field sun cup	*Camissonia campestris* subsp. *campestris*	None	Native
Shepherd's purse	*Capsella bursa-pastoris*	None	Introduced
Field bindweed	*Convolvulus arvensis*	None	Introduced
Turkey-mullein	*Croton setigerus*	None	Native
Flix weed	*Descurainia sophia*	None	Introduced
Common sunflower	*Helianthus annuus*	None	Native
Mustard	*Hirschfeldia incana*	None	Introduced
Prickly lettuce	*Lactuca serriola*	None	Introduced
Needle goldfields	*Lasthenia gracilis*	None	Native
Shining pepper grass	*Lepidium nitidum*	None	Native
Cheeseweed mallow	*Malva parviflora*	None	Introduced
White horehound	*Marrubium vulgare*	None	Introduced
Sleeping combseed	*Pectocarya penicillata*	None	Native
Valley popcornflower	*Plagiobothrys canescens*	None	Native
Russian thistle	*Salsola tragus*	None	Introduced
Oriental hedge mustard	*Sisymbrium orientale*	None	Introduced
Wire-lettuce	*Stephanomeria exigua*	None	Native
Vinegar weed	*Trichostema lanceolatum*	None	Native
Grasses - 13 Species			
Wild oat	*Avena fatua*	None	Introduced
Ripgut brome	*Bromus diandrus*	None	Introduced
Soft chess brome	*Bromus hordeaceus*	None	Introduced
Red top brome	*Bromus madritensis* ssp. *rubens* *[= B. rubens]*	None	Introduced
Cheatgrass	*Bromus tectorum*	None	Introduced
Longbeak stork's bill	*Erodium botrys*	None	Introduced
Red stemmed filaree	*Erodium cicutarium*	None	Introduced
White stemmed filaree	*Erodium moschatum*	None	Introduced
Rattail sixweeks grass	*Festuca [=Vulpia] myuros*	None	Introduced
Foxtail barley	*Hordeum murinum*	None	Introduced
Barley	*Hordeum vulgare*	None	Introduced
Mediterranean grass	*Schismus arabicus*	None	Introduced
Commercial rye	*Secale cereale*	None	Introduced

4.8 Wildlife Survey Results

Wildlife observed or detected in the Study Area are listed in Table 6. A total of 2 reptiles, 14 birds, and 6 mammals were detected. Reptiles were generally uncommon, with side-blotched lizards being observed in bare ground areas between shrubs and one gopher snake observed. Birds also were found to be low in abundance, but a total of 14 species were detected. Ravens were the only species found nesting in the Study Area, however we expect small passerine species to nest on the ground and in low shrubs in low abundance. Six mammal species were recorded in the Study Area. Heermann's kangaroo rat and deer mouse were confirmed by small mammal trapping, the former being very abundant and widespread across the site and the latter only detected in one location. Black-tailed jack rabbit and desert cottontail were observed frequently throughout the site, and California ground squirrel was uncommon. Coyote was not observed but tracks and scat were present in numerous areas of the site, as well as dens that showed sign of use by coyote.

TABLE 6. WILDLIFE LIST.

Common Name	Scientific Name	Special Status	Found On-site?	Habitat Type
Reptiles – 2 Species				
Pacific Gopher Snake	*Pituophis catenifer catenifer*	None	✓	Woodland, grassland, rural
Side-blotched Lizard	*Uta stansburiana*	None	✓	Dry habitats
Birds – 14 Species				
Cooper's Hawk	*Accipiter cooperii*	Special Animal[1] (nesting)	Observed non-nesting	Oak, riparian woodland
Northern Harrier	*Circus cyaneus*	SSC (nesting)	Observed non-nesting	Nest on ground in tall reeds or grasses
Common Raven	*Corvus corax*	None	✓	Riparian, chaparral and woodlands
Horned Lark	*Eremophila alpestris*	None	✓	Grassland, oak savanna
Prairie Falcon	*Falco mexicanus*	Special Animal (nesting)	Observed non-nesting	Open country, nests on cliffs
Loggerhead Shrike	*Lanius ludovicianus*	SSC (nesting)	Observed non-nesting	Nests in shrubs, trees near open areas. Non-nesting
Black phoebe	*Sayornis nigricans*	None	✓	Riparian, livestock areas, human-made structures
Say's Phoebe	*Sayornis saya*	None	✓	Open country, grassland

1 Special Animal refers to all of the animal taxa inventoried by the CNDDB, regardless of their legal or protection status. Refer to discussion of Special Animals in Section 3.5.2.

Common Name	Scientific Name	Special Status	Found On-site?	Habitat Type
Western Meadowlark	*Sturnella neglecta*	None	✓	Open habitats, grasslands
European Starling	*Sturnus vulgaris*	None	✓	Agricultural, livestock areas
Western Kingbird	*Tyrannus verticalis*	None	✓	Grasslands, savannah
Barn Owl	*Tyto alba*	None	✓	Agricultural, woodlands
Mourning Dove	*Zenaida macroura*	None	✓	Open and semi-open habitats
White-crowned Sparrow	*Zonotrichia leucophrys*	None	✓	Oak, riparian woodlands
Mammals – 6 Species				
Coyote	*Canis latrans*	None	✓	Open woodlands, brushy areas, wide ranging.
Heermann's Kangaroo Rat	*Dipodomys heermanni*	None	✓	Dry grasslands with few shrubs
Black-tailed Jackrabbit	*Lepus californicus*	None	✓	Grasslands
Deer Mouse	*Peromyscus maniculatus*	None	✓	All dry land habitats
California Ground Squirrel	*Spermophilus beecheyi*	None	✓	Grasslands
Desert Cottontail	*Sylvilagus audubonii*	None	✓	Brushy habitats

Heermann's kangaroo rat (*Dipodomys heermanni*) and deer mouse (*Peromyscus maniculatus*) were the two small mammal species captured during trapping surveys (Table 7). On April 11, eighteen Heermann's kangaroo rats and three deer mice were captured. On April 12, eighteen Heermann's kangaroo rats and one deer mouse were captured.

TABLE 7. SMALL MAMMAL TRAPPING RESULTS.

Date	Total Traps	*Dipodomys heermanni*	*Peromyscus maniculatus*	Trap success
April 11, 2018	47	18	3	44.7%
April 12, 2018	47	18	1	40.4%
Totals	94	36	4	42.5%

5 POTENTIAL IMPACTS

The proposed SEPV Cuyama Solar Project would affect annual grassland and goldenbush scrub habitats and could potentially affect common and special animals and nesting birds. Based on biological surveys to date, we expect no federal or state listed species occur in the Study Area. The proposed project is anticipated to have no effect to listed species. Preconstruction surveys are recommended, as outlined in Section 6, to confirm absence of listed and special status species at the time of construction.

5.1 Habitats

The proposed SEPV Cuyama Solar Project would affect annual grassland and goldenbush scrub habitats throughout the Study Area (see Site Plan in Section 8). Approximate impact acreage is provided in Table 8 for each habitat type occurring in the Study Area.

TABLE 8. POTENTIAL HABITAT IMPACTS

Habitat Type	Approximate Impact (acres)
California annual grassland	17.3
Alkali goldenbush scrub	3.1

5.1.1 California annual grassland

California annual grassland habitat is a non-native grassland community type that is typical for the region. It is composed primarily of introduced annual grasses, but also contains a variety of native and non-native forbs. California annual grassland is not a sensitive habitat type, although it may support special status species. Impacts to California annual grassland habitat are not significant and do not require mitigation.

5.1.2 Alkali goldenbush scrub

Alkali goldenbush scrub habitat is a native shrub community type that is typical of alluvial plains, flood terraces, and other sandy or gravelly areas of the interior Coast Range. In the Study Area it is associated with kangaroo rat burrows and other native and introduced plants. Impacts to alkali goldenbush scrub habitat are not significant and do not require mitigation.

5.2 Potential Wetlands and Jurisdictional Waters

A Delineation of Potentially Jurisdictional Wetlands and Waters report has been prepared for the project (Althouse and Meade, Inc. 2017). The wetland study yielded negative results for jurisdictional wetlands and waters within the Study Area. The proposed project would not impact federal or state jurisdictional wetlands or waters, and no further surveys or mitigations are recommended.

5.3 Special Status Plants

There were no special status plants detected during seasonally timed botanical surveys in spring 2018. The proposed project would not affect special status plants, and no further surveys or mitigations are recommended.

5.4 Birds

Several bird species were observed within and flying over the Study Area, and other common and special status bird species could potentially be present, at least as transients or flyovers, but also nesting.

Construction activities (e.g. mowing, grading, disking, driving) occurring in grassland and scrub habitats could impact nesting birds if conducted during the nesting season. Preconstruction nesting bird surveys are recommended to reduce potential adverse effects of the project on common and special status nesting birds (refer to Section 6).

The California condor is very unlikely to occur within the Study Area, but it is known from the region and therefore has a low potential to occur. Presence of microtrash presents a danger to California condors who are known to ingest and/or feed these materials to their chicks. Mitigation recommendations are provided in Section 6 to reduce potential adverse effects of microtrash on condors.

5.5 Invertebrates

The Kern primrose sphinx moth is an endangered species known to occur in the region. Low habitat suitability and lack of larval food plants in the Study Area indicates this species is not present. No further surveys or mitigations are recommended for Kern primrose sphinx moth.

5.6 Reptiles

Common and special status reptiles could be present at the project site during construction. Impacts could occur to common reptiles, such as side-blotched lizard and gopher snake, from ground or vegetation disturbing activities, or by vehicle strikes. Impacts to common reptile species are not significant and do not require mitigation.

Impacts to special status reptiles, such as San Joaquin coachwhip and California glossy snake could occur from ground or vegetation disturbing activities, or by vehicle strikes. Preconstruction surveys for special status reptiles are recommended prior to start of construction (refer to Section 6).

5.7 Mammals

Observations of small and medium-sized mammals and their sign within the Study Area indicates the presence of common species such as Heermann's kangaroo rat, deer mouse, desert cottontail and coyote. Grubbing, grading and other construction activities are likely to affect common mammal species. Impacts to common mammal species are not significant and do not require mitigation.

There was no indication of special status mammals utilizing habitats within the Study Area. Special status small mammals are unlikely to be present. However, larger subterranean dens suitable for American badger and San Joaquin kit fox were observed in the Study Area. American badger and San Joaquin kit fox are known to be present in the Cuyama Valley in low abundance. Because they are wide ranging animals there is potential that they could occupy or pass through the Study Area at the time of construction even though they were not present during biological surveys conducted in 2017 and 2018. Preconstruction surveys and den excavation are recommended prior to start of construction (refer to Section 6).

6 MITIGATION RECOMMENDATIONS

The following sections include biological resource (BR) mitigation measures designed to reduce the potential for impacts to biological resources at the proposed SEPV Cuyama Solar Project.

BR-1. Worker Environmental Awareness Program. The applicant shall prepare a Worker Environmental Awareness Program that shall be presented to all construction personnel and employees before any ground-disturbing activities commence at the site. This presentation shall include information on special status species with potential to occur at the site, including habitat needs, protection status, and required mitigation measures. Each worker shall be provided with a hand-out of pertinent information. Sign-in sheets documenting the trainings shall be maintained by the applicant and submitted to the County monthly.

6.1 Nesting Birds

BR-2. Preconstruction Nesting Bird Survey. If seasonal avoidance of nesting birds is not feasible and construction activities are scheduled to occur during the nesting season (March 15 to August 15 or as determined by the County), a qualified biologist shall conduct a preconstruction survey of the project site and the area within 100 feet of the site, including denuded areas, within seven days prior to the start of ground-disturbing activities. A qualified biologist shall also conduct periodic surveys of the project site, during the nesting season, after the start of construction and at weekly intervals, until such time that no potential nesting habitat remains onsite (e.g. vegetation clearing has been completed). If nesting birds are found within the survey area, an appropriate buffer around the nest shall be identified by the qualified biologist to ensure compliance with Fish and Game Code Sections 3503 and 3513, and no new activities would be allowed within the buffer until the young have fledged from the nest, as determined by the qualified biologist, or until the nest fails for reasons unrelated to the project. Preconstruction survey reports shall be submitted to the County.

6.2 Reptiles

BR-3. Preconstruction Survey for Special Status Reptiles. Preconstruction surveys for the presence of San Joaquin coachwhip and California glossy snake shall be conducted immediately prior to start of ground or vegetation disturbing construction activities during spring and summer months (April through August). Surveys at other times of year are not likely to detect special status reptiles and are not recommended. The surveys shall be conducted by qualified biologists and shall include complete visual coverage of the ground surface to be disturbed. If special status species are found, a qualified biologist with approval from CDFW (Memorandum of Understanding or other written approval) shall move them to the nearest safe location.

6.3 Mammals

BR-4. Preconstruction Survey for Special Status Mammals. Within 30 days prior to start of construction, a preconstruction survey shall be conducted throughout the project site for mammal dens suitable for use by American badger and/or San Joaquin kit fox. The survey shall be conducted such that complete visual inspection of the ground surface is completed. If no dens suitable for badger or kit fox are identified, construction may commence after acceptance of a preconstruction survey report by the County. If dens suitable for either species are located, the dens shall be monitored with tracking medium and/or remote cameras for three days to determine if they are occupied, and by which species. Occupied American badger dens shall be protected by a 50-foot buffer. Active badger maternity dens shall be protected by a 100-foot buffer. Badger dens or other dens suitable for use by kit fox but showing no sign of current or past use by kit fox may be excavated by a qualified biologist when not occupied (refer to USFWS 2011 Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox prior to or during Ground Disturbance). If San Joaquin kit fox or sign of kit fox is detected in the Study Area, the applicant shall consult with CDFW and USFWS for appropriate protection measures.

BR-5. Biological Monitoring. A biological monitor shall be present during initial site preparation activities (e.g., grading, mowing, and removal of large waste debris) to relocate wildlife out of harm's way. The monitor shall be qualified to identify, capture and relocate non-listed special status species that are found during construction. If species listed under FESA or CESA are found, all work shall stop and the applicant shall consult with CDFW and/or USFWS, as appropriate. The Biological Monitor shall have the authority to temporarily stop work if special status species are encountered.

BR-6. Construction Hours. To minimize impacts to common and special status wildlife that are active at night, construction activities shall be limited to daytime hours, when feasible. A Biological Monitor shall be present for construction activities that must occur at night (sunset to sunrise).

7 PHOTOGRAPHS

Photo 1. View of grassland habitat in Study Area with adjacent solar facility in the background. View facing southwest. April 11, 2018.

Photo 2. View of alkali goldenbush scrub habitat in eastern portion of Study Area. View facing southeast. April 11, 2018.

Photo 3. Elements of abandoned vehicles remaining within the Study Area. View facing South. April 11, 2018.

Photo 4. Photo of sandy soil substrate in northeast portion of Study Area. April 11, 2018.

Photo 5. Photo of Heerman's kangaroo rat on Day 1 of small mammal trapping in Study Area. April 11, 2018.

Photo 6. Photo of diagnositic five toed Heerman's kangaroo rat identified within Study Area. April 11, 2018.

Photo 7. Photo of Heerman's kangaroo rat on ground in Study Area after processing. April 11, 2018.

Photo 8. Photo of potential large mammal den observed in northeastern portion of Study Area. April 10, 2018.

8 FIGURES

- Figure 1. United States Geological Survey Topographic Map
- Figure 2. California Natural Diversity Database Plants
- Figure 3. California Natural Diversity Database Animals
- Figure 4. Biological Resources
- Figure 5. Small Mammal Trap Capture Results
- Overall Site Plan for SEPV Cuyama Solar, LLC

Figure 1. United States Geological Survey Topographic Map

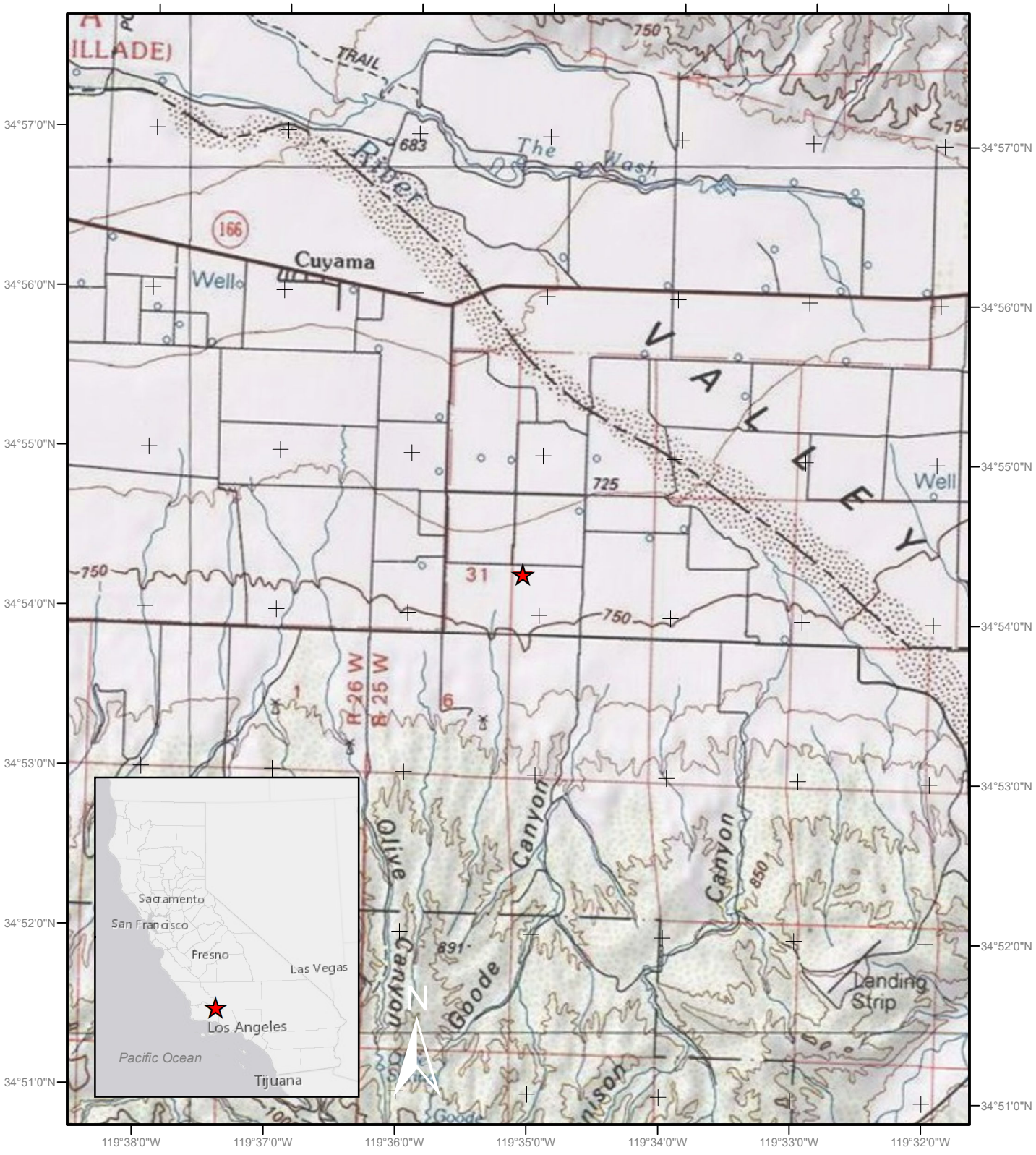
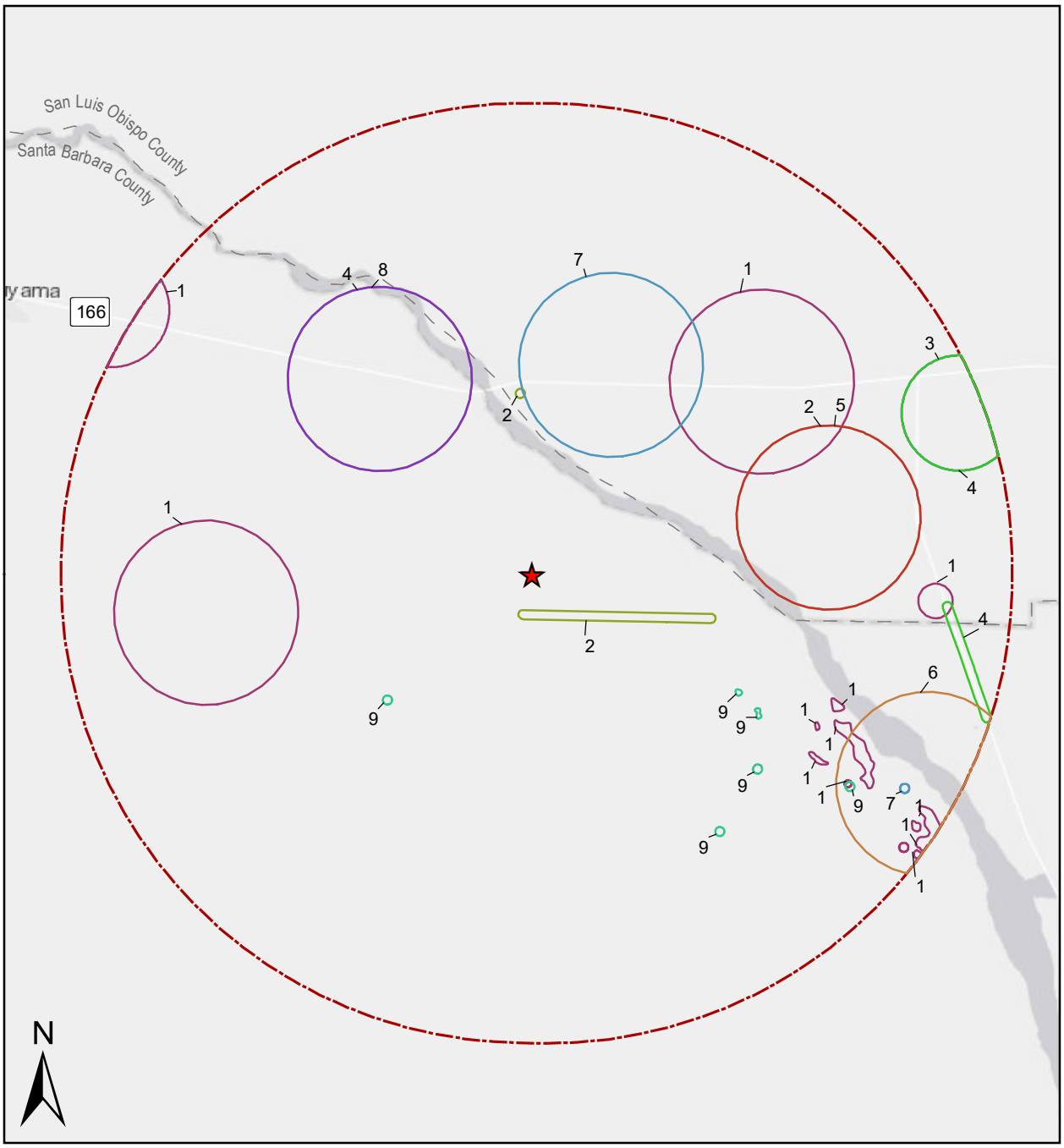


Figure 2. California Natural Diversity Database Plants



Label	Common Name	Label	Common Name
1	California jewelflower	6	Pale-yellow layia
2	Hoover's eriastrum	7	San Joaquin woollythreads
3	Kern mallow	8	Showy golden madia
4	Lemmon's jewelflower	9	Stinkbells
5	Munz's tidy-tips		

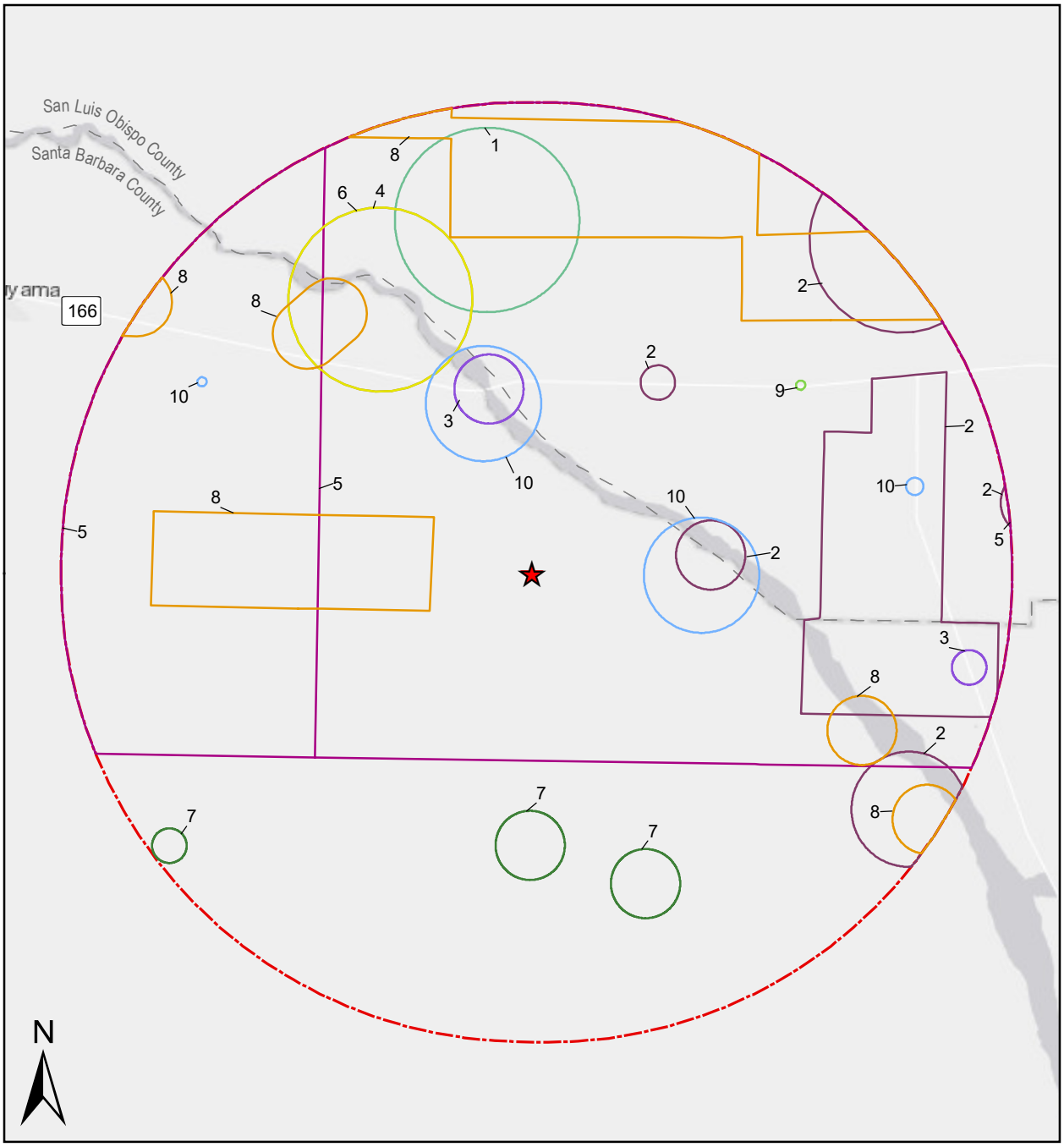
Project Location

5-Mile Radius

0 0.5 1 2 3 Miles

Updated April 27, 2018 03:18 PM by: MMP

Figure 3. California Natural Diversity Database Animals



Label	Common Name
1	American badger
2	Blunt-nosed leopard lizard
3	California glossy snake
4	Giant kangaroo rat
5	Kern primrose sphinx moth
6	Nelson's antelope squirrel
7	Northern California legless lizard
8	San Joaquin kit fox
9	Swainson's hawk
10	Tricolored blackbird

Project Location

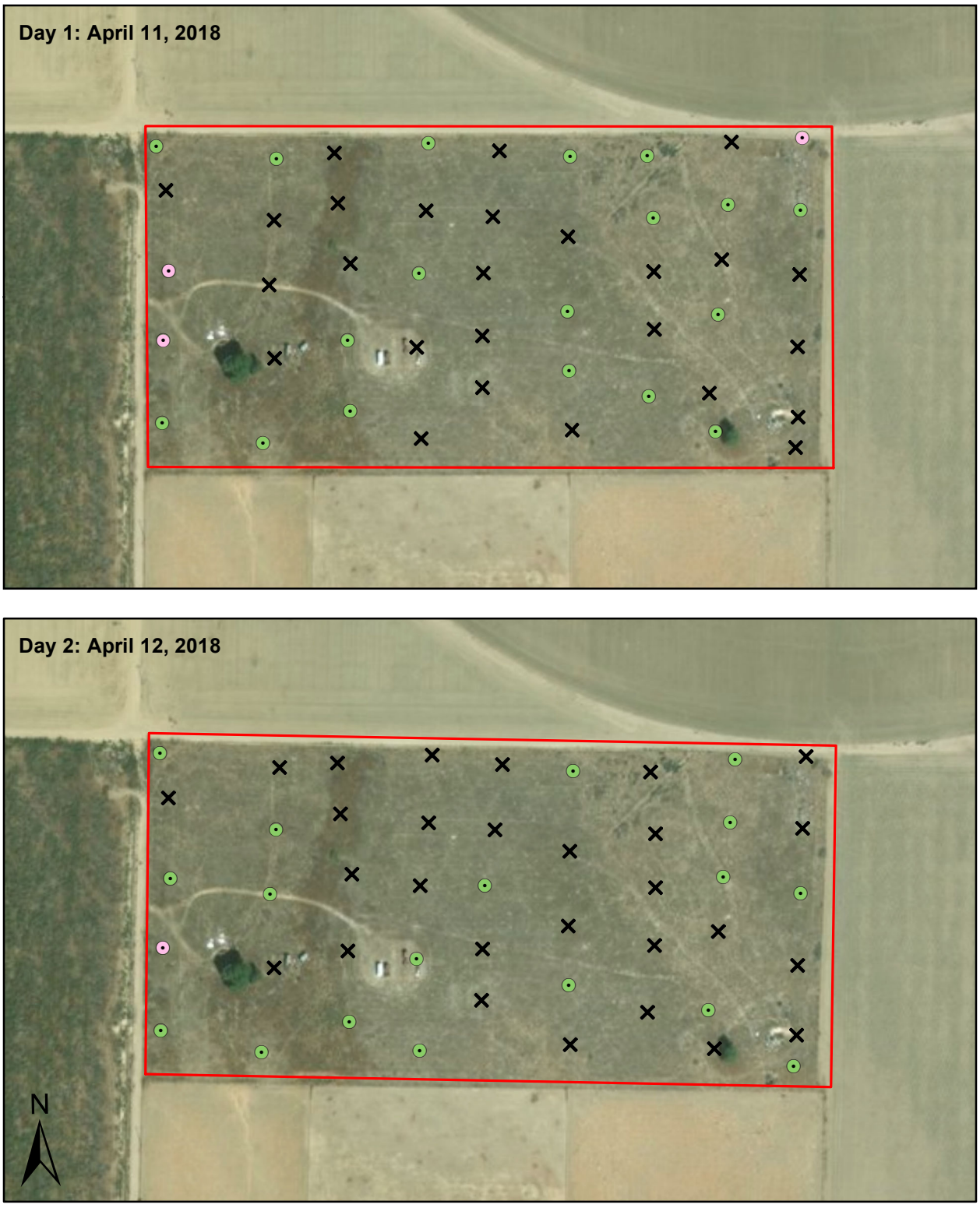
5-Mile Radius

0 0.5 1 2 3 Miles

Updated May 01, 2018 02:05 PM by: MMP

Figure 4. Biological Resources

Figure 5. Small Mammal Trap Capture Results



SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING FACILITY

CUYAMA, CA

LEGEND

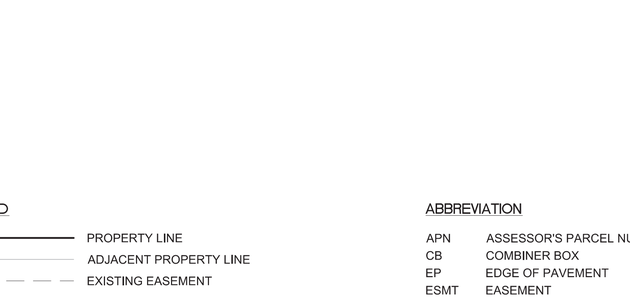
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED CHAINLINK FENCE
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED OVERHEAD ELECTRIC LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ONSITE FIRE/SERVICE ACCESS ROADS (NATIVE SOIL COMPACTED TO 90%)

ABBREVIATION

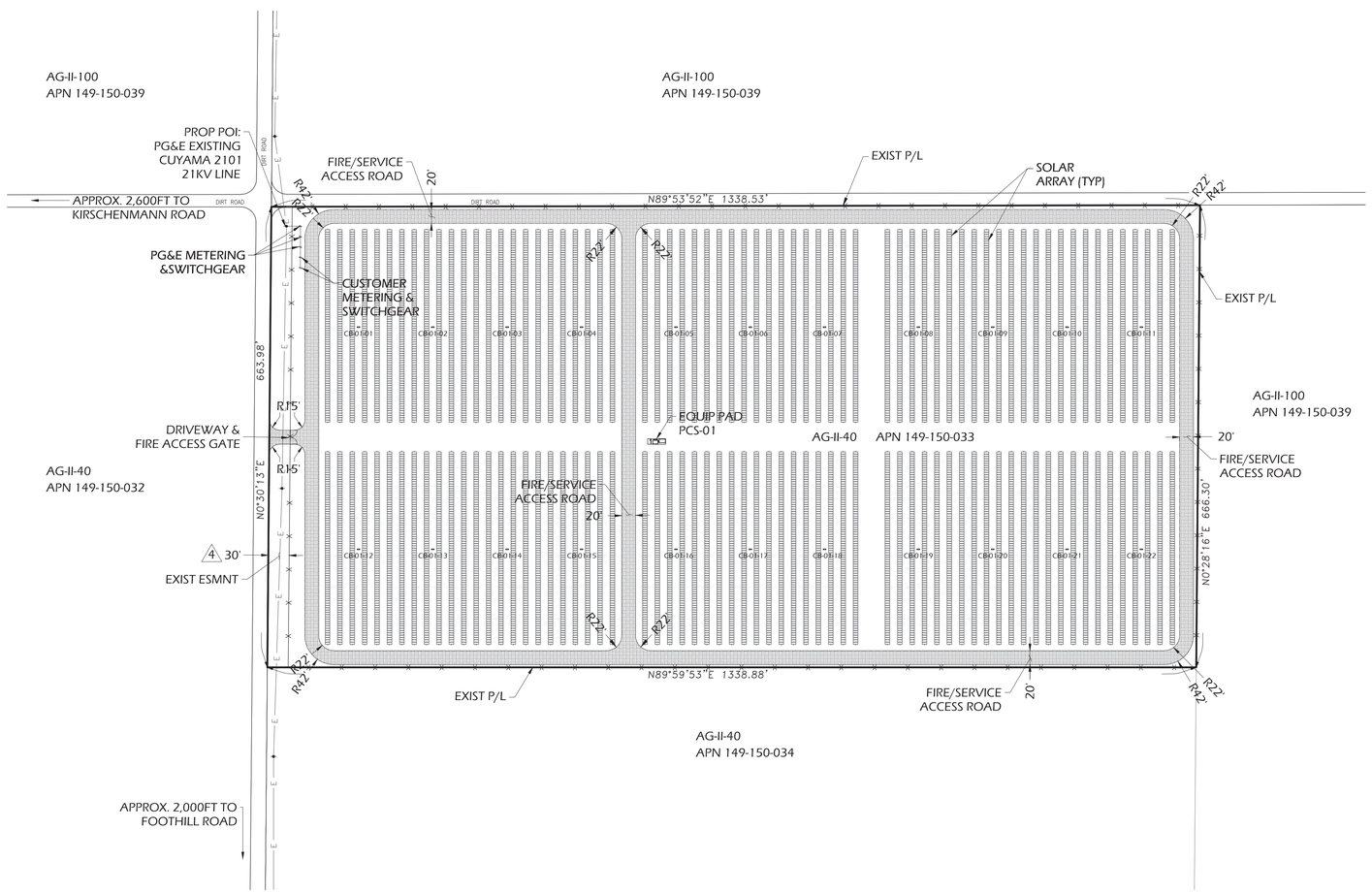
APN	ASSESSOR'S PARCEL NUMBER
CB	COMBINER BOX
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EQUIP	EQUIPMENT
PCS	POWER CONDITIONING SYSTEM
PROP	PROPOSED
P/L	PROPERTY LINE
R/W	RIGHT OF WAY
TYP	TYPICAL

COMBINER ID: CB-01-01

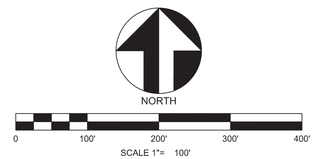
PCS # — COMBINER #



2 E-300 FENCE DETAIL
SCALE: NTS



1 E-300 OVERALL SITE PLAN
SCALE: 1" = 100'



PRELIMINARY NOT FOR CONSTRUCTION

SEPV CUYAMA, LLC

11726 SAN VICENTE BLVD.
SUITE 414
LOS ANGELES, CA 90049
PHONE: (310) 826-8511

CHECKED BY: MS
DRAWING NAME:288262-E-300
PLOT DATE: 01/16/2018

SEPV CUYAMA

REV#	APPR	DATE	REVISION DESCRIPTION	PLAN CKR APPR	CITY ENGR APPR	DATE
1						

OVERALL SITE PLAN

SEPV CUYAMA
SOLAR PV ELECTRIC FACILITIES
SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
E-300

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10 APPENDICES

- Appendix A. Special Status Plants Reported from the Region
- Appendix B. Special Status Animals Reported from the Region
- Appendix C. Small Mammal Trapping Data Sheets

APPENDIX A. SPECIAL STATUS PLANTS REPORTED FROM THE REGION

	Common Name *Scientific Name*	Fed/State Status Global/State Rank CRPR	Blooming Period	Habitat Preference	Potential to Occur	Detected within Study Area?	Effect of Proposed Activity
1.	**Heart-leaved Thorn-mint** *Acanthomintha obovata* ssp. *cordata*	None/None G4T3/S3 4.2	April - July	Grassy slopes, oak woodland, chaparral; <1600 m. SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
2.	**Mt. Pinos Onion** *Allium howellii* var. *clokeyi*	None/None G4T2/S2 1B.3	April - June	Open slopes, sagebrush scrub; 1300-1850 m. n WTR	No. Appropriate habitat is not present in the Study Area.	No	No Effect
3.	**Douglas's Fiddleneck** *Amsinckia douglasiana*	None/None G4/S4 4.2	March - May	Unstable shaly sedimentary slopes; (100) 150–1600 m. SCoR, w WTR	No. Appropriate habitat is not present in the Study Area.	No	No Effect
4.	**Forked Fiddleneck** *Amsinckia furcata*	None/None G4/S4 4.2	February - May	Semi-barren, loose, shaly slopes; 50-1000 m. w SnJV, SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
5.	**California Androsace** *Androsace elongata* ssp. *acuta*	None/None G5?T3T4 4.2	March - June	Dry grassy slopes,; <1200 m. NCoRI, CaR, s SNF, GV, SnFrB, SCoRI, Sco, WTR, SnBr, PR; OR, NV, Baja CA	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
6.	**Oval-Leaved Snapdragon** *Antirrhinum ovatum*	None/None G3/S3 4.2	May - November	Heavy, adobe-clay soils on gentle, open slopes, also disturbed areas; 200-1000 m. s San Joaquin Valley, s SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
7.	**Salinas Milk-Vetch** *Astragalus macrodon*	None/None G4/S4 4.3	April - July	Eroded pale shales or sandstone, or serpentine alluvium; 300-950 m. SCoR	Low. Soil type is unlikely to support Salinas Milk-vetch.	No	No Effect
8.	**Heartscale** *Atriplex cordulata* var. *cordulata*	None/None G3T2/S2 1B.2	April - October	Alkaline flats and scalds in chenopod scrub, grassland, meadows; 1-375 m.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
9.	**Lost Hills Crownscale** *Atriplex coronata* var. *vallicola*	None/None G4T2/S2 1B.2	April - September	Alkaline soils in chenopod scrub, valley and foothill grassland, and vernal pools; 50-635 m.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
10.	**Late-flowered Mariposa-lily** *Calochortus fimbriatus*	None/None G3/S3 1B.3	June - August	Dry, open coastal woodland, chaparral; <900m. SCoRO, WTR	No. Appropriate habitat is not present in the Study Area.	No	No Effect
11.	**Mojave Paintbrush** *Castilleja plagiotoma*	None/None G4/S4 4.3	April - June	Dry sagebrush scrub, pinyon woodland; 300-2500 m. s SN, The, SCoRI, TR, Dmoj	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
12.	**California Jewel-flower** *Caulanthus californicus*	Endangered/Endangered G1/S1 1B.1	February - May	Sandy soils in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland; 70-1000 m.	Low. Appropriate grassland habitat characteristics are not expected to be present in the Study Area.	No	No Effect
13.	**Lemmon's Jewelflower** *Caulanthus lemmonii*	None/None G3/S3 1B.2	February - May	Dry, exposed slopes, grassland, chaparral, scrub; 80-1100 m. sw San Joaquin Valley, se SnFrb, e SCoRO, SCoRI	No. Appropriate habitat is not present in the Study Area..	No	No Effect
14.	**Blakley's Spineflower** *Chorizanthe blakleyi*	None/None G2/S2 1B.3	April - June	Chaparral, pinyon and juniper woodland; 600-1600 m. ScoRO	No. Appropriate habitat is not present in the Study Area.	No	No Effect
15.	**Straight-awned Spineflower** *Chorizanthe rectispina*	None/None G2/S2 1B.3	April - July	Chaparral, dry woodland in sandy soil; 200-600 m. SCoRO	No. Appropriate habitat is not present in the Study Area.	No	No Effect
16.	**Mojave Spineflower** *Chorizanthe spinosa*	None/None G4/S4 4.2	March - July	Desert scrub; 6-1300 m. w Dmoj	No. Appropriate habitat is not present in the Study Area.	No	No Effect
17.	**Mt. Pinos Larkspur** *Delphinium parryi* ssp. *purpureum*	None/None G4T4/S4 4.3	May - June	Sagebrush scrub, dry chaparral; 1000-2600 m. Teh, WTR	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
18.	**Recurved Larkspur** *Delphinium recurvatum*	None/None G2?/S2? 1B.2	March - June	Poorly drained alkaline soils in chenopod scrub, grassland, cismontane woodland;	No. Appropriate habitat is not present in the Study Area.	No	No Effect
19.	**Umbrella Larkspur** *Delphinium umbraculorum*	None/None G3/S3 1B.3	April - June	Moist oak forest; 400-1600 m. SCoRO, WTR.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
20.	**Kern Mallow** *Eremalche kernensis*	Endangered/None G3G4T2/S2 1B.2	January – May	On dry, open sandy to clayey soils in chenopod scrub and valley and foothill grassland; 100-1000 m.	Low. Sandy soils in grassland habitat are present, however there are no historic records in the Cuyama Valley south of Hwy 166.	No	No Effect
21.	**Hoover's Eriastrum** *Eriastrum hooveri*	Delisted/None G3/S3 4.2	March - July	Sparsely vegetated alkaline alluvial pans in chenopod scrub, grassland, pinyon-juniper woodland;	No. Appropriate habitat not found on property.	No	No Effect
22.	**Cottony Buckwheat** *Eriogonum gossypinum*	None/None G3G4/S3S4 4.2	March - September	Clay hills; 100-500 m. s SNF, sw San Joaquin Valley	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
23.	**Temblor Buckwheat** *Eriogonum temblorense*	None/None G2/S2 1B.2	(April) May - September	Barren clay in grassland, sandstone outcrops; 300-1000 m. s SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
24.	**Fort Tejon Woolly Sunflower** *Eriophyllum lanatum* var. *hallii*	None/None G5T1/S1 1B.1	May - July	Dry sites; 1200-1500 m. s Teh, se SCoRO	No. Appropriate habitat is not present in the Study Area.	No	No Effect
25.	**San Benito Poppy** *Eschscholzia hypecoides*	None/None G4/S4 4.3	March - June	Grassy area in woodland, chaparral; 200-1600 m. SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
26.	**Tejon Poppy** *Eschscholzia lemmonii* ssp. *kernensis*	None/None G5T2/S2 1B.1	(February) March - May	Open grasslands; 200-1000 m. sw Teh, n WTR	No. Appropriate habitat is not present in the Study Area.	No	No Effect
27.	**Stinkbells** *Fritillaria agrestis*	None/None G3/S3 4.2	March - June	Clay (gen serpentine) banks, depressions; <500 m. NCoRO , SNF, GV, CW	No. Appropriate habitat is not present in the Study Area.	No	No Effect
28.	**Cuyama Gilia** *Gilia latiflora* ssp. *cuyamensis*	None/None G5?T4/S4 4.3	April - June	Sandy flats, pinyon/juniper woodland, lower river valleys; 600-2100 m. m. SCoRI, n WTR, s SNF	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
29.	**Ferris' Goldfields** *Lasthenia ferrisiae*	None/None G3/S3 4.2	February - May	Vernal pools or wet saline flats; < 700 m. ScV	No. Appropriate habitat is not present in the Study Area..	No	No Effect
30.	**Coulter's Goldfields** *Lasthenia glabrata* ssp. *coulteri*	None/None G4T2/S2 1B.1	February - June	Saline places, vernal pools; <1000 m. s SCoRO, SCo, n ChI, PR, w DMoj	No. Appropriate habitat is not present in the Study Area.	No	No Effect
31.	**Pale-Yellow Layia** *Layia heterotricha*	None/None G2/S2 1B.1	March - June	Alkaline or clay soils, open areas, in pinyon-juniper woodland, grassland; 270-1705 m. Teh, San Joaquin Valley, SCoR, n WTR	No. Appropriate habitat is not present in the Study Area..	No	No Effect
32.	**Munz's Tidy-tips** *Layia munzii*	None/None G2/S2 1B.2	March - April	Alkaline clay soils in chenopod scrub, grasslands; 45-760 m.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
33.	**Jared's Pepper-grass** *Lepidium jaredii* ssp. *jaredii*	None/None G2G3T1T2/S1S2 1B.2	March - May	Alkali bottoms, slopes, washes, <500 m. SCoRI, San Joaquin Valley	No. Appropriate habitat is not present in the Study Area.	No	No Effect
34.	**Silky Lupine** *Lupinus elatus*	None/None G4/S4 4.3	June - August	Dry forest; 1500-3000 m. s SNH, TR	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CRPR**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
35.	**Showy Golden Madia** *Madia radiata*	None/None G2/S2 1B.1	March - May	Grassy slopes, often in heavy clay; <900 m. w San Joaquin Valley, e SnFrB, SCoRI	No. Appropriate habitat is not present in the Study Area.	No	No Effect
36.	**Davidson's Bush-mallow** *Malacothamnus davidsonii*	None/None G2/S2 1B.2	June - January	Sandy washes in coastal scrub, riparian woodland, chaparral; 180-855 m. c SCoRO, SCo	No. Appropriate habitat is not present in the Study Area.	No	No Effect
37.	**San Joaquin Woolythreads** *Monolopia congdonii*	Endangered/None G2/S2 1B.2	February - May	Sandy grassland, alkali sinks; 90-700 m.	Low. Sandy soil is present in grassland habitat; however, the site is likely too overgrown for this species, and there are no recent records from the Cuyama area.	No	No Effect
38.	**Adobe Yampah** *Perideridia pringlei*	None/None G4/S4 4.3	April – June (July)	Grassy slopes, serpentine outcrops; 300-1800 m. Teh, SCoR, WTR.	No. Appropriate habitat is not present in the Study Area.	No	No Effect

California Geographic Subregion Abbreviations:

CCo: Central Coast	SnFrB: San Francisco Bay	SLO: San Luis Obispo	CW: Central West
SCo: South Coast	TR: Transverse Ranges	SN: Sierra Nevada	SW: South West
SCoR: South Coast Ranges	WTR: Western Transverse Ranges	SnJt: San Jacinto Mtns	DMoj: Mojave Desert
SCoRO: Outer South Coast Ranges	SnJV: San Joaquin Valley	SnBr: San Bernardino	PR: Peninsular Range
SCoRI: Inner South Coast Ranges	ScV: Sacramento Valley	Teh: Tehachapi Mtn Area	

State/Rank Abbreviations:

FE: Federally Endangered	PT: Proposed Federally Threatened	CT: California Threatened
FT: Federally Threatened	CE: California Endangered	Cand. CE: Candidate for California Endangered
PE: Proposed Federally Endangered	CR: California Rare	Cand. CT: Candidate for California Threatened

California Rare Plant Ranks:

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California, but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 4: Plants of limited distribution - a watch list

CRPR Threat Ranks:

0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

APPENDIX B. SPECIAL STATUS ANIMALS REPORTED FROM THE REGION

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
1.	**Tricolored Blackbird** *Agelaius tricolor*	None/ Cand. CE G2G3/S1S2 SSC (Nesting)	March 15 through August 15	Requires open water, protected nesting substrate, & foraging area with insect prey near nesting colony.	No. Appropriate nesting habitat not present in Study Area. Observed within approximately 2 miles of Study Area in April 2018.	No	No Effect
2.	**Nelson's Antelope Squirrel** *Ammospermophilus nelsoni*	None/Threatened G2/S2S3 None	February - May	Open, rolling hills and gentle slopes; Typically found in arid annual grassland and shrubland communities.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
3.	**Bakersfield Legless Lizard** *Anniella grinnelli*	None/None G2/S2S3 SSC	n/a	Southern San Joaquin Valley. Known from two disjunct areas: the east side of the Carrizo Plain and portions of the city limits of Bakersfield	No. Appropriate habitat is not present in the Study Area.	No	No Effect
4.	**Northern California Legless Lizard** *Anniella pulchra*	None/None G3/S3 SSC	n/a	Chaparral, coastal dunes, coastal scrub, sandy or loose loamy soils under sparse vegetation.	No. Appropriate habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
5.	**California Legless Lizard** *Anniella* sp.	None/None G3G4/S3S4 SSC	n/a	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of Anniella not yet assigned to new species within the *Anniella pulchra* complex.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
6.	**California Glossy Snake** *Arizona elegans occidentalis*	None/None G5T2/S2 SSC	May - July	Arid scrub, rocky washes, grassland, chaparral. Nocturnal. Feeds on small mammals, birds, and other reptiles.	Moderate. Appropriate habitat and food sources present. Nearest CNDDB record is 2 miles north.	No	Potential Adverse Effect Can be Mitigated
7.	**Short-eared owl*** *Asio flammeus*	None/None G5/S3 SSC (nesting)	March 15 through August 15	Inhabits grasslands and open areas with low vegetation. Feeds on small mammals. Nests on dry ground in tall grasses. May be winter residents or year-round in southern portion of range.	High. Appropriate nesting and foraging habitat is present and ground-roosting raptor sign observed at site. Known nesting site 0.75 mile west of site in 2017.	No	Potential Adverse Effect Can be Mitigated
8.	**Burrowing Owl** *Athene cunicularia*	None/none G4/S3 SSC (Burrow sites and some wintering sites)	March 15 through August 15	Burrows in squirrel holes in open habitats with low vegetation.	No. Appropriate burrow habitat is not present in the Study Area.	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
9.	**Swainson's Hawk** *Buteo swainsoni*	None/Threatened G5/S3 None	March 15 through August 15	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, agricultural fields.	No. Pine trees onsite are not suitable as nesting sites. Eucalyptus on site is too small for nesting. Species known to nest in recent years within 3 miles of Study Area.	No	No Effect
10.	**Mountain Plover** *Charadrius montanus*	None/None G3/S2S3 SSC (Wintering)	November - February (Wintering)	Short grasslands, plowed fields, etc. Needs short vegetation or bare ground and flat topography.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
11.	**Giant Kangaroo Rat** *Dipodomys ingens*	Endangered/Endangered G1G2/S1S2 None	n/a	Sandy loamy soil on level and gently sloping ground with annual grasses, forbs, and scattered shrubs. Sw. San Joaquin Valley.	Low. Appropriate habitat present however no sign of species (colonial precincts) observed. Nearest CNDDB record is 3 miles northwest and is from 1916 (CNDDB 38).	No	No Effect
12.	**Short-nosed Kangaroo Rat** *Dipodomys nitratoides brevinasu*	None/None G3T1T2/S1S2 SSC	n/a	Grasslands with scattered shrubs, desert shrub association on powdery soils	Low. Appropriate habitat present. Nearest CNDDB record is 15 miles north, however species also described in Cuyama Valley (USFWS 1998).	No	No Effect

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
13.	**Tipton Kangaroo Rat** *Dipodomys nitratoides nitratoides*	Endangered/Endangered G3T1T2/S1S2 None	n/a	Saltbush scrub and sink scrub communities.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
14.	**Western Pond Turtle** *Emys marmorata*	None/none G3G4/S3 SSC	n/a	Permanent or semi-permanent streams, ponds, lakes.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
15.	**Kern Primrose Sphinx Moth** *Euproserpinus euterpe*	Threatened/None G1G2/S1 None	Spring	Host plant is evening primrose (*Camissonia contorta epilobioides*).	No. Habitat is marginal, with no washes. Larval food plant does not occur onsite. Records of species in Cuyama Valley; however exact locations unspecified.	No	No Effect
16.	**Blunt-nosed Leopard Lizard** *Gambelia sila*	Endangered/Endangered G1/S1 Fully Protected	Spring	Semiarid grasslands, alkali flats, and washes; San Joaquin Valley and adjacent lands. 30-730 m.	No. Habitat in the Study Area is generally too overgrown and fragmented by surrounding agriculture.	No	No Effect
17.	**California Condor** *Gymnogyps californianus*	Endangered/Endangered G1/S1 Fully Protected	March 15 through August 15	Wide-ranging over Coast Ranges from Ventura to Big Sur. High Mtn Condor Lookout located in Pozo.	Low. Potential to occur is very low. Appropriate nesting habitat is not present in the Study Area	No	No Effect
18.	**Loggerhead shrike*** *Lanius ludovicianus*	None/None G4/S4 SSC (nesting)	March 15 through August 15	Open areas with low vegetation and scattered shrubs. Nests in dense shrubs near open habitat.	High. Appropriate nesting and foraging habitat is present. Species observed on site.	Yes (not nesting)	Potential Adverse Effect Can be Mitigated

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
19.	**San Joaquin Coachwhip** *Coluber flagellum ruddocki*	None/None G5T2T3/S2? SSC	n/a	Open, dry, treeless areas, including grasslands and saltbush scrub; takes refuge in burrows and under shaded vegetation	High. Appropriate habitat present and species known to occur within 1 mile (L. Gadsby 2017).	No	Potential Adverse Effect Can be Mitigated
20.	**Tulare Grasshopper Mouse** *Onychomys torridus tularensis*	None/None G5T1T2/S1S2 SSC	n/a	Hot arid valleys and scrub deserts; S. San Joaquin Valley. Eats arthropods.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
21.	**Coast Horned Lizard** *Phrynosoma blainvillii*	None/None G3G4/S3S4 SSC	May - September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No. Habitat in Study Area is not suitable. Nearest CNDDB record is 5.7 miles southeast.	No	No Effect
22.	**Western Spadefoot Toad** *Spea hammondii*	None/None G3/S3 SSC	January – August	Vernal pools in grassland and woodland habitats	No. Appropriate aquatic breeding habitat is not present in the Study Area.	No	No Effect
23.	**American Badger** *Taxidea taxus*	None/None G5/S3 SSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Low. Species may travel through or forage at site. No sign of badger (dig outs, dens) observed in Study Area. Nearest CNDDB record is 3.2 miles north.	No	Potential Adverse Effect Can be Mitigated

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting/ Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
24.	**Le Conte's Thrasher** *Toxostoma lecontei*	None/None G4/S3 SSC	March 15 through August 15	Desert wash, Mojavean desert scrub, Sonoran desert scrub; a desert resident, primarily of open desert wash and scrub habitats.	No. Appropriate habitat is not present in the Study Area.	No	No Effect
25.	**San Joaquin Kit Fox** *Vulpes macrotis mutica*	Endangered/Threatened G4T2/S2 None	December – July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Low. Species could be transient in the area. No sign of species detected in Study Area in 2017 or 2018.	No	Potential Adverse Effect Can be Mitigated

Habitat characteristics are from the Jepson Manual and the CDNNB.
*not listed in the CNDDB or CNPS for the search area, but possibly for the location.

Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened

CE: California Endangered
CT: California Threatened
Cand. CE: Candidate for California Endangered
Cand. CT: Candidate for California Threatened

SSC: CDFW Species of Special Concern
FP: CDFW Fully-Protected

Cuyama, 1100.04
Small mammal live trapping

DATE: 4/11/18

BIOLOGISTS: KristenAndersen

DAY (1-2): 1 VISIT (am/pm): AM Start time: 0730 End Time: 1030 Start temp (F°): 50 End temp (F°): 62 %clouds: ø Rain: ø

Fate: N=new; R=recapture; D=dead Age: A=adult; SA=sub-adult; J=juvenile Sex: M=male; F=female; U=unknown Br.: (breeding status): 1=non-breeding; 2=pregnant; 3=lactating; 4=testes enlarged; 5=unknown Recap: Recapture, if so, what's the mark? Please remember to list any incidental animal sightings on the back or in the margins of this data sheet.

total = 9

Trap number	Species code	Fate	Age	Sex	Br.	Recap	Mark	Total wgt g	Bag wgt g	Total lgth	Tail lgth	Foot lgth	Ear lgth	Comments
I-1	P.man			M	5			44	29	80	61	19	11	—
I-5	SPRV													
I-6	SPRV													
* G-5	~~DENT~~ DIHE	N		M	1			87	32	110	150	38	9	4 toad + sprucktoad tadpoles (white stripe over hind haunch)
G-4	SPRV													
G-3	SPRV													
G-2	DIHE			M	1			100+	29		170		14	didn't get all measurements, escaped
G-1	DIHE			M	1			100+	26	123	160	45	10	bedding removed
E-1	SPRV													
E-2	MOBB													Bedding removed, door open
C-5	DIHE			M	1			100+	27	125	172	44	15	—
C-4	DIHE			M	1			100+	29	120	164	38	11	—
A-1	DIHE			F	1			100+	30	124	160	40	13	
A-3	PEMA			F	5			51	28	70	63	18	11	manage ~~bad~~ sensitive
A-4	PEMA			M	4			50	30	71	64	19	11	

Date data entered: _____

WUKI COTA (nest) NOHA SAPU COHA

* Hawkmoth larval food source = camissonia Tetrapteron sp. (?)

Cuyama, 1100.04
Small mammal live trapping

DATE: 4/11/18

BIOLOGISTS: GROH, [redacted]

DAY (1-2): 1 VISIT (am/pm): AM Start time: 0730 End Time: _____ Start temp (C): 5° End temp (C): _____ %clouds: Ø Rain: Ø

Fate: N=new; R=recapture; D=dead Age: A=adult; SA=sub-adult; J=juvenile Sex: M=male; F=female; U=unknown Br.: (breeding status): 1=non-breeding; 2=pregnant; 3=lactating; 4=testes enlarged; 5=unknown Recap: Recapture, if so, what's the mark? Please remember to list any incidental animal sightings on the back or in the margins of this data sheet.

Trap number	Species code	Fate	Age	Sex	Br.	Recap	Mark	Total wgt	Bag wgt	Total lgth	Tail lgth	Foot lgth	Ear lgth	Comments
I-2	[redacted]	N	A	M	4			112g	28g	115	175	40	17	
H-6	DIHE	N	A	M	4			109g	28g	125	165	44	13	
H-5	SPRO									[redacted]				
H-4	DIHE	N	A	M	4			°	°	120	175	42	13	
H-3	SPRO													
H2	DIHE	N	A	M	4			°	°	120	184	40	15	
H1	SPRO													
F1	SPRO													
F3	DIHE	N	J	F	1			78	33	100	150	40	14	HIND LEG STRIPE
F2	DIHE	N	A	M	4			°	°	110	170	44	15	
F1	DIHE	N	A	M	4			°	°	120	100*	43	15	*TAIL PREV CUT
D3	DIHE	N	A	M	1			°	°	111	168	42	12	
D1	DIHE	N	A	M	4			°		120	180	43	14	
B1	DIHE	N	J	M	1			90	30	112	150	40	13	4 + spine
B5	DIHE	N	A	M	4			°	°	N/A	N/A	41	13	ESCAPE
A5	DIHE	N	A	M	4			°	°	124	176	43	15	

SPRO
F2
D2 *
B2
B3

Date data entered: _____

Pg ___ of ___

Cuyama, 1100.04
Small mammal live trapping

DATE: 4/12/18

BIOLOGISTS: Kristen Andersen

DAY (1-2): 2 VISIT (am/pm): am Start time: 0730 End Time: 1000 Start temp (F°): 42 End temp (F°): 47 %clouds: 95 Rain: overnight ~~night~~ rain

Fate: N=new; R=recapture; D=dead Age: A=adult; SA=sub-adult; J=juvenile Sex: M=male; F=female; U=unknown Br.: (breeding status): 1=non-breeding; 2=pregnant; 3=lactating; 4=testes enlarged; 5=unknown Recap: Recapture, if so, what's the mark? Please remember to list any incidental animal sightings on the back or in the margins of this data sheet.

Total caps = (7)

Trap number	Species code	Fate	Age	Sex	Br.	Recap	Mark	Total wgt	Bag wgt	Total lgth	Tail lgth	Foot lgth	Ear lgth	Comments
I-3	DI HE			M	1			100+	28	-	160	42		—
I-5	SPRU.													
I-6	DI HE			M	1			100+	28	-	160	40	14	—
G-5	SPRU													
G-4	SPRU													
G-3	SPRU													
C-1	SPRU													
E-3	DI HE			M	1			100+	28	—	162	40	15	Al adding out of trap; eye + [illegible]
E-4	SPRU.													
E-5	SPRU;													filled w/ dirt!!
C-5	DI HE			F	3			100+	29	120	170	41	14	enlarged mammae
C-4	SPRU													
A-1	DI HE.			F	3			100+	25	118	165	41	13	enlarged mammae
A-2	SPRU													
A-3	DI HE.			M	4			100+	28	122	—	42	12	
A-5	DI HE			M	1			100+	25	100	150	40	10	juvenile

Pg ___ of ___

Date data entered: _____

Cuyama, 1100.04
Small mammal live trapping

DATE: 4/12/18

BIOLOGISTS: GROH

DAY (1-2): 2 VISIT (am/pm): AM Start time: 0730 End Time: _____ Start temp (C): 42°F End temp (C): _____ %clouds: 95 Rain: OVERNIGHT

Fate: N=new; R=recapture; D=dead Age: A=adult; SA=sub-adult; J=juvenile Sex: M=male; F=female; U=unknown Br.: (breeding status): 1=non-breeding; 2=pregnant; 3=lactating; 4=testes enlarged; 5=unknown Recap: Recapture, if so, what's the mark? Please remember to list any incidental animal sightings on the back or in the margins of this data sheet.

Trap number	Species code	Fate	Age	Sex	Br.	Recap	Mark	Total wgt	Bag wgt	Total lgth	Tail lgth	Foot lgth	Ear lgth	Comments
H-1	DIHE		A	m	1			+	—	111	178	42	17	5 TOES
H2	DIHE		A	m	4			+	—	110	180	43	16	5 TOES
H3	DIHE		A	m	4			+	—	135	200	43	15	5 TOES
H4	SPRU													
H5	DIHE		~~5~~ A	m	1			89	34	100	170	45	11	5 TOES
F4	DIHE		A	m	1			+	~	110	170	45	14	5 TOES
F1	DIHE		A	m	4			+	~	125	185	43	13	
D4	DIHE		A	m	1			+	~	110	172	44	12	
D5	DIHE		A	m	4			+	~	114	175	41	12	
B5	DIHE		A	F	3	?		+	~	125	175	44	14	
B3	DIHE		A	m	4			+	~	110	185	42	12	
B2	DIHE		A	m	4			+	~	110	155*	42	15	* TAIL CUT FROM TRAP
A4	PEMA		A	m	4			59	32	92	77	23	14	

SPRU H4 H5 F4 F1 D4 D5 B5 B3 B2 A4

Date data entered: _____

Pg ___ of ____

Air Quality/Greenhouse Gas Report

SEPV Cuyama Solar Project

Santa Barbara County

Prepared for:

SEPV Cuyama, LLC

c/o Solar Electric Solutions
11726 San Vicente Blvd., Suite 414
Los Angeles, CA 90049

Prepared by:

OB-1
AIR ANALYSES

308 San Dimas Ave
Oceanside, CA 92057

March 2018

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Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
2016 Plan	2016 Ozone Plan
2017 Report	August 2017 Report
A	areawide
AAQS	ambient air quality standard
AB	Assembly Bill
AC	alternating current
AP	aggregated point
APCD	Santa Barbara County Air Pollution Control District
AP-42	Compilation of Air Pollutant Emission Factors
AQMP	Imperial County Air Quality Management Plan
AQR	Air Quality Report
AR4	IPCC's Fourth Assessment Report
BAU	business as usual
BMP	best management practices
CAAQS	California Ambient Air Quality Standards
CalEEMod®	California Emissions Estimator Model
CARB	California Air Resources Control Board
CAT	Climate Action Team
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CH_4	methane
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Santa Barbara
CTI	California Toxic Inventory
DC	direct current
District	Santa Barbara County Air Pollution Control District
DPM	diesel particulate matter
ECAP	Energy and Climate Action Plan
EI	emission inventory
EO	Executive Order
EPA	United States Environmental Protection Agency
ESRL	Earth System Research Laboratory
FCAA	Federal Clean Air Act
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IPCC	International Panel on Climate Change
$MMTCO_2e$	million metric tons of carbon dioxide equivalents

Acronyms and Abbreviations

MT	metric ton
$MTCO_2e$	metric tons of carbon dioxide equivalents
MWac	megawatts of alternative current
N	natural
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NH_3	ammonia
NH_4NO_3	ammonium nitrate
NO	nitric oxide
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
NSR	New Source Review
O&M	operations and maintenance
OD	on-road diesel
OG	on-road gasoline
OMD	off-road mobile diesel
OMG	off-road mobile gasoline
OMO	off-road mobile other
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric
PM	particulate matter
PM_{10}	respirable particulate matter of 10 micrometers or less in size
$PM_{2.5}$	fine particulate matter of 2.5 micrometers or less in size
ppb	parts per billion
ppm	parts per million
PV	photovoltaic
ROC	reactive organic compounds
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
SAR	Second Assessment Report
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SP	stationary point
TAC	toxic air contaminants
TCM	transportation control measures
UFP	ultrafine particles
VMT	vehicle miles traveled
VOC	volatile organic compounds
WRI	World Resources Institute

SECTION 1.0 – INTRODUCTION

1.1. Report Purpose

The purpose of this Air Quality Report (AQR) is to analyze the potential air quality and climate change impacts that could occur with the construction and operation of the SEPV Cuyama Solar Facility (Project), in Santa Barbara County, California. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 et seq.). The methodology follows Scope and Content of Air Quality Sections in Environmental Documents[1] as prepared by the Santa Barbara County Air Pollution Control District (APCD or District) for quantification of emissions and evaluation of potential impacts to air resources.

1.2. Project Location

The Project is in the Cuyama Valley, an area isolated in the far northeastern portion of the county which is a large agricultural area bounded by the Caliente Mountain Range to the north and the Sierra Madre Mountains to the south. The Project site will be approximately 2.7 miles southeast of Cuyama, a census-designated place in unincorporated northeastern Santa Barbara County, California (see Figure 1) and 35 miles north-northeast of the City of Santa Barbara, near the San Luis Obispo County line (See Figure 2). The site is located 1 mile from San Luis Obispo County, approximately ½ miles east of Kirschenmann Road and approximately ½ miles north of Foothill Road (see Figure 3). Agricultural uses surround the site, and in the general surrounding area.

1.3. Project Description

The Project is constructing and operating a 3-megawatt of alternating current (MWac), solar photovoltaic (PV) electricity generating facility called SEPV Cuyama on approximately 20 acres in an unincorporated area of Santa Barbara County (County). The proposed solar project site is to the east of the existing 40 MWac Cuyama Solar Array project site.

The project will utilize PV modules mounted on single-axis sun tracking support structures to generate 3 MWac of renewable electrical energy. Electricity generated by the project will be interconnected to the PG&E electrical distribution system at an existing PG&E 21kV line that runs north-south along western boundary line of the property (SEPV Cuyama 2017)[2]. The Pacific Gas and Electric (PG&E) Substation is approximately 2.5 miles northwest of the project site.

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[1] Scope and Content of Air Quality Sections in Environmental Documents. Technology and Environmental Assessment Division. Santa Barbara County Air Pollution Control District. June 2017 Limited Update.

[2] Conditional Use Permit Application for SEPV Cuyama: 3MW Solar Photovoltaic Electricity Generating Facility, Santa Barbara County, California. SEPV Cuyama, LLC. November 2017.

Figure 1 – Project Area

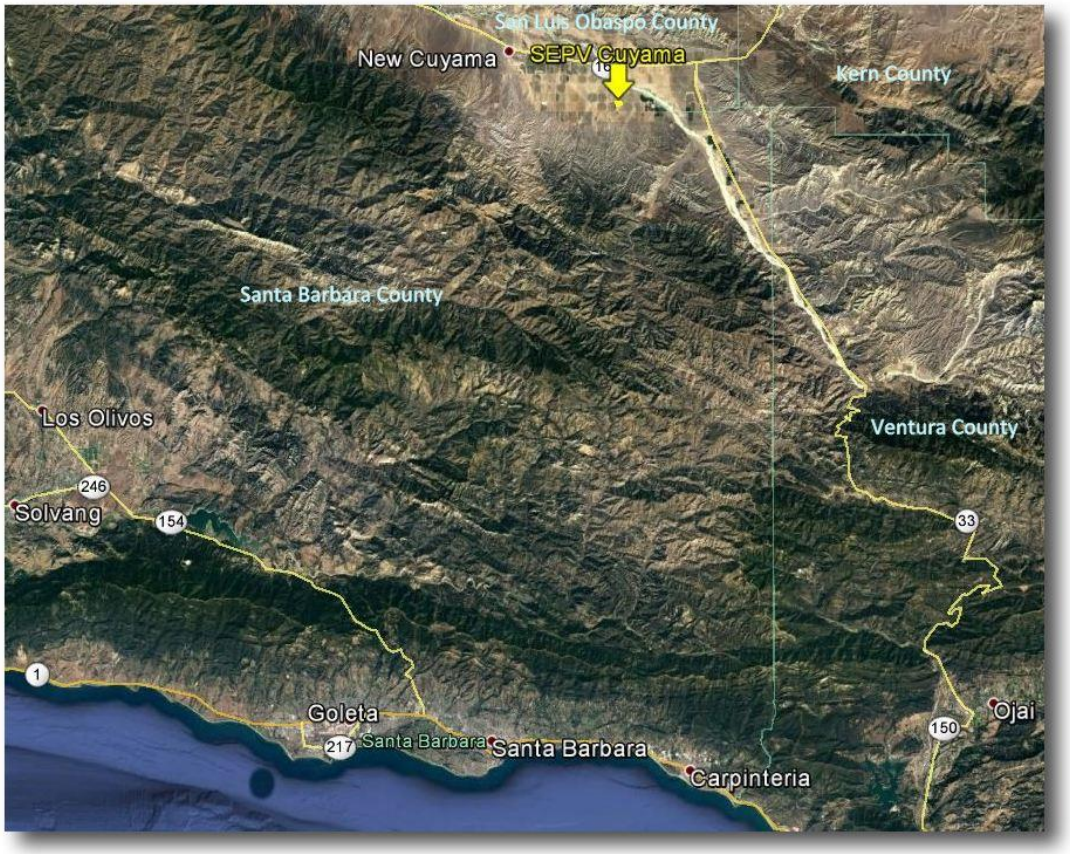

Figure 2 – Project Vicinity

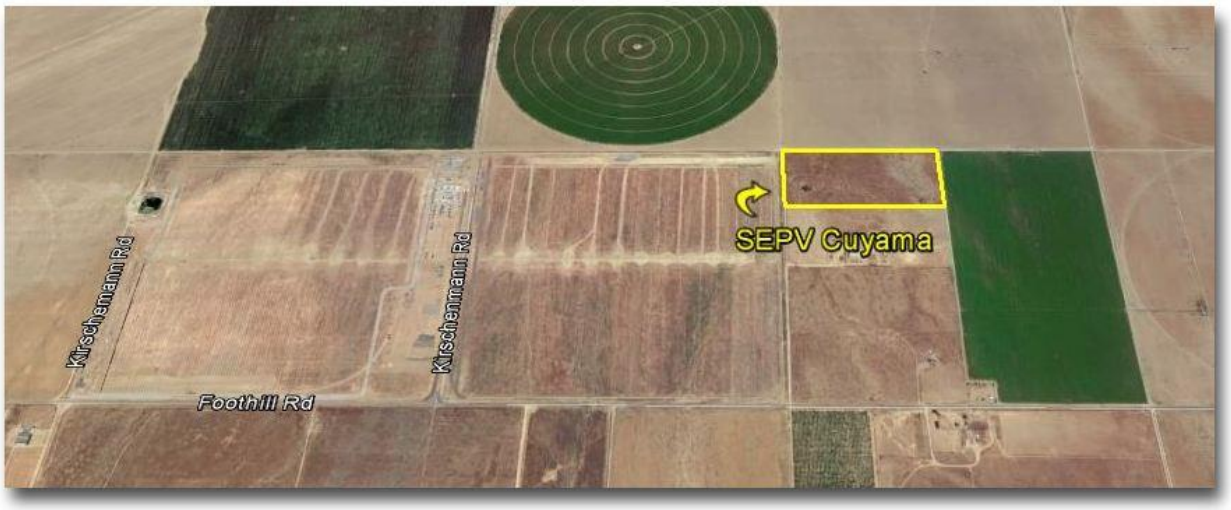

Figure 3 – Project Location

The project site consists of one 20-acre parcel (APN# 149-150-033). The portion of the site that will be impacted by the arrays, equipment, and components as well as access roads will be approximately 6 acres, less than 30% of the total area of the parcel. The impacted acreage is significantly less than the full acreage because of setbacks, access roads and because of the spacing between array rows (more than twice as much space between rows than is covered by the width of the arrays) to minimize inter-row shading of the photovoltaic (PV) modules.

The major construction components of the project are:

- PV Modules – will be wired together in a series and parallel configuration and connected to direct current (DC) to alternate current (AC) inverters and transformers located throughout the project site.
- Support Structures – are typically mounted on foundations of steel beams or tubes directly embedded into the ground to a depth of five to eight feet depending upon loading and soil conditions, typically driven into the earth with vibratory or hydraulic press-in methods.
- Electronic/Electrical Equipment – DC electrical output from the PV modules will be transferred to inverters which convert the DC energy to high quality utility grade AC electricity. Ancillary equipment includes switch/fuse panels, control and protection equipment, communications hardware, and meteorological data equipment.

The operational features and characteristics include site security and fencing; remotely operated; minimal maintenance; minimal lighting; no hazardous materials; negligible noise; and decommissioning.

SECTION 2.0 – EXISTING CONDITIONS

Air quality is determined primarily by the type and number of contaminants emitted into the atmosphere, the size and topography of the air basin, and its meteorological conditions. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollution emissions and air quality.

2.1. Climatology/ Meteorology

Meteorology is the study of weather and climate. Weather refers to the state of the atmosphere at a given time and place regarding temperature, air pressure, humidity, cloudiness, and precipitation. The term "weather" refers to conditions over short periods; whereas conditions over extended periods, generally at least 30 to 50 years, are referred to as climate. Climate, in a narrow sense, is usually defined as the "average weather," or more rigorously as the statistical description in terms of the mean and variability of relevant quantities over a period ranging from months to thousands or millions of years. These quantities are most often surface variables such as temperature, precipitation, and wind.

Santa Barbara County generally experiences a warm-summer Mediterranean climate characteristic of coastal California where onshore breezes moderate temperatures, resulting in warmer winters and cooler summers compared with places farther inland.

However, the project site is in Cuyama Valley, which is a valley along the Cuyama River in northern Santa Barbara County, southern San Luis Obispo County, southwestern Kern County, and northwestern Ventura County. Therefore, the microclimate surrounding the project site is locally different than the City of Santa Barbara and general Santa Barbara County conditions. The climate of the Valley is semi-arid with hot summers and cool winters. Almost all precipitation occurs in the winter in the form of rain, although snow has fallen on occasion. Since the Valley is open to the sea, there is occasional marine influence.

The nearest National Weather Service Cooperative Observer Program weather station to the project is the station in New Cuyama, which is located approximately 6 miles south-southwest of the project. At the New Cuyama station [3], average recorded rainfall during the Period of Record (1974 to 2016) measured 7.84 inches, with 73 percent of precipitation occurring between December and March. The number of "wet" days with at least 0.01 inches are 17 in winter, 11 days in spring, 6 days in fall, and only 1 day in summer, for a total of 35 days per year.

Monthly average maximum temperatures at this station vary annually by 33.5 degrees Fahrenheit (ºF); from 94.3 °F at the hottest to 60.8 ºF at the coldest and the monthly average minimum temperatures vary by 24.3 °F annually; i.e. from 31.5 °F to 55.8 ºF.

[3] Western U.S. Climate Historical Summaries. Western Regional Climate Center. http://www.wrcc.dri.edu/Climsum.html. Accessed February 2018.

2.2. Local Air Quality Conditions

2.2.1 Criteria Air Pollutants

As required by the Federal Clean Air Act (FCAA), the Environmental Protection Agency (EPA) has identified criteria pollutants and established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide, suspended particulate matter (PM), and lead. Suspended PM has standards for both PM with an aerodynamic diameter of 10 micrometers or less (respirable PM, or PM_{10}) and PM with an aerodynamic diameter of 2.5 micrometers or less (fine PM, or $PM_{2.5}$). The California Air Resources Board (CARB) has established separate standards for the State, i.e. the California Ambient Air Quality Standards (CAAQS). CARB established CAAQS for all the federal pollutants and sulfates, hydrogen sulfide, and visibility-reducing particles.

For some of the pollutants, the identified air quality standards are expressed in more than one averaging time to address the typical exposures found in the environment. For example, CO is expressed as a one-hour averaging time and an eight-hour averaging time. Regulations have set NAAQS and CAAQS limits in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$). The standards are presented in Table 1 and the following text provides descriptions and health effects of each.

2.2.1.1 Ozone

Ozone is not emitted directly to the atmosphere but is formed by photochemical reactions between reactive organic gases[4] (ROG) and oxides of nitrogen (NO_X) in the presence of sunlight. The long, hot, humid days of summer are particularly contributing to ozone formation; thus, ozone levels are of concern primarily during the months of May through September.

- **Reactive organic gases (ROG)** are defined as any compound of carbon, excluding CO, carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participate in atmospheric photochemical reactions. It should be noted that there are no State or national ambient air quality standard (AAQS) for ROG because ROGs are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROGs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
- **Nitrogen oxides (NO_X)** serve as integral participants in the process of photochemical smog production. The two major forms of NO_X are nitric oxide (NO) and NO_2. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the

[4] Sometimes known as reactive organic compounds (ROC) or volatile organic compounds (VOC). All describe essentially the same thing with minor differences. All are a composite of various organic gases that are reactive to sunlight and are one of the components in the formation of smog. They are very similar, and in this document, they will be used synonymously.

combination of NO and oxygen. NO_X is an ozone precursor. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an AAQS has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more AAQSs. When NO_X and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone.

Table 1 – National and State Ambient Air Quality Standards[5]

Air Pollutant	Averaging Time	California Standard	National Standard
Ozone (O_3)	1 hour 8 hour	0.09 ppm 0.070 ppm	— 0.070 ppm
Respirable particulate matter (PM_{10})	24 hour Mean	50 µg/m^3 20 µg/m^3	150 µg/m^3 —
Fine particulate matter ($PM_{2.5}$)	24 hour Mean	— 12 µg/m^3	35 µg/m^3 12.0 µg/m^3
Carbon monoxide (CO)	1 hour 8 hour	20 ppm 9.0 ppm	35 ppm 9 ppm
Nitrogen dioxide (NO_2)	1 hour Mean	0.18 ppm 0.030 ppm	100 ppb 0.053 ppm
Sulfur dioxide (SO_2)	1 hour 24 hour	0.25 ppm 0.04 ppm	75 ppb —
Lead	30-day Rolling 3-month	1.5 µg/m^3 —	— 0.15 µg/m^3
Sulfates	24 hour	25 µg/m^3	**No Federal Standard**
Hydrogen sulfide	1 hour	0.03 ppm	
Vinyl chloride	24 hour	0.01 ppm	
Visibility-reducing particles	8 hour	Extinction coefficient of 0.23 per kilometer, visibility of ten miles or more due to particles when relative humidity is less than 70%.	

Abbreviations:
ppm = parts per million *ppb = parts per billion* *30-day = 30-day average*
µg/m^3 = micrograms per cubic meter *Mean = Annual Arithmetic Mean*

5 Ambient Air Quality Standards. California Air Resources Board. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed February 2018.

2.2.1.2 Particulate matter (PM)

PM is a general term used to describe a complex group of airborne solid, liquid, or semi-volatile materials of various size and composition. Primary PM is emitted directly into the atmosphere from both human activities (including agricultural operations, industrial processes, construction and demolition activities, and entrainment of road dust into the air) and non-anthropogenic activities (such as windblown dust and ash resulting from forest fires). Secondary PM is formed in the atmosphere from predominantly gaseous combustion by-product precursors, such as sulfur oxides and NO_X, and ROGs.

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have established two types of PM air quality standards as shown in Table 1. PM_{10} corresponds to the fraction of PM no greater than 10 microns in aerodynamic diameter and is commonly called respirable particulate matter, while $PM_{2.5}$ refers to the subset of PM_{10} of aerodynamic diameter smaller than 2.5 microns, which is commonly called fine particulate matter. An even smaller category of PM are the ultrafine particles (UFP), which are less than 1 microns. UFPs are currently unregulated but penetrate deepest in the lungs and can even be absorbed directly into the bloodstream.

PM air pollution has undesirable and detrimental environmental effects. PM affects vegetation, both directly (e.g. deposition of nitrates and sulfates may cause direct foliar damage) and indirectly (e.g. coating of plants upon gravitational settling reduces light absorption). PM also accumulates to form regional haze, which reduces visibility due to scattering of light. Agencies concerned with haze include the National Park Service, the U.S. Forest Service, the Western Regional Air Partnership, and the Western States Air Resources Council.

PM is respirable, with $PM_{2.5}$ and UFP reaching the alveoli deep in the lungs, and PM_{10} depositing principally in the nose and throat area. PM deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/ cardiovascular function. For these individuals, adverse health effects of PM pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading for example to increased risks of hospitalization and mortality from asthma attacks and heart attacks.

2.2.1.3 Other Criteria Pollutants

The standards for other criteria pollutants are either being met or are unclassified in the County, and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future.

2.2.2 Pollutant Transport

As stated above, ozone is a "secondary" pollutant, formed in the atmosphere by reactions between NO_X and ROG. These reactions are driven by sunlight and proceed at varying rates. Transport is the movement of ozone or the pollutants that form ozone from one area (known as the upwind area) to another area (known as the downwind area). Pollutant transport is a very complex phenomenon. Sometimes transport is a straightforward matter of wind blowing from one area to another at ground level, carrying ozone precursors with it, but usually it is not that simple. Ozone and ozone forming emissions from upwind areas can mix with locally generated ozone and locally generated emissions, often making it difficult to determine the origin of the emission causing high pollution levels.

CARB reviewed the status of transport couples,[6] where local air districts may influence the attainment status of others, in the State and recognized that Santa Barbara County lies immediately to the northwest of the South Coast and are both sources and recipients of transported pollutants. Ozone violations in Santa Barbara County are sometimes caused by local emissions, and sometimes caused by a mixture of transported and local emissions. Pollutants from the South Coast Air basin can be blown offshore and carried to the coastal cities of both counties. CARB also found that modeling studies have shown that when winds blow from the coast, eastward through the Simi Valley, pollutants from Santa Barbara and Ventura County can be carried into the San Fernando Valley and contribute to violations there. The results show that the impact of the South Coast on Santa Barbara County is significant but inconsequential, because of localized pollution.

2.2.3 Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Assembly Bill (AB) 1807[7] sets forth a procedure for the identification and control of TAC in California defines a TAC as an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. There are almost 200 compounds that have been designated as TACs in California. The ten TACs posing the greatest known health risk in California, based primarily on ambient air quality data, are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, formaldehyde, methylene chloride, para-dichlorobenzene, perchloroethylene, and diesel particulate matter (DPM).

TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure.

Since 2004, CARB has maintained the California Toxic Inventory (CTI), which provides emissions estimates by stationary point (SP) and aggregated point (AP); areawide (A); on-road gasoline (OG)

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6 Staff Report - Ozone Transport: 2001 Review. Planning and Technical Support Division. California Air Resources Board. April 2001.

7 Enacted in September 1983. Health & Safety Code section 39650 et seq., Food & Agriculture Code Section 14021.

and on-road diesel (OD); off-road mobile gasoline (OMG); off-road mobile diesel (OMD); and off-road mobile other (OMO); and natural sources (N). Stationary sources include point sources provided by facility operators and/or districts pursuant to the Air Toxics "Hot Spots" Program (AB 2588), and aggregated point sources estimated by CARB and/or districts. Areawide sources are those that do not have specific locations and are spread out over large areas such as consumer products and unpaved roads. Mobile sources consist of on-road vehicles such as passenger cars and trucks, motorcycles, busses, and heavy-duty trucks. Off-road sources include trains, ships, and boats. Natural sources like wildfires are also included.

The top three contributors of the potential cancer risk come primarily from motor vehicles - DPM, 1,3 butadiene, and benzene. Cleaner motor vehicles and fuels are reducing the risks from these priority toxic air pollutants. The remaining toxic air pollutants, such as hexavalent chromium and perchloroethylene, while not appearing to contribute as much to the overall risks, can present high risks to people living close to a source. CARB has control measures that are either already on the books, in development, or under evaluation for most of the remaining top ten, where actions are suitable through our motor vehicle, consumer products, or industrial source programs. Of these top ten, carbon tetrachloride is unique in that most of the health risk from this toxic air pollutant is not attributable to specific sources, but rather to background concentrations. Emissions from the top ten[8] TACs in Santa Barbara County in 2010 are presented in Table 2.

Table 2 – 2010 TAC Emissions[9] in Santa Barbara County (tons per year)

Toxic Air Contaminant	SP	AP	A	OD	OG	OMG	OMD	OMO	N	Total
Diesel particulate matter (DPM)	15.23	15.60	0.19	65.96			734.56			831.53
1,3-Butadiene	3.95	0.06	0.06	0.26	11.93	6.04	1.93	1.01	37.81	71.36
Benzene	11.92	29.31	1.48	2.77	55.62	26.45	20.30	7.84	31.46	187.16
Acetaldehyde	6.89	2.39	30.36	10.19	9.40	7.14	74.59	1.72	1,257.85	1,400.52
Hexavalent Chromium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.01
para-Dichlorobenzene			13.99							13.99
Formaldehyde	47.61	52.30	35.43	20.39	20.40	31.55	149.28	4.52		362.93
Methylene Chloride		1.17								1.17
Perchloroethylene	0.19	33.07	15.96							49.22
Carbon Tetrachloride	0.01									0.01

Note: *SP = stationary point* *AP = aggregated point* *A = areawide* *OD = on-road diesel* *OG = on-road gasoline* *OMO = off-road mobile diesel* *OMD = off-road mobile gasoline* *OMO = off-road mobile other* *N = natural*

8 Based on relative contributions to the estimated potential cancer risk from outdoor levels for the year 2000.

9 California Toxics Inventory – Draft 2010 CTI Summary Table. California Air Resources Board. (November 2013. http://www.arb.ca.gov/toxics/cti/cti.htm. Accessed February 2018.

2.2.4 Sensitive Receptors

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. These people include children, the elderly, and persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather are defined as sensitive receptors.

Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods, resulting in sustained exposure to any pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation.

The nearest residences are south of the site (on parcels 149-150-034 and 149-150-036). There are no other residences within the 2,200-foot radius area.

2.3. Greenhouse Gases

Constituent gases that trap heat in the Earth's atmosphere are called greenhouse gases (GHGs), analogous to the way a greenhouse retains heat. GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. Prominent GHGs contributing to this process include CO_2, methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). Without the natural heat-trapping effect of GHG, the earth's surface would be about 34 °F cooler[10]. This is a natural phenomenon, known as the "Greenhouse Effect," is responsible for maintaining a habitable climate. However, anthropogenic emissions of these GHGs more than natural ambient concentrations are responsible for the enhancement of the greenhouse effect and have led to a trend of unnatural warming of the Earth's natural climate known as global warming or climate change, or more accurately Global Climate Disruption. Emissions of these gases that induce global climate disruption are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors.

The global warming potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere. Individual GHG compounds have varying GWP and atmospheric lifetimes. The reference gas for the GWP is CO_2; CO_2 has a GWP of one. The calculation of the CO_2 equivalent (CO_2e) is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent metric. Methane's warming potential of 25 indicates that methane has a 25 times greater warming affect than CO_2 on a molecular basis. he larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for

[10] Climate Action Team Report to Governor Schwarzenegger and the California Legislature. California Environmental Protection Agency, Climate Action Team. March 2006.

GWPs is 100 years. GWPs for the three GHGs produced by the Project are presented in Methane (**CH4)** is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH4 is combustible, and it is the main constituent of natural gas-a fossil fuel. CH4 is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Human sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH4. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

. A CO_2e is the mass emissions of an individual GHG multiplied by its GWP. GHGs are often presented in metric tons (MT) of CO_2e ($MTCO_2e$).

Table 3 – Global Warming Potentials[11]

Pollutant	GWP for 100-year time horizon	
	Second assessment report (SAR)[12]	4th assessment report (AR4) [13]
Carbon dioxide (CO_2)	1	1
Methane (CH_4)	21	25
Nitrous oxide (N_2O)	310	298

Note: Current protocol is to use the 4th assessment values, however, the second assessment report values are also provided since they are the values used by many inventories and public documents.

Carbon Dioxide (CO_2) is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter, (such as coal, oil, or natural gas) is burned in the presence of oxygen. CO_2 is removed from the atmosphere by CO_2 "sinks", such as absorption by seawater and photosynthesis by ocean-dwelling plankton and land plants, including forests and grasslands. However, seawater is also a source of CO_2 to the atmosphere, along with land plants, animals, and soils, when CO_2 is released during respiration. Whereas the natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood.

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11 Global Warming Potentials. Greenhouse Gas Protocol. World Resources Institute and World Business Council on Sustainable Development. http://www.ghgprotocol.org/files/ghgp/tools/Global-Warming-Potential-Values.pdf. Accessed May 2015.

12 Second Assessment Report. Climate Change 1995: WG I - The Science of Climate Change. Intergovernmental Panel on Climate Change. 1996

13 Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. 2007

Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution. Prior to the industrial revolution, concentrations CO_2 were stable at a range of 275 to 285 ppm[14]. The National Oceanic and Atmospheric Administration (NOAA's) Earth System Research Laboratory (ESRL)[15] indicates that global concentration of CO_2 was 402.29 ppm in August 2017. In addition, the CO_2 levels at Mauna Loa[16] averaged over 400 ppm for the first time during the week of May 26, 2013. These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH_4) is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH_4 is combustible, and it is the main constituent of natural gas-a fossil fuel. CH_4 is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Human sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O) is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas", and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests. Man-made sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically un-reactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they can destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons (HFCs) are synthesized chemicals that are used as a substitute for CFCs. Out of all the GHGs; HFCs are one of three groups with the highest GWP. HFCs are synthesized for

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[14] Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

[15] Recent Global Monthly Mean CO_2. Trends in Atmospheric Carbon Dioxide. Earth System Research Laboratory. National Oceanic and Atmospheric Administration. https://www.esrl.noaa.gov/gmd/ccgg/trends/global.html. Accessed December 2017.

[16] *ibid*

applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface can destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride (SF_6) is an extremely potent greenhouse gas. SF_6 is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF_6 can have a significant long-term impact on global climate change. SF_6 is human-made, and the primary user of SF_6 is the electric power industry. Because of its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF_6 is used extensively in high voltage circuit breakers and switchgear, and in the magnesium metal casting industry.

2.3.1 GHG Emission Levels

Per the World Resources Institute[17] (WRI) in 2014, total worldwide GHG emissions were estimated to be 42,204.5 million metric ton (MMT) of CO_2e ($MMTCO_2e$) and GHG emissions per capita worldwide was 4.2 $MTCO_2e$. These emissions exclude GHG emissions associated with the land use, land-use change, and forestry sector, and bunker fuels. The WRI reports that in 2014, total GHG emissions in the U.S. were 6,371 $MMTCO_2e$, with average GHG emissions per capita of 20.00 $MTCO_2e$ and total GHG emissions in California[18] were 440.4 $MMTCO_2e$ in 2015, with average GHG emissions per capita of 11.3 $MTCO_2e$.

California has a larger percentage of its total GHG emissions coming from the transportation sector (39%) than the U.S. emissions (27%) and a smaller percentage of its total GHG emissions from the electricity generation sector, i.e. California has 11 percent, but the U.S. has 37 percent.

2.3.2 Potential Environmental Effects

Worldwide, average temperatures are likely to increase by 3 °F to 7 °F by the end of the 21st century[19]. However, a global temperature increase does not directly translate to a uniform increase in temperature in all locations on the earth. Regional climate changes are dependent on multiple variables, such as topography. One region of the Earth may experience increased temperature, increased incidents of drought, and similar warming effects, whereas another region may experience

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17 Climate Analysis Indicators Tool. International Dataset. World Resources Institute. http://cait.wri.org/. Accessed December 2017.

18 California Greenhouse Gas Emission Inventory - 2017 Edition. California Air Resources Board. https://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed December 2017.

19 Climate Change 2007: Impacts, Adaptation, and Vulnerability. Website http://www.ipcc.ch/ipccreports/ar4-wg2.htm. Accessed March 2013.

a relative cooling. According to the International Panel on Climate Change's (IPCC's) Working Group II Report[20], climate change impacts to North America may include diminishing snowpack, increasing evaporation, exacerbated shoreline erosion, exacerbated inundation from sea level rising, increased risk and frequency of wildfire, increased risk of insect outbreaks, increased experiences of heat waves, and rearrangement of ecosystems, as species and ecosystem zones shift northward and to higher elevations.

2.3.3 California Implications

Even though climate change is a global problem and GHGs are global pollutants, the specific potential effects of climate change on California have been studied. The third assessment produced by the California Natural Resources Agency (CNRA)[21] explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to reduce climate-change impacts. Projected changes for the remainder of this century in California include:

- **Temperatures** – By 2050, California is projected to warm by approximately 2.7 °F above 2000 averages, a threefold increase in the rate of warming over the last century and springtime warming — a critical influence on snowmelt — will be particularly pronounced.
- **Rainfall** – Even though model projections continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability, improved climate models shift towards drier conditions by the mid-to-late 21st century in Central, and most notably, Southern California.
- **Wildfire** - Earlier snowmelt, higher temperatures, and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning, with human activities continuing to be the biggest factor in ignition risk. Models are showing that estimated that property damage from wildfire risk could be as much as 35 percent lower if smart growth policies were adopted and followed than if there is no change in growth policies and patterns.

The third assessment by CNRA not only defines projected vulnerabilities to climatic changes but analyzes potential impacts from adaptation measures used to minimize harm and take advantage of beneficial opportunities that may arise from climate change.

The report highlights important new insights and data, using probabilistic and detailed climate projections and refined topographic, demographic, and land use information. The findings include:

- The state's electricity system is more vulnerable than was previously understood.
- The Sacramento-San Joaquin Delta is sinking, putting levees at growing risk.
- Wind and waves, in addition to faster rising seas, will worsen coastal flooding.
- Animals and plants need connected "migration corridors" to allow them to move to habitats

[20] *ibid*

[21] Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. California Natural Resources Agency. July 2012 / CEC-500-2012-007

that are more suitable to avoid serious impacts.

- Native freshwater fish are particularly threatened by climate change.
- Minority and low-income communities face the greatest risks from climate change.

2.4. Baseline Conditions

2.4.1 Local Ambient Air Quality

Existing levels of ambient air concentrations and historical trends and projections in the project area are best documented by measurements made by the air districts and CARB. The project site is in a remote location, as such there are no monitors in close proximity. In fact, the nearest monitoring station to the project site is in Kern County in Maricopa on Stanislaus Street, approximately 15 miles northeast of the site. The Maricopa monitor only measures ozone and is representative of air quality in the San Joaquin Valley. The nearest monitor that measures NO_2 is in Santa Barbara County on Paradise Road in the Los Padres National Forest, approximately 27.5 miles south-southwest of the project site. The nearest monitor that also measures PM_{10} and $PM_{2.5}$ in in Goleta on Fairview Avenue. Table 4 summarizes 2011 through 2016 published monitoring data from the CARB's Aerometric Data Analysis and Management System for the Project vicinity.

The monitoring data shows that the Maricopa Station exceeded the 8-hour ozone standards in all six years and the State 1-hour standard in 2011 and 2012. In fact, the Maricopa station exceeded the federal 8-hor standard an average of 26 days per year and exceeded the State standard an average of 47 days per year. Even though Maricopa is the monitoring station nearest the project site, this data is indicative of its location in the San Joaquin Valley Air Basin and would not be representative of the project site.

The nearest station monitoring ozone in Santa Barbara County is the Paradise Road station in the Los Padres National Forest, which did not exceed the State 1-hour ozone at all and exceeded both the State and federal 8-hour ozone standards in 4 of the 6 years, but in 3 of those years, there was only 1 exceedance per year. The Paradise Road station also measures NO_2, with no exceedances of either the federal or State standard in any of the 6 years.

The nearest station that monitors PM_{10} and $PM_{2.5}$ is the Goleta station on Fairview Avenue. The Goleta station did not record an exceedance of the of federal PM_{10} standard at all and only had two exceedances of the State PM_{10} standard. The Goleta station did not record any exceedance of the federal $PM_{2.5}$ standard. The Goleta station also monitors ozone and NO_2. At the Goleta station, the State and federal 8-hour ozone standard was exceeded in 3 of the 6 years and the State 1-hour ozone was only exceeded once. In addition, the Goleta did not record any exceedance of the federal or State NO_2 standards.

Table 4 – Ambient Air Quality Monitoring Summary for Project Vicinity[22]

Air Pollutant	Monitoring Year					
Ozone - Maricopa	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max 1 Hour (ppm)	**0.114**	**0.097**	0.089	0.090	0.094	0.092
Days > CAAQS (0.09 ppm)	**10**	**1**	0	0	0	0
Max 8 Hour (ppm)	**0.105**	**0.093**	**0.083**	**0.083**	**0.087**	**0.087**
Days > NAAQS (0.075 ppm)	**49**	**24**	**10**	**8**	**16**	–
Days > NAAQS (0.070 ppm)	–	–	–	–	–	**50**
Days > CAAQS (0.070 ppm)	**81**	**63**	**23**	**25**	**32**	**55**
Ozone – Paradise Road	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max 1 Hour (ppm)	0.096	0.075	0.079	0.081	0.091	0.079
Days > CAAQS (0.09 ppm)	0	0	0	0	0	0
Max 8 Hour (ppm)	**0.075**	0.064	**0.073**	**0.080**	0.062	**0.071**
Days > NAAQS (0.075 ppm)	**1**	0	**1**	**2**	0	–
Days > NAAQS (0.070 ppm)	–	–	–	–	–	**1**
Days > CAAQS (0.070 ppm)	**1**	0	**1**	**3**	0	**1**
Ozone - Goleta	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max 1 Hour (ppm)	0.091	0.065	0.075	**0.096**	0.075	0.079
Days > CAAQS (0.09 ppm)	0	0	0	**1**	0	0
Max 8 Hour (ppm)	**0.075**	0.056	0.064	**0.080**	0.062	**0.071**
Days > NAAQS (0.075 ppm)	**1**	0	0	**2**	0	–
Days > NAAQS (0.070 ppm)	–	–	–	–	–	**1**
Days > CAAQS (0.070 ppm)	**1**	0	0	**3**	0	**1**
Nitrogen Dioxide (NO_2) - Paradise Road	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max Hourly (ppb)	14	14	23	14	8	17
Days > NAAQS (100 ppb)	0	0	0	0	0	0
Days > CAAQS (0.18 ppm)	0	0	0	0	0	0
Nitrogen Dioxide (NO_2) - Goleta	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max Hourly (ppb)	52	41	**132**	38	34	30
Days > NAAQS (100 ppb)	0	0	1	0	0	0
Days > CAAQS (0.18 ppm)	0	0	0	0	0	0
Inhalable Particulate Matter (PM_{10}) - Goleta	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max Daily National Measurement (µg/m^3)	67.9	46.5	43.0	44.7	40.0	67.9
Max Daily California Measurement (µg/m^3)	**70.0**	48.0	44.0	45.3	41.2	**68.8**
Days > NAAQS (150 µg/m^3)	0	0	0	0	0	0
Days > CAAQS (50 µg/m^3)	**2**	0	0	0	0	**3**
Fine Particulate Matter ($PM_{2.5}$) - Goleta	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Max Daily National Measurement (µg/m^3)	18.4	29.0	20.5	24.3	23.2	26.0
Days > NAAQS (35 µg/m^3)	0	0	0	0	0	0

Abbreviations:

> = exceed ***Bold** = exceedance* *N/A = not available or applicable*
ppm = parts per million *ppb = parts per billion* *µg/m^3 = micrograms per cubic meter*
CAAQS = California Ambient Air Quality Standard *NAAQS = National Ambient Air Quality Standard*

[22] ADAM Air Quality Data Statistics. California Air Resources Board. http://www.arb.ca.gov/adam/welcome.html. Accessed March 2018.

2.4.2 Local Emissions Inventory

An emissions inventory is an account of the amount of air pollution generated by various emissions sources in a specified area. To estimate the sources and quantities of pollution, CARB, in cooperation with local air districts, other government agencies, and industry, maintains an inventory of California emission sources. Sources are subdivided into four major emission categories: mobile, stationary, and area-wide.

Mobile sources include on-road sources and off-road mobile sources. The on-road emissions inventory, which includes automobiles, motorcycles, and trucks, is based on an estimation of population, activity, and emissions of the on-road motor vehicles used in California. The off-road emissions inventory is based on an estimate of the population, activity, and emissions of various off-road equipment, including recreational vehicles, farm and construction equipment, lawn and garden equipment, forklifts, locomotives, commercial marine ships, and marine pleasure craft.

Stationary sources are large, fixed sources of air pollution, such as power plants, refineries, and manufacturing facilities. Stationary sources also include aggregated point sources. These include many small point sources, or facilities, that are not inventoried individually but are estimated as a group and reported as a single-source category. Examples include gas stations and dry cleaners. Each of the local air districts estimates the emissions for most stationary sources within its jurisdiction.

Areawide sources include source categories associated with human activity that take place over a wide geographic area. Emissions from area-wide sources may be either from small, individual sources, such as residential fireplaces, or from widely distributed sources that cannot be tied to a specific location, such as consumer products, and dust from unpaved roads or farming operations (such as tilling).

2.4.2.1 Santa Barbara County Emissions Inventory

Table 5 summarizes Santa Barbara County's estimated 2015 emissions inventory (EI) for major categories of air pollutants presented in tons per day. Detailed breakdowns of the emissions sources and categories are available at CARB's website[23].

2.4.2.2 2015 Santa Barbara County Emission Inventory Summary

Reactive organic gases (ROG)

ROG emissions result primarily from incomplete fuel combustion and the evaporation of chemical solvents and fuels. In 2015, Santa Barbara County had 25 percent of the ROG emissions contributed by solvent evaporation, primarily pesticides/fertilizers and consumer products; approximately 20 percent will be contributed by cleaning and surface coatings, such as degreasers and solvents; and 18 percent came from other mobile sources, primarily ocean-going vessels, and off-road equipment.

[23] Almanac Emissions Projection Data. California Air Resources Board. http://www.arb.ca.gov/app/emsinv/. Accessed March 2018.

Table 5 – Santa Barbara County 2015 Estimated Annual Emissions

Emission Category	2015 Emissions in tons per day					
Stationary Sources	**ROG**	**CO**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**	**NH_3**
Fuel combustion	0.99	7.85	5.02	0.33	0.33	0.01
Waste disposal	0.08	0.05	0	0.01	0.01	0.41
Cleaning and surface coatings	5.80	0	0	0	0	0
Petroleum production and marketing	3.64	0.32	0.08	0.03	0.03	0
Industrial processes	0.22	0.28	0.15	0.68	0.12	0
Areawide Sources	**ROG**	**CO**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**	**NH_3**
Solvent evaporation	7.19	0	0	0	0	1.01
Miscellaneous processes	1.87	7.19	0.88	10.88	2.31	0.80
Mobile Sources	**ROG**	**CO**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**	**NH_3**
On-road motor vehicles	3.81	29.62	7.59	0.62	0.30	0.32
Other mobile sources	5.17	40.19	54.92	0.74	0.65	0.05
GRAND TOTAL	***28.77***	***85.50***	***68.64***	***13.29***	***3.75***	***2.60***

Notes:
All values in tons per day. 2015 emissions are estimated from a base year inventory for 2012 and based on growth and control factors available from CARB. Control reflects only those rules already adopted. The sum of values may not equal total shown, due to rounding.

Carbon monoxide (CO)

The primary source of CO in Santa Barbara County in 2015 was from other mobile sources (primarily aircraft and off-road equipment), which contributes 47 percent of the total CO. On-road motor vehicles (primarily light-duty cars and trucks) will contribute another 35 percent. Higher levels of CO generally occur in areas with heavy traffic congestion.

Nitrogen Oxides (NO_X)

A review of the 2015 EI shows that over 91 percent of the total NO_X emissions in Santa Barbara County is from on- and off-road vehicles (11.1% from on-road and 80.0% from off-road). The largest portion of on-road NO_X emissions come from medium- and heavy-duty diesel trucks (31.8% of the total for on-road). The primary contributor from off-road sources are ocean-gong vessels, which contribute almost 90 percent of the other mobile sources category.

Inhalable Particulate Matter (PM_{10})

Almost 82 percent of the total PM_{10} emissions in Santa Barbara County came from the category labeled Miscellaneous Processes in 2015. The largest portion of the PM_{10} emissions from

miscellaneous processes comes from construction and demolition (43.7% of the total for miscellaneous processes) and paved road dust (17.1%).

Fine Particulate Matter ($PM_{2.5}$)

Whereas a sizeable portion of PM_{10} emissions come from soil dislocation processes, $PM_{2.5}$ is smaller and is more often a result of particulates coming from combustion sources. However, in Santa Barbara County, Miscellaneous Processes will still represent over 36 percent of the total $PM_{2.5}$ and construction and demolition contributing approximately 20 percent of the miscellaneous processes total. Another 17 percent of the $PM_{2.5}$ is contributed by other mobile sources, primarily from ocean-going vessels.

Ammonia (NH_3)

Ammonia (NH_3) is added to the CARB EI due to NH_3's role as a precursor to PM_{10}, specifically the wintertime violations. The cooler temperatures and higher humidity of the winter months are conducive to ammonium nitrate (NH_4NO_3) formation through a complex process involving NO_X, NH_3, and ROGs. This occurs both at the surface and aloft, via both daytime and nighttime chemistry. Understanding the interactions amongst these precursors is needed to design an appropriate and effective approach to reduce NH_4NO_3. The 2015 Santa Barbara County EI shows that about 39 percent of the NH_3 is generated from pesticides and fertilizers and another 31 percent is from other miscellaneous processes, sub-category unspecified.

SECTION 3.0 – REGULATORY CONTEXT

Air pollutants are regulated at the national, State, and air basin level; each agency has a different degree of control. The EPA regulates at the national level; the CARB regulates at the State level; and the APCD regulates at the air basin level in the Project area.

3.1. Regulatory Agencies

3.1.1 Environmental Protection Agency (EPA)

EPA is the federal agency responsible for overseeing state air programs as they relate to the FCAA, approving State Implementation Plans (SIP), establishing NAAQS and setting emission standards for mobile sources under federal jurisdiction. EPA has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

3.1.2 California Air Resources Board (CARB)

CARB is the state agency responsible for establishing CAAQS, adopting and enforcing emission standards for various sources including mobile sources (except where federal law preempts their authority), fuels, consumer products, and toxic air contaminants. CARB is also responsible for providing technical support to California's 35 local air districts, which are organized at the county or regional level, overseeing local air district compliance with State and federal law, approving local air plans, and submitting the SIP to the EPA. CARB also regulates mobile emission sources in California, such as construction equipment, trucks, and automobiles.

For the purposes of managing air quality in California, the California Health & Safety Codes Section 39606(a)(2) gave the CARB the responsibility to "based upon similar meteorological and geographic conditions and consideration for political boundary lines whenever practicable, divide the State into air basins to fulfill the purposes of this division". Santa Barbara County is located within the Salton Sea Air Basin.

3.1.3 Santa Barbara County Air Pollution Control District (APCD)

The APCD shares responsibility with CARB for ensuring that all State and federal ambient air quality standards are achieved and maintained within the County. State law assigns to local air pollution control districts the primary responsibility for control of air pollution from stationary sources, while reserving an oversight role for CARB. Generally, the air pollution control districts must meet minimum State and EPA program requirements. The air pollution control district is also responsible for the inspection of stationary sources, monitoring of ambient air quality, and planning activities such as modeling and maintenance of the emission inventory.

3.2. Attainment Status

3.2.1 Designations/Classifications

EPA has identified nonattainment and attainment areas for each NAAQS. Under amendments to the FCAA, EPA has designated air basins or portions thereof as attainment, nonattainment, or

unclassifiable, based on whether the national standards have been achieved. The State designates air basins or portions thereof for all CAAQS. The State designation criteria specify four categories: nonattainment, nonattainment-transitional, attainment, and unclassified.

In addition, the FCAA uses a classification system to design clean-up requirements appropriate for the severity of the pollution and set realistic deadlines for reaching clean-up goals. If an air basin is not in federal attainment for a pollutant, the Basin is classified as a marginal, moderate, serious, severe, or extreme nonattainment area, based on the estimated time it would take to reach attainment for that pollutant. Nonattainment areas must take steps towards attainment by a specific timeline. Table 6 shows the federal and State attainment designations and federal classifications for the Basin.

Table 6 – Designations/Classifications for Santa Barbara County[24]

Pollutant	State Designation	Federal Designation (Classification)
Ozone	Nonattainment/ Transitional	Unclassifiable/Attainment
Respirable PM (PM_{10})	Nonattainment	Unclassifiable
Fine PM ($PM_{2.5}$)	Unclassified	Unclassifiable/Attainment
Carbon Monoxide (CO)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable
Lead	Attainment	Unclassifiable/Attainment
Sulfates	Attainment	**No Federal Standard**
Hydrogen Sulfide	Attainment	
Visibility reducing Particles	Unclassified	

3.3. Regulatory Framework

This section contains a discussion of the federal, State, and local air quality regulations, plans, and policies applicable to the proposed landfill plan. Federal, state, and local authorities have adopted rules and regulations that govern the emissions of air pollutants from any facility. The local and federal authorities each have specific criteria for the evaluation of a source and its emissions and the authority to issue permit conditions and specify recordkeeping and reporting requirements that must be met to operate a source of air pollutants. This section focuses on current air quality regulations and their impact on the currently permitted landfill and on the proposed landfill plan.

3.3.1 Federal Regulations and Standards

The FCAA was enacted in 1970 and last amended in 1990 (42 USC 7401, et seq.) with the purpose

[24] Proposed 2017 Amendments to Area Designations for State Ambient Air Quality Standards. California Air Resources Board. December 2017. Final Resolution 18-1. California Air Resources Board. February 8, 2018.

of controlling air pollution and providing a framework for national, state, and local air pollution control efforts. Basic components of the FCAA and its amendments include NAAQS for major air pollutants, hazardous air pollutants standards, SIP requirements, motor vehicle emissions standards, and enforcement provisions. The FCAA was enacted for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity.

3.3.2 State Regulations and Standards

The CARB is responsible for responding to the FCAA, regulating emissions from motor vehicles and consumer products, and implementing the CCAA. The CCAA outlines a program to attain the CAAQSs for ozone, sulfur dioxide, and CO by the earliest practical date. Since CAAQSs are more stringent than NAAQSs in most cases, attainment of the CAAQS will require more emissions reductions than what would be required to show attainment of the NAAQS. Like the federal system, the state requirements and compliance dates are based upon the severity of the ambient air quality standard violation within a region.

3.3.3 Local Regulations and Standards

The APCD also has the authority to adopt and enforce regulations dealing with controls for specific types of sources, emissions of hazardous air pollutants, and New Source Review. The APCD Rules and Regulations are part of the SIP and are separately enforceable by the EPA. The following APCD rules potentially apply to the Project:

- **Rule 303** (Nuisance) – Prevents the discharge from any source whatsoever such quantities of air contaminants which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.
- **Rule 345** (Control of Fugitive Dust from Construction and Demolition Activities) – Prevents visible fugitive dust beyond the property line from construction and demolition activities, specifically addressing emissions related to truck hauling and track-out/carry-out. Specific requirements for demolition is also provided.

3.3.4 Air Quality Management Plans (AQMP)

3.3.4.1 Ozone Plan

In October 2016, the APCD published the 2016 Ozone Plan (2016 Plan)[25] designed to implement an "every feasible measure" strategy to ensure continued progress toward attainment of the state ozone standards pursuant to California Health and Safety Code Section 40914 (b). The 2016 Plan is the eighth triennial update to their initial state Air Quality Attainment Plan adopted in 1991. The 2016 Plan adopted one control measure listed in the previous triennial update, the 2013 Plan, and reevaluated the remaining 2013 Plan's feasible control measures and assembled a new rule adoption schedule that would achieve cost-effective and feasible emission reductions. The 2016 Plan also identified control measures that required further study before making a commitment to adopt. The

[25] 2016 Ozone Plan. Santa Barbara County Air Pollution Control District. October 2016.

2016 Plan also incorporates 18 transportation control measures (TCMs) developed and adopted by the Santa Barbara County Association of Governments (SBCAG) and a separate TCM proposed for further study, i.e. Traffic Flow Improvements. The final strategy discussed in the 2016 Plan relates to emissions from marine shipping. Since a substantial portion of the Santa Barbara County NO_X emission inventory comes from marine shipping. Achieving additional NO_X reductions from shipping is key to ensuring continued progress towards attainment of the state ozone standard. The 2016 Plan includes a viable strategy of Vessel Speed Reduction.

At the time of publication, Santa Barbara County was designated nonattainment for the State ozone standard, however on April 17, 2017 CARB changed the designation for Santa Barbara County area from "Nonattainment" to "Nonattainment-Transitional", leading the APCD to create an August 2017 Report[26] (2017 Report) to the APCD Board. The 2017 Report presents three actions as an interim strategy to satisfy requirements in California Health and Safety Code Section 40925.5 to delay implementation of NO_X control measures until 2018; shift the ROC measures to contingency category; and receive and file preliminary cost-benefit analyses of the NO_X control measures.

3.4. Climate Change

GHGs, like criteria air pollutants, are regulated at the national, State, and air basin level; each agency has a different degree of control. EPA regulates at the national level; CARB regulates at the State level; and the APCD regulates at the air basin level in the Project area.

3.4.1 Federal Climate Change Legislation

The federal government is taking several common-sense steps to address the challenge of climate change. EPA collects several types of GHG emissions data. This data helps policy makers, businesses, and EPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. EPA has been collecting a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

Current EPA efforts based on historical website material reflecting the EPA website as it existed on January 19, 2017[27] include common-sense regulatory initiatives such as EPA's vehicle greenhouse gas rules and Clean Power Plan; partnering with the private sector through voluntary energy and climate programs; and reducing EPA's carbon footprint with the federal greenhouse gas requirements and EPA's Strategic Sustainability Performance Plan. However, the current administration is making effort to repeal the Clean Power Plan, scrubbing climate change from their website, instructing EPA scientists not to speak at scientific conferences[28], and eliminating all mention of climate change from

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26 Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule. Report to the District Board of Directors. Santa Barbara County Air Pollution Control District. August 2017.

27 What EPA Is Doing about Climate Change, Environmental Protection Agency.

28 EPA yanks scientists' conference presentations, including on climate change. New York Times. October 22, 2017.

EPA's latest Strategic Plan.[29]

3.4.2 State Climate Change Legislation

3.4.2.1 Executive Order S 3-05

On June 1, 2005, the Governor issued Executive Order (EO) S 3-05 which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

To meet these targets, the Climate Action Team prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met.

3.4.2.2 Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The CARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming to reduce emissions of GHGs. AB 32 also requires that by January 1, 2008, the CARB must determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The CARB approved a 1990 GHG emissions level of 427 $MMTCO_2e$, on December 6, 2007 in its Staff Report. Therefore, in 2020, emissions in California are required to be at or below 427 $MMTCO_2e$.

Under the "business as usual or (BAU)" scenario established in 2008, Statewide emissions were increasing at a rate of approximately 1 percent per year as noted below. It was estimated that the 2020 estimated BAU of 596 $MMTCO_2e$ would have required a 28 percent reduction to reach the 1990 level of 427 $MMTCO_2e$.

3.4.2.3 Climate Change Scoping Plan

The Scoping Plan[30] released by CARB in 2008 outlined the state's strategy to achieve the AB-32 goals. This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by CARB at its meeting in

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29 Draft FY 2018-2022 EPA Strategic Plan: Public Review Draft. United States Environmental Protection Agency. October 2, 2017

30 Climate Change Scoping Plan: a framework for change. California Air Resources Board. December 2008.

December 2008. According to the Scoping Plan, the 2020 target of 427 $MMTCO_2e$ requires the reduction of 169 $MMTCO_2e$, or approximately 28.3 percent, from the State's projected 2020 business as usual (BAU) emissions level of 596 $MMTCO_2e$.

In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document[31]. This document includes expanded analysis of project alternatives as well as updates the 2020 emission projections considering the updated economic forecasts. The updated 2020 BAU estimate of 507 $MMTCO_2e$ yielded that only a 16 percent reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan.

However, in May 2014, CARB developed; in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan[32] (Update), which shows that California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB-32. In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), CARB has mostly transitioned to the use of the AR4's[33] 100-year GWPs in its climate change programs. CARB recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 $MMTCO_2e$, therefore the 2020 GHG emissions limit established in response to AB-32 is now slightly higher than the 427 $MMTCO_2e$ in the initial Scoping Plan.

In November 2017, CARB published the 2017 Scoping Plan[34] which builds upon the former Scoping Plan and Update by outlining priorities and recommendations for the State to achieve its 2030 GHG target of a 40 percent reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are enhancement of the Renewables Portfolio Standard (RPS) and the Low Carbon Fuel Standard; a Mobile Source Strategy, Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post-2020 Cap-and-Trade Program; a 20 percent reduction in GHG emissions from the refinery sector and an Integrated Natural and Working Lands Action Plan.

3.4.2.4 Renewables Portfolio Standard (Scoping Action E-3)

The California Energy Commission estimates that in 2000 about 12 percent of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.

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31 *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document.* California Air Resources Board. August 19, 2011.

32 *First Update to the Climate Change Scoping Plan, Building on the Framework*. California Air Resources Board. May 2014.

33 *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Intergovernmental Panel on Climate Change. Core Writing Team; Pachauri, R.K; Reisinger, A., eds., 2007. ISBN 92-9169-122-4.

34 *California's 2017 Climate Change Scoping Plan.* California Air Resources Board. November 2017. URL: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

California's current RPS is intended to increase that share to 20 percent by 2010. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Based on the Governor's call for a Statewide 33 percent RPS, the Scoping Plan anticipates that California will have 33 percent of its electricity provided by renewable resources by 2020 and includes this reduction in GHG emissions. Most recently, Governor Brown signed into legislation SB 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030.

3.4.2.5 Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008 and was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions and contributes over 40 percent of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

3.4.2.6 Executive Order B-30-15

On April 29, 2015, the Governor issued EO B-30-15 which added an interim target of GHG emissions reductions to help ensure the State meets its 80 percent reduction by 2050, as set in EO S-3-05. The interim target is reducing GHG emissions by 40 percent by 2030. It also directs State agencies to update the Scoping Plan, update Adaptation Strategy every 3 years, and take climate change into account in their planning and investment strategies. Additionally, it requires the State's Five-Year Infrastructure Plan will take current and future climate change impacts into account in all infrastructure projects.

3.4.3 Local Climate Change Legislation

The County of Santa Barbara's (County) Energy and Climate Action Plan[35] (ECAP) was created in response to the direction from the County Board of Supervisors "to take immediate, cost-effective, and coordinated steps to reduce the County's collective GHG emissions". The ECAP demonstrates the County's continued commitment to reduce GHG emissions while protecting the aesthetic qualities and unique resources of the County. The ECAP outlines the County's commitment and strategy to reduce GHG emissions, as well as to protect the built environment, public health and welfare, and natural resources from the vulnerabilities caused by changing climate conditions. The

[35] Energy and Climate Action Plan. County of Santa Barbara, Long Range Planning Division. May 2015.

ECAP demonstrates the County's strategy to reduce community-wide GHG emissions by 15% from baseline emissions by 2020; helps increase the community's resilience to the effects of climate change; and provides a policy document and list of specific actions that can tier and thereby streamline environmental analyses under CEQA. The ECAP is a Qualified GHG Reduction Strategy satisfying requirements of Section 15183.5 of the CEQA Guidelines.

SECTION 4.0 – SIGNIFICANCE CRITERIA

The APCD Environmental Review Guidelines[36] outlines significance determination thresholds related to projects where the APCD is the lead agency. However, the significance criteria described in this section have been derived from the June 2017 Limited Update of the Scope and Contents (Scope & Contents)[37] document, which was developed to act as guidance for projects where the District is a responsible agency or a concerned agency with jurisdiction by law over the air resources of the County under CEQA. Also addressed are the thresholds as presented in the County's Environmental Thresholds and Guidelines Manual[38].

4.1. CEQA Significance Determination Thresholds

As stated in the State CEQA Guidelines, a project is deemed to have a "potentially significant impact" on air quality if it could:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Violate any air quality standard or contribute to an existing or projected air quality violation;
3. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
4. Expose the public (especially schools, day care centers, hospitals, retirement homes convalescence facilities, and residences) to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people. Each of these threshold criteria is discussed in this section.

4.2. Environmental Thresholds of Significance

Under CEQA, each public agency is encouraged to develop and publish thresholds of significance. These thresholds of significance should be an identifiable quantitative, qualitative, or performance level of an environmental effect; the noncompliance with would mean the effect would normally be significant while compliance with would mean the effect would normally be less than significant.

4.2.1 Short-Term Construction Thresholds

The County considers short-term fugitive dust air quality impacts insignificant because dust control measures are required under the County of Santa Barbara's Grading Ordinance for most projects. The

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36 Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District: Guidelines for the Implementation of the California Environmental Quality Act of 1970, as amended. Santa Barbara County Air Pollution Control District. Revised April 30, 2015.

37 Scope and Content of Air Quality Sections in Environmental Documents. Technology and Environmental Assessment Division. Santa Barbara County Air Pollution Control District. June 2017 Limited Update.

38 Environmental Thresholds and Guidelines Manual. County of Santa Barbara Planning and Development. Published October 2008, Revised July 2015.

short-term thresholds for NO_X and ROC emissions from construction equipment were not considered because emissions of NO_X from construction equipment in the County are estimated to comprise only six percent of the 1990 county-wide emission inventory for NO_X.

Even though quantitative thresholds are not currently in place for short-term emissions, the District's Scope & Contents recommends that, in the interest of public disclosure, "construction-related NO_X, ROC, PM_{10}, and $PM_{2.5}$ emissions, from diesel and gasoline powered, paving, and other activities, be quantified". Additionally, since Santa Barbara County violates the State standard for PM_{10}, dust mitigation measures are required for all discretionary construction activities regardless of the significance of the fugitive dust impacts.

4.2.2 Long-term/Operational Emission Thresholds

The APCD thresholds of significance apply to all sources of air pollutants, including equipment and businesses not regulated by the District and motor vehicles.

A proposed project will not have a significant air quality effect on the environment, if the operation of the project will:

- Emit (from all project sources, mobile and stationary) less than the daily trigger for offsets set in the APCD New Source Review (NSR) Rule, for any pollutant. *For ozone precursor emissions (ROG or NOx), the APCD NSR threshold is 55 pounds per day from all project sources (stationary sources and mobile sources) or 25 pounds per day from mobile sources only. For long-term operational particulate emissions (PM_{10}), the APCD NSR threshold is 80 pounds per day from all project sources)*;
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board *(10 excess cancer cases in a million for cancer risk and a Hazard Index of more than one (1.0) for non-cancer risk)*; or
- Be consistent with the latest adopted federal and state air quality plans for Santa Barbara County.

4.2.3 Odor Threshold

While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the District. Any project with the potential to expose members of the public to objectionable odors frequently would be deemed to have a significant impact.

In the Scope & Content document, the District lists some examples of projects that may cause a significant odor impact because of the nature of their operation and their location (e.g. fast food restaurants, bakeries, and coffee roasting facilities. Other odor concerns are locating new projects downwind of existing sources of odors.

4.2.4 Cumulative Threshold

Cumulative air quality impacts are the effect of long-term emissions of a proposed project, plus any existing emissions at the same location, plus reasonably foreseeable similar projects on the projected regional air quality or localized air pollution problems in the County.

The APCD has determined the cumulative contribution of project emissions to regional levels should be compared with existing programs and plans, including the most recent Ozone Plan. Due to the county's nonattainment status for ozone and the regional nature of ozone as a pollutant, if a project's air pollutant emissions of either of the ozone precursors (NO_X or ROC) exceed the long-term thresholds, then a project's cumulative impacts would be considered significant. For projects that do not have significant ozone precursor emissions or localized pollutant impacts, if emissions have been considered in the most recent Ozone Plan growth projections, regional cumulative impacts may be considered to be insignificant.

4.3. Greenhouse Gas (GHG) / Climate Change

4.3.1 California Environmental Quality Act (CEQA)

Effective March 18, 2010, CEQA Appendix G states that a project would have potentially significant GHG emission impacts if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

4.3.2 Local Significance Thresholds

Climate change under CEQA differs from most other types of impacts in that, by definition, it is only examined as a cumulative impact that results not from any one project's GHG emissions, but rather from GHG emissions "… generated globally over many decades by a vast number of different sources."[39] Therefore, analysis of a project's GHG emissions under CEQA focuses solely on the incremental contribution of estimated project emissions to climate change.

The County, as the Lead Agency, has established a quantitative criterion by which to determine if GHG emissions from applicable industrial stationary sources that are subject to discretionary approval will have a significant cumulative effect on climate change. However, this criterion is not applicable to residential or commercial projects.

However, the Scope & Contents document concludes that CEQA documents should include a quantification of GHG emissions from all project sources, direct and indirect[40], as applicable. In

[39] Environmental Thresholds and Guidelines Manual. County of Santa Barbara Planning and Development. Published October 2008, Revised July 2015.

[40] Indirect emissions include the electricity

addition, the District recommends that climate change impacts be mitigated to the extent reasonably possible, whether they are determined to be significant or less than significant.

In lieu of specific quantitative thresholds for commercial projects, this analysis will use the County's industrial threshold, a numeric bright-line threshold, for comparative purposes. The County requires direct and indirect sources to be evaluated and that construction-related emissions are to be accounted for in the year they occur. The County is clear that the threshold does not apply to GHGs that are emitted throughout the life cycle of products that a product may produce or consume. The County's Numeric Bright-Line Threshold for industrial stationary sources is 1,000 $MMTCO_2e$ per year. Annual GHG emissions that are equivalent to or exceed the threshold are determined to have a significant cumulative impact on global climate change unless mitigated.

SECTION 5.0 – IMPACT ANALYSIS

5.1. Analysis Methodology

Regional and local emissions of criteria air pollutants and precursors, and GHGs during project construction and operations were assessed in accordance with the methodologies described below. Due to the type of project (i.e. solar farm), it was determined that emissions from the construction activities related to the Project could not be easily estimated using existing models, including Urban Emissions Model (URBEMIS2007) and California Emissions Estimator Model (CalEEMod) as these models are designed for "typical" land development projects. Therefore, this analysis attempts to provide detailed analysis of impacts related to site preparation, including any erosion control measures deemed necessary; stabilization of construction entrances and exits to reduce tracking; internal access roads; construction of PV modules; and testing/certification.

5.1.1 Construction Emissions

Construction of the Project would result in temporary emissions of ROG, CO, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Emissions from construction activities would result from fuel combustion and exhaust from construction equipment and vehicle traffic (i.e., worker commute and delivery truck trips), and grading and site work.

Construction for the Project is expected to 26 weeks and would be divided into four potentially overlapping phase activities:

- **Phase 1 - Site Preparation**, which includes preconstruction surveys; required sediment and erosion control measures; installation of stabilized construction entrance and exits; and installation of fencing, gates and communication and security systems. Grading activities will be minimal due to relative flat topology and adaptability of the support structures. Foundation locations will be surveyed, and internal access roads graded and compacted.
- **Phase 2 – System Installation**, which includes trenching for underground electrical and communication lines; install concrete; steel beam/tube; horizontal crossbeams and other hardware for the foundation; install and mount electronic/electrical equipment; and mechanically attach PV modules.
- **Phase 3 - Facility Commissioning**, which includes final inspections testing, start-up, and certification; and facility brought on-line in stages and tested at every stage.

Emissions from off-road equipment, such as tractors, graders, loaders, scrapers, forklifts, trenchers, compactors, rollers, and post drivers; onsite mobile equipment, such as water trucks, pickup trucks, lube/fuel trucks, and flatbed delivery trucks; mobile activity from vendors, such as flatbed/delivery trucks; and employee vehicular commute were estimated. A detailed summary of the assumptions and model data used to estimate the Project's construction emissions is provided in Appendix A.

5.1.2 Operational Emissions

The facilities would be remotely operated, controlled, and monitored and with no requirement for daily on-site employees. Local and remote operations and maintenance staff would be on-call to respond to any alerts generated by the monitoring systems and would be present on the site periodically to perform maintenance. A part-time operations and maintenance (O&M) staff of two to three persons would respond to any alerts generated by the monitoring systems and will be present on the site periodically to perform maintenance. Staff will also be responsible for performing all routine and emergency operational and maintenance activities. Such activities include inspections, equipment servicing, site and landscape clearing, and periodic washing of the PV modules if needed (up to four times per year) to increase the performance of the panels. Replacement parts and components will be warehoused off site and deployed as needed. Most scheduled maintenance will occur during daytime hours, but work may be performed at night for safety reasons.

A detailed summary of the assumptions and model data used to estimate the Project's operational emissions is provided in Appendix A.

5.1.3 Other Air Quality Impacts

Other air quality impacts (i.e., local emissions of CO, odors, and construction- and operation-related TACs) were assessed in accordance with methodologies recommended by CARB and APCD.

5.2. Analysis of Environmental Impacts

IMPACT 1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

CEQA requires that projects be consistent with the applicable air quality management plan (AQMP). A consistency determination plays a key role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision-makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed.

APCD's CEQA Guidelines states that a Project should demonstrate compliance with the most recent Ozone Plan. It also states the analysis should also demonstrate compliance with the Santa Barbara County Rules and Regulations but also those of the State and federal regulations.

2016 Ozone Plan

The 2016 Plan is the latest triennial update to the original Air Quality Attainment Plan adopted in 1991. As in previous triennial updates, the 2016 Plan future growth in emissions are estimated using changes in the value of pollution-producing activities, known as "activity indicators". The Project does not produce new residential activity, produces only minimal additional traffic activity during project operations; and does not fall outside of the modeling forecast estimations used in determining continued maintenance and will comply with all applicable State and federal requirements for attainment of air quality objectives.

Level of Significance Before Mitigation: The Project would not conflict with, or obstruct implementation of, the applicable air quality plan, therefore would result in a less than significant impact.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 2: Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction of the Project would result in emissions of the air pollutants ROG, NO_X, CO, PM_{10}, $PM_{2.5}$, and SO_X. Emissions from construction would result from fuel combustion and exhaust from construction equipment and vehicle traffic and fugitive dust from earth moving operations and roadways.

Criteria pollutant emissions from off-road construction equipment use were estimated using the underlying emission and load factors of the CalEEMod computer model. Emissions were estimated from the exhaust off-road equipment by using emission factors from Table 3.4 of Appendix D in the CalEEMod User's Guide[41] for year calendar year 2018. The vibratory post driver used in the PV panel construction phase was not listed in Appendix D but, since it is only an attachment typically used on an excavator, the excavator emission factors were used. Equipment activity data was supplied by the client. Average daily number represents a reference point, in that 1 per day means the equipment is used every day. However, if a piece of equipment is used every other day, the average daily use would be 0.5.

Emissions from vehicular activity related to construction employees and vendors were estimated using CARB's EMFAC2011 Web Based Data Access[42] with emission rate data for Santa Barbara County for the 2018 calendar year. This AQR used EMFAC2011's aggregate model years, which is an average age of vehicles specific for Santa Barbara County. To generate expected exhaust emissions from employee vehicles, this AQR also used CARB's EMFAC2011 Web Based Data Access and to more accurately represent the type of vehicles used by the potential employee work pool, an activity-weighted average emission factor was generated using light-duty automobiles and light-duty trucks. The averages were derived from the distributions of vehicle miles travelled from EMFAC2011.

Grading fugitive dust was estimated using methodology described in Section 11.9, Western Surface Coal Mining, of the EPA Compilation of Air Pollutant Emission Factors (AP-42)[43] and as presented in the CalEEMod User's Guide. The grading dust emissions are calculated by multiplying the

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41 User's Guide: California Emissions Estimator Model® (CalEEMod). Version 2016.3.2. California Air Pollution Control Officers Association. November 2017.

42 http://www.arb.ca.gov/msei/modeling.htm#emfac2011_web_based_data

43 Compilation of Air Pollutant Emission Factors – AP-42. Fifth Edition. United States Environmental Protection Agency. January 1995.

emission factors with the total vehicle miles traveled (VMT) for the grading equipment (i.e., grader). The VMT for grader are estimated based on the dimensions of the grading area and the blade width of the grading equipment. Area disturbed is conservatively estimated to be 10 percent of the site's gross acreage, since earthmoving activities are expected to be limited to the construction of the access roads, any O&M buildings, any substations, and any storm water protection or storage (detention) facilities.

Entrained road dust emissions are generated by vehicles traveling on both paved and unpaved roads. These equations are based on the paved and unpaved roads emission factors found in the AP-42 and defaults from CalEEMod. Even though Appendix D, Table 4.1 assumes 100 percent of the travel in Santa Barbara County for construction workers, hauling, and vendors and for operational mobile would be on paved roads, this AQR estimates that, whereas the construction employees would likely arrive and park in a designated parking area, which would be located near paved road, resulting in near 100 percent of employee travel, vendors often have to travel on unpaved roads to reach the area for delivery of materials or to provide service. Therefore, for vendor activity, it was assumed that 5 percent of their travel would be on unpaved roads.

Trip distance for construction and operational employees were estimated to originate from Santa Maria for 108 round trip miles. Vendor trips were more diverse. Whereas the one-way average trip length was also 54 miles, only the medium and light-heavy duty vehicles were assigned a round trip mileage, as they are assumed to be specifically traveling to and from the site. The mileage for the trucks supplying the PV panel material, was assumed to be from the Port Hueneme. Using the Highway 126 to I-5 to Highway 226 for 150 miles, one way. One-way mileage was used due to the potential of back-haul.

Since the thresholds for criteria pollutants are in pounds per day, emissions estimated from each activity phase for each project. Since Phases 1 and 2 have the potential to overlap, to generate the maximum emissions per day these two phases were combined. There is some overlap of activity phases for each separate project, as well as some overlap between projects in the overall scheduling of the entire Project. Emissions presented below are considered unmitigated, which is to mean hypothetical emissions from construction activity, which does not apply equipment or activity restrictions or controls, even those required by APCD regulations.

Construction Emissions

The Project is estimated to be completed within 26 weeks from project start and Table 7 presents, in the purpose of public disclosure, the daily maximum hypothetical unmitigated emissions for on- and off-road sources from all construction activities.

Table 7 – Construction Criteria Emissions

Activities	Criteria Emissions (lbs/day)				
	ROG	CO	NO_X	PM_{10}	$PM_{2.5}$
Phases 1 & 2	4.1	41.4	44.1	38.9	6.3
Phase 3	0.1	2.0	1.2	8.0	1.0
Maximum Daily	***4.1***	***41.4***	***44.1***	***38.9***	***6.3***

Although the County has no thresholds related to construction, the Scope and Content document requires PM_{10} "Mitigation Measures" be required for all projects involving earthmoving activities regardless of the project size or duration. Since these measures do not act as mitigation, they are more appropriately best management practices (BMP). Therefore, the Project will implement the following BMPs:

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving, or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to grading/building permit issuance and/or map clearance.

Operational Emissions

These facilities would operate seven days a week, 24 hours a day, generating electricity during

normal daylight hours when the solar energy is available. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. Additionally, the surface of the PV panels would be washed seasonally to increase the average optical transmittance of the flat panel surface. Much of the vehicle trips during operations would be off-site trips consisting mostly worker commute, with the occasional general service, electrical service, and equipment/delivery vehicles. In addition, there would be some activity from vehicles onsite including pickup trucks, water trucks, and utility/service vehicles. Table 8 summarizes each site's total project-related annual operational air emissions. The County operational thresholds of significance are also included in this table as well as information regarding whether annual operational emissions would exceed those thresholds. As shown in Table 8, all onsite and offsite operational emissions would be mobile sources and would be well below both County Operational thresholds. Detailed emissions calculations are included in Appendix A.

Table 8 – Estimated Operational Criteria Emissions

Activity Type	Criteria Emissions (lbs/d)				
	ROG	CO	NO_X	PM_{10}	$PM_{2.5}$
Onsite Activity	0.002	0.079	0.012	0.212	0.053
Offsite Activity	0.040	1.715	0.265	20.464	2.089
Maximum Daily	***0.04***	***1.79***	***0.28***	***20.68***	***2.14***
County Operational Thresholds	*25*	*N/A*	*25*	*80*	*N/A*
Exceed Thresholds?	*No*		*No*	*No*	

Level of Significance Before Mitigation: The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 3: Would the Project result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts incorporates a summary of projections. The following three-tiered approach is to assess cumulative air quality impacts.

- Consistency with the County operational thresholds;
- Project consistency with existing air quality plans; and
- Assessment of the cumulative health effects of the pollutants.

Project Specific Thresholds

As established previously in **Impact 2**, during project operation, emissions of ROC, NO_X, and PM_{10} are not expected to exceed the County operational thresholds.

Air Quality Plans

The area in which the Project is located, is in State nonattainment for ozone and PM_{10}. As such, the APCD is required to prepare and maintain an AQMP to document the strategies and measures to be undertaken to reach attainment of the ozone ambient air quality standards. While the APCD does not have direct authority over land use decisions, it was recognized that changes in land use and circulation planning were necessary to maintain clean air. As discussed above in **Impact 1**, the Project is compliant with the AQMP and would not result in a significant impact.

Cumulative Health Impacts

The area is in State nonattainment for ozone and PM_{10}, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect the health of sensitive individuals (i.e., elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some of the sensitive individuals of the population experience adverse health effects.

The localized significance analysis in **Impact 2** demonstrated that during operational activities, no significance threshold was expected to be exceeded; therefore, the emissions of particulate matter and NO_X would not result in a significant cumulative health impact.

Level of Significance Before Mitigation: The Project would not result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 4: Would the Project expose the public (especially schools, day care centers, hospitals, retirement homes convalescence facilities, and residences) to substantial pollutant concentrations?

Sensitive receptors are defined as land uses where sensitive population groups are likely to be located (e.g., children, the elderly, the acutely ill, and the chronically ill). These land uses include residences, schools, childcare centers, retirement homes, convalescent homes, medical care facilities, and recreational facilities. Sensitive receptors that may be adversely affected by the Project include the surrounding residential land uses.

Impacts to sensitive receptors, particularly from dust, would vary depending on the level and type of activity, the silt content of the soil, and prevailing weather. As mentioned above, the project vicinity consists predominantly of agricultural and undeveloped land with an occasional rural residence.

Even though the Project has a residential source (rural-very low density) adjacent to the solar site's

boundaries, the physical proximity to the construction activity is not adjacent. The Project's compliance with the Scope & Content's PM_{10} Mitigation Measures will prevent the residences exposure to substantial pollutant concentrations.

Another way a project can establish significance with this impact is the potential to create a CO hotspot. In the Scope & Content document, the District says due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health-related air quality standards. Therefore, CO "Hotspot" analyses are not required anymore.

During construction activities, diesel equipment will be operating and DPM is known to the State of California as a TAC. However, the risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined as 24 hours per day, 7 days per week, 365 days per year, for 70 years. However, the short-term nature of project construction would support that exposure to diesel exhaust emissions during construction would not be significant.

Level of Significance Before Mitigation: The Project would not expose the public (especially schools, day care centers, hospitals, retirement homes convalescence facilities, and residences) to substantial pollutant concentrations.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 5: Would the Project create objectionable odors affecting a substantial number of people?

The CEQA Guidelines indicate that a significant impact would occur if a project would create objectionable odors affecting a substantial number of people. While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the APCD. Because offensive odors rarely cause any physical harm and no requirements for their control are included in State or federal air quality regulations, the APCD has no rules or standards related to odor emissions, other than its nuisance rule.

The construction and operation of a solar farm is not an odor producer nor located near an odor producer; therefore, the Project would not result in a significant odor impact.

Level of Significance before Mitigation: The Project would not create objectionable odors affecting a substantial number of people.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 6: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and operation of the Project would result in a relatively small amount of GHG emissions. The Project would generate GHG emissions during construction and routine operational activities at the site. During construction, GHG emissions would be generated from operation of both on-road and off-road equipment. Once operational, emissions associated with the Project would be limited to vehicle trips associated with routine maintenance and monitoring activities at each of the sites.

Solar projects are an integral part of CARB's emission reduction strategy presented in the Scoping Plans. The 2008 Scoping Plan[44] specifically addresses critical complementary measures directed at emission sources that are included in the cap-and-trade program that are designed to achieve cost-effective emissions reductions while accelerating the necessary transition to the low-carbon economy. One of these measures was the RPS, which was to promote multiple objectives, including diversifying the electricity supply by accelerating the transformation of the Electricity sector, including investment in the transmission infrastructure and system changes to allow integration of large quantities of intermittent wind and solar generation. Therefore, this Project complies with an approved GHG emission reduction plan and is presumed to have less-than-significant GHG impacts.

Using the methods developed by the South Coast Air Quality Management District when comparing to their adopted GHG thresholds, GHGs are quantified as the sum of annual operational GHG emissions and total construction GHG emissions amortized over 30 years. **Error! Reference source n ot found.** shows that the amortized construction plus annual operation for the Project would be 53 $MTCO_2e$ per year.

Table 9 – Project GHG Emissions

Source	$MTCO_2e$ per Year
Phase 1: Site Preparation	108.1
Phase 2: System Installation	350.5
Phase 3: Facility Commissioning	*7.9*
Project Construction Total	**467**
Amortized over 30 years	*15.6*
Project Operational Total	**37.7**
Total Annual Emissions	***53***
Annually Displaced Emissions	2,556
Net Project GHG Emissions	***-2,503***

In addition, the Project would be a renewable source of energy that could displace electricity generated by fossil fuel combustion and provide low-GHG electricity to consumers. Of the potential

[44] Climate Change Scoping Plan: a framework for change. California Air Resources Board. December 2008.

fossil fuels typically used for power generation, natural gas is one of the cleanest. To provide a conservative estimate, this AQR estimated emissions that would be generated from an equivalent amount of energy by natural gas generators to estimate the reduction in GHG emissions by electricity displacement by if the solar power displaces electricity generated by dispatchable natural-gas fired combined-cycle power plants and that the Project has a capacity factor of 26 percent. Natural gas energy requirements for generation by combined-cycle power plants and emission factors from The Climate Registry were used to estimate the displaced emissions. This AQR estimated the 3 MW generated by the Project would displace 2,556 $MTCO_2e$ per year. Detailed calculations are presented in Appendix A.

Level of Significance Before Mitigation: The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

IMPACT 7: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

One of the critical complementary measures directed at emission sources that are included in the cap-and-trade program is the RPS, which places an obligation on electricity supply companies to produce 33 percent of their electricity from renewable energy sources by 2020. A key prerequisite to reaching the target would be to provide sufficient electric transmission lines to renewable resource zones and system changes to allow integration of large quantities of intermittent wind and solar generation. The Project would help the State meet this goal by generating up to 3 MWac of power to California's current renewable portfolio. Therefore, in this regard, the Project would help the state meet its goals under AB 32.

The County adopted the ECAP [45] to take immediate, cost-effective, and coordinated steps to reduce the County's collective GHG emissions. The Project satisfies the ECAP's Renewable Energy Strategy by building a utility-scale renewable energy project to provide solar energy to the citizens of the County to help the County reach local energy independence.

The APCD does not have any specific plans, policies, nor regulations adopted for reducing the emissions of GHGs.

Level of Significance Before Mitigation: The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: Impacts would be less than significant.

[45] Energy and Climate Action Plan. County of San Diego Long Range Planning Division. May 2015.

ATTACHMENT D

FINAL ENVIRONMENTAL IMPACT REPORT

11EIR-00000-00005

Located online at:

http://www.sbcountyplanning.org/energy/projects/CuyamaSolarArrayCFEIR.asp

ATTACHMENT E

NBAR MINUTES

COUNTY OF SANTA BARBARA

NORTH
BOARD OF ARCHITECTURAL REVIEW
UNAPPROVED MINUTES

Meeting Date: May 18, 2018

Planning and Development
Conference Room
624 West Foster Road
Santa Maria, CA 93455
(805) 934-6250

Michael C. Maglinte, **Chair**
Robert W. Jones, **Vice-Chair**
Kevin J. Small
James King, **Alternate**
Steve Reese
John Zorovich, **NBAR Planner**
Lia Graham, **NBAR Secretary**

The regular meeting of the Santa Barbara County North Board of Architectural Review was called to order by the Chair Jones at 9:02 A.M., in the Public Works Conference Room A, 620 W. Foster Road, Santa Maria, California.

BOARD MEMBERS PRESENT:

Kevin J. Small
James King
Steve Reese
Robert W. Jones

STAFF MEMBERS PRESENT:

David Villalobos - NBAR Secretary
Dana Eady - NBAR Planner

BOARD MEMBERS ABSENT:

Michael C. Maglinte

1. 18BAR-00000-00007 SEPV Cuyama Solar Cuyama

17CUP-00000-00044 (Joe Dargel (805) 568-3573, Planner) **Jurisdiction: Solar**

Request of Freeman Hall, agent for the owner, Earl Clettus McDonell, for **Conceptual review of a Solar Photovoltaic Electricity Facility. The project doesn't propose any buildings or structures.** The property is a 20.44 acre parcel zoned AG-II-40 and shown as Assessor's Parcel Number 149-150-033 located at approximately .4 miles north of foothill road and .5 miles east of Kirschenmann Road in the Cuyama Valley area, First Supervisorial District.

Project received conceptual review only. Applicant may return for Preliminary and Final Approval on Consent if allowable.

Meeting adjourned at 10:14 A.M.

ATTACHMENT F

COMPREHENSIVE PLAN RESOLUTION

ATTACHMENT F

RESOLUTION OF THE SANTA BARBARA COUNTY PLANNING COMMISSION
COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

IN THE MATTER OF RECOMMENDING TO THE BOARD OF SUPERVISORS THE ADOPTION OF AN AMENDMENT TO THE COMPREHENSIVE PLAN LAND ELEMENT MAP FOR THE CUYAMA VALLEY (COMP-9) TO APPLY THE UTILITY-SCALE SOLAR PHOTOVOLTAIC FACILITY OVERLAY TO ASSESSOR'S PARCEL NO.149-150-033.	)	RESOLUTION NO. 18-_____ CASE NO: 17GPA-00000-00006

WITH REFERENCE TO THE FOLLOWING:

A. On December 20, 1980, by Resolution No. 80-566, the Board of Supervisors of the County of Santa Barbara adopted the Comprehensive Plan (General Plan) for the County of Santa Barbara.

B. On April 12, 2011, the Board of Supervisors adopted Resolution No. 11-178 and Resolution 11-179 initiating amendments to Section 35-1, the County Land Use Development Code, of Chapter 35, Zoning, of the County Code, to allow for large and small scale solar photovoltaic projects to be located on land zoned Agriculture-II, 40 acre minimum lot area (AG-II-40).

C. On October 7, 2014, by Resolution No. 14-234, the Board of Supervisors of the County of Santa Barbara adopted amendments to Section 35-1, the County Land Use Development Code, by amending Article 35.2, Zones and Allowable Land Uses, Article 35.5, Oil and Gas, Wind Energy and Cogeneration Facilities, and Article 35.11, Glossary, to add regulations regarding the development of Utility-Scale Solar Photovoltaic Facilities.

D. During the environmental analysis of the above-referenced initiated amendments to the Land Use Development Code, the proposed Comprehensive Plan amendments and the limitation of utility-scale solar photovoltaic facilities on up to 600 acres of land zoned Agriculture-II (AG-II) in the Cuyama Valley Rural Region were developed in order to comply with Government Code Section 65860 that requires that County zoning ordinances shall be consistent with the General Plan.

E. The proposed amendment is consistent with the Santa Barbara County Comprehensive Plan and the requirements of California Planning, Zoning, and Development laws.

F. Public agencies, California Native American Indian Tribes, civic, education, and other community groups, public utility companies, and citizens have been provided the opportunity for involvement pursuant to Section 65351 of the Government Code.

G. The County initiated consultations with Native American tribes as required by Government Code Section 65352.3 and 65352.4.

H. This County Planning Commission has held a duly noticed hearing, as required by Section 65353 of the Government Code on the proposed amendment at which hearing the amendment was explained and comments invited from the persons in attendance and has endorsed and transmitted a written recommendation to the Board of Supervisors pursuant to Government Code Section 65354.

NOW, THEREFORE, IT IS HEREBY RESOLVED as follows:

1. The above recitations are true and correct.

2. The Planning Commission now finds that it is in of the orderly development of the County and important to the preservation of the health, safety and general welfare of the residents of the County

to recommend that the Board of Supervisors adopt a Resolution (Case No. 17GPA-00000-00006) amending the Cuyama Valley Area (COMP-9) Map of the Comprehensive Plan Land Use Element, to designate Assessor's Parcel No. 149-150-033 with the Utility-Scale Solar Photovoltaic Facility Overlay.

Said Resolution is attached hereto as Attachment 1 and is incorporated by reference.

3. This County Planning Commission recommends that the Board of Supervisors of the County of Santa Barbara, State of California, following the required noticed public hearing, approve and adopt the above mentioned recommendation of this Commission, based on the findings included as Attachment A of the Planning Commission Staff report dated October 30, 2018.

4. A certified copy of this resolution shall be transmitted to the Board of Supervisors.

5. The Chair of this Planning Commission is hereby authorized and directed to sign and certify all maps, documents, and other materials in accordance with this resolution to show the above mentioned action by the Planning Commission.

PASSED, APPROVED AND ADOPTED this November 7, 2018 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
DANIEL BLOUGH, Chair
Santa Barbara County Planning Commission

ATTEST:

_____
JEFFREY WILSON
Secretary to the Commission

APPROVED AS TO FORM:

MICHAEL C. GHIZZONI
COUNTY COUNSEL

By _____
Deputy County Counsel

ATTACHMENT:

1. Board of Supervisors Resolution

ATTACHMENT 1

RESOLUTION OF THE SANTA BARBARA COUNTY BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

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ATTACHMENT 1

RESOLUTION OF THE SANTA BARBARA COUNTY BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

IN THE MATTER OF ADOPTING AN AMENDMENT TO THE COMPREHENSIVE PLAN LAND USE ELEMENT MAP FOR THE CUYAMA VALLEY (COMP-9) TO APPLY THE UTILITY-SCALE SOLAR PHOTOVOLTAIC FACILITY OVERLAY TO ASSESSOR'S PARCEL NO. 149-150-033.	RESOLUTION NO. 18-_____ CASE NO: 17GPA-00000-00006

WITH REFERENCE TO THE FOLLOWING:

A. On December 20, 1980, by Resolution No. 80-566, the Board of Supervisors of the County of Santa Barbara adopted the Comprehensive Plan (General Plan) for the County of Santa Barbara.

B. On April 12, 2011, the Board of Supervisors adopted Resolution No. 11-178 and Resolution 11-179 initiating amendments to Section 35-1, the County Land Use Development Code, of Chapter 35, Zoning, of the County Code, to allow for large and small scale solar photovoltaic projects to be located on land zoned Agriculture-II, 40 acre minimum lot area (AG-II-40).

C. On October 7, 2014, by Resolution No. 14-234, the Board of Supervisors of the County of Santa Barbara adopted amendments to Section 35-1, the County Land Use Development Code, by amending Article 35.2, Zones and Allowable Land Uses, Article 35.5, Oil and Gas, Wind Energy and Cogeneration Facilities, and Article 35.11, Glossary, to add regulations regarding the development of Utility-Scale Solar Photovoltaic Facilities.

D. During the environmental analysis of the above-referenced initiated amendments to the Land Use Development Code, the proposed Comprehensive Plan amendments and the limitation of utility-scale solar photovoltaic facilities on up to 600 acres of land zoned Agriculture-II (AG-II) in the Cuyama Valley Rural Region were developed in order to comply with Government Code Section 65860 that requires that County zoning ordinances shall be consistent with the General Plan.

E. The proposed amendment is consistent with the Santa Barbara County Comprehensive Plan and the requirements of California Planning, Zoning, and Development laws.

F. Public agencies, California Native American Indian Tribes, civic, education, and other community groups, public utility companies, and citizens have been provided the opportunity for involvement pursuant to Section 65351 of the Government Code.

G. The County conducted consultations with Native American tribes as required by Government Code Section 65352.3 and 65352.4.

H. The County Planning Commission held a duly noticed hearing, as required by Section 65353 of the Government Code on the proposed amendment at which hearing the amendment was explained and comments invited from the persons in attendance and has

endorsed and transmitted a written recommendation to the Board of Supervisors pursuant to Government Code Section 65354.

H. This Board has held a duly noticed public hearing, as required by Section 65355 of the Government Code on the proposed amendment, at which hearing the proposed amendment was explained and comments invited from the persons in attendance.

NOW, THEREFORE, IT IS HEREBY RESOLVED as follows:

1 . The above recitations are true and correct.

2. Whereas the Board of Supervisors now finds consistent with the authority of Government Code Section 65358 that it is in the interest of orderly development of the County and important to the preservation of the health, safety, and general welfare of the residents of said County to amend the Land Use Element of the Santa Barbara County Comprehensive Plan's as follows:

   A. Amend the Cuyama Valley Area (COMP-9) Map to designate Assessor's Parcel No. 149-150-033 with the Utility-Scale Solar Photovoltaic Facility Overlay as shown on attached Exhibit B.

3. In compliance with the provisions of Section 65356 of the Government Code, the above described change is hereby adopted as an amendment to the Land Use Element of the Santa Barbara County Comprehensive Plan.

4. Pursuant to provisions of Government Code Section 65357(a), the Clerk of the Board is hereby directed to send copies of the documents amending the Santa Barbara County Comprehensive Plan, including the diagrams and text, to all public entities specified in Government Code Section 65352 and any other public entities that submitted comments on the amendment to the general plan during its preparation.

5. Pursuant to provisions of Government Code Section 65357(b), the Clerk of the Board is hereby directed to make the documents amending the Santa Barbara County Comprehensive Plan, including the diagrams and text, available to the public for inspection.

6. The Chair and the Clerk of this Board are hereby authorized and directed to sign and certify all maps, documents, and other materials in accordance with this Resolution to reflect the above described action by the Board.

PASSED, APPROVED, AND ADOPTED by the Board of Supervisors of the County of Santa Barbara, State of California, this _____ day of _____, 2019 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____

DAS WILLIAMS, CHAIR
BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA

ATTEST:

MONA MIYASATO, COUNTY EXECUTIVE OFFICER
CLERK OF THE BOARD

By _____
Deputy Clerk

APPROVED AS TO FORM:

MICHAEL C. GHIZZONI
COUNTY COUNSEL

By _____
Deputy County Counsel

EXHIBITS:

A. 17GPA-00000-00006 Cuyama Valley Area (COMP-9) Map

EXHIBIT A:

17GPA-00000-00006 Cuyama Valley Area (COMP-9) Map

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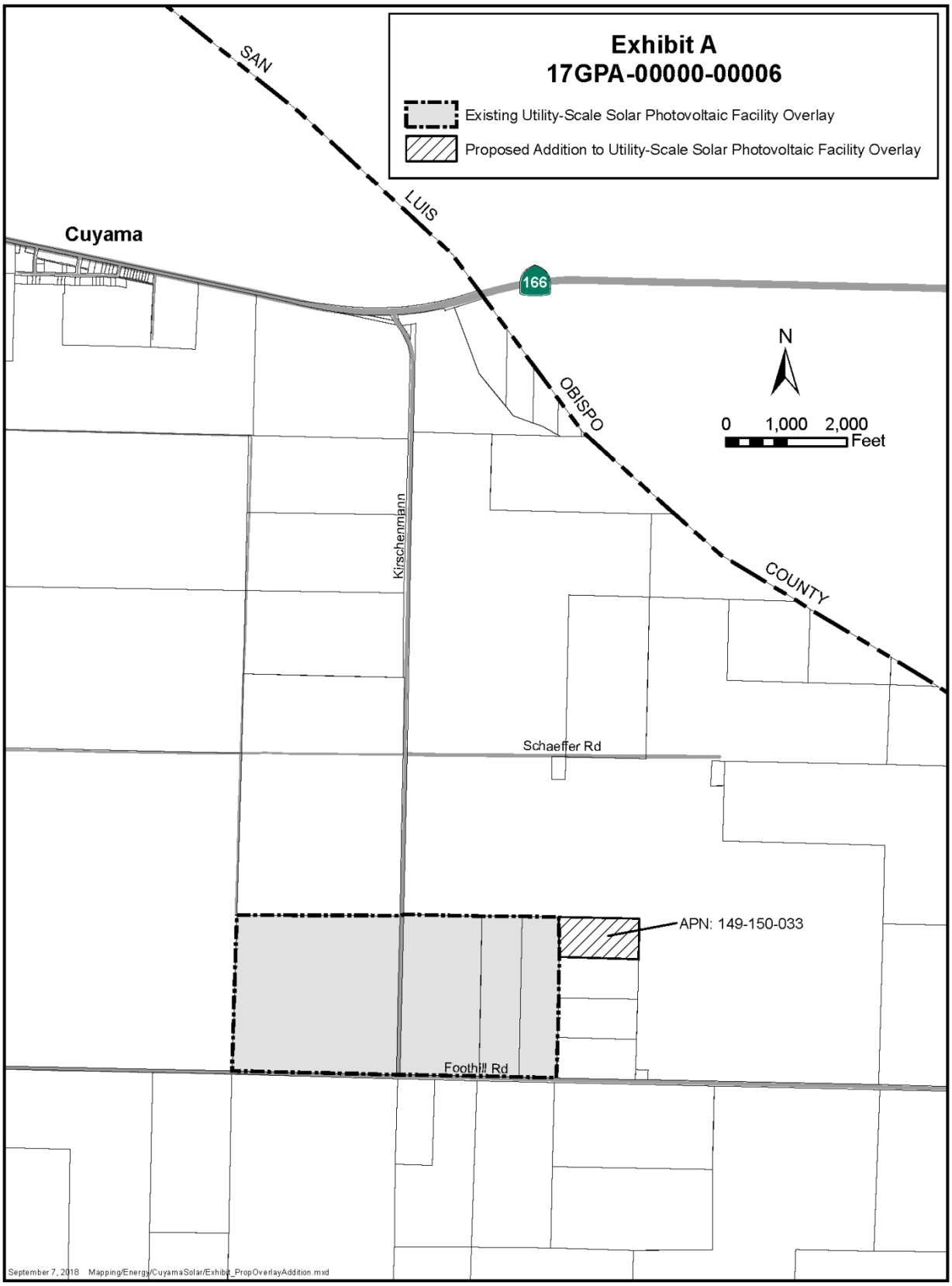
EXHIBIT A:

17GPA-00000-00006 Cuyama Valley Area (COMP-9) Map



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ATTACHMENT G

WATER CAN AND WILL SERVE LETTER

CUYAMA COMMUNITY SERVICES DISTRICT

4853 Primero Street
P.O. Box 368
New Cuyama, CA 93254

Phone (661) 766-2780
Fax (661) 766-2632
ccsd@inreach.com

November 17, 2017

Solar Electric Solutions
SEPV Cuyama, LLC
11726 San Vincente Blvd., Suite 414
Los Angeles, CA 90049

Attn: Neda Aghvami

Re: SEPV Cuyama, LLC / 3 MWac Solar PV site
Request for Can and Will Serve

This letter is being written at the request of Solar Electric Solutions, SEPV Cuyama, LLC. Cuyama Community Services District can and will serve temporary water supply for the above-referenced project.

The financial requirement for the temporary hookup for water service must be met prior to construction at the site. The District Payment Fee Schedule is set as follows:

$250.00 initial set-up fee to connect to water meter
$0.0175 per gallon ($17.50 per 1,000 gallons) of metered water delivery

If you need any additional information, please feel free to contact the District office. Office hours are Monday through Friday from 7:30 a.m. to 3:30 p.m.

Sincerely,

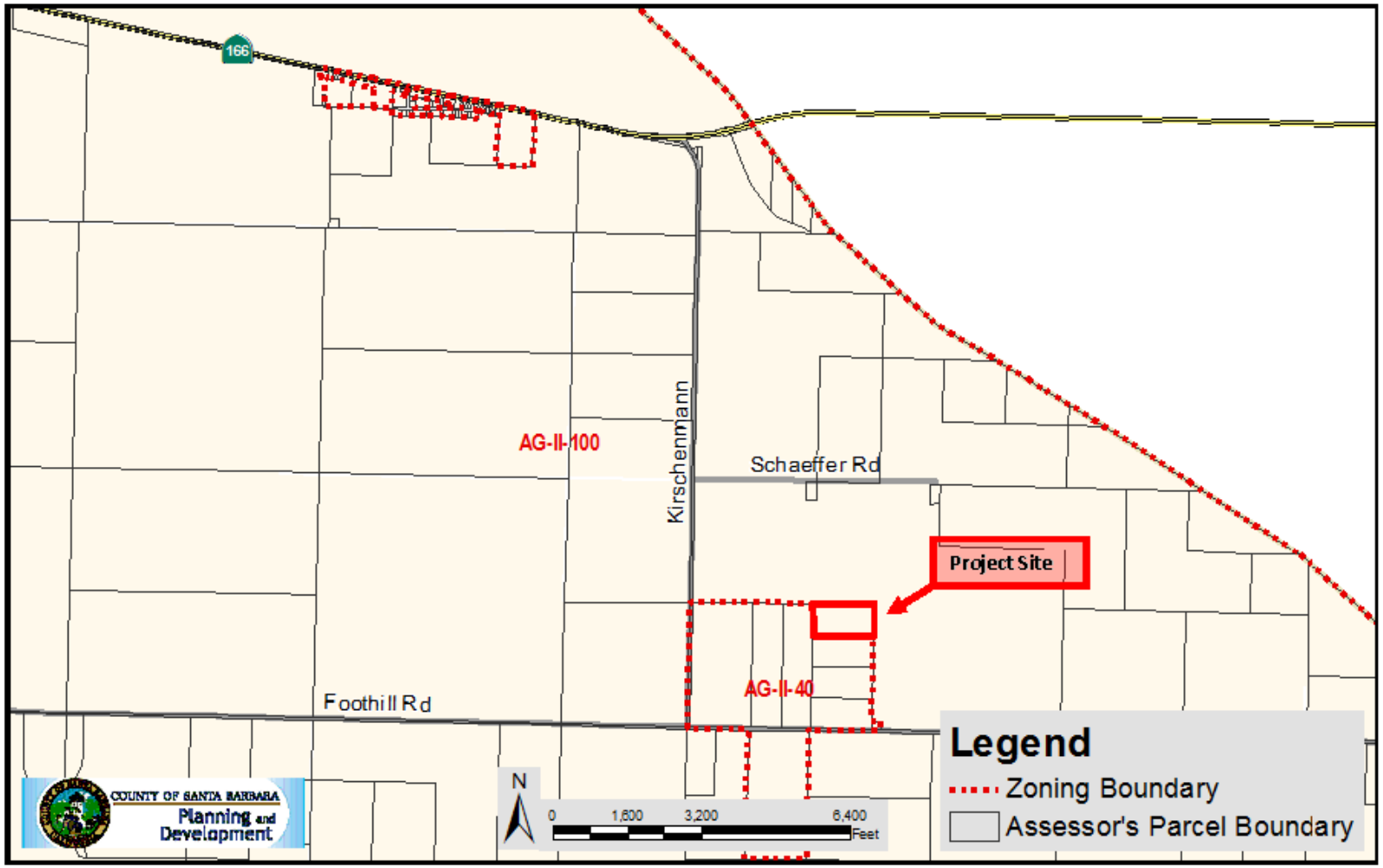
Vivian Vickery

Vivian Vickery
Office Administrator
Cuyama CSD

ATTACHMENT H

APN MAP

Attachment H
SEPV Cuyama Utility-Scale Solar Photovoltaic and Battery Energy Storage Facility Project
Case Nos. 17GPA-00000-00006 & 17CUP-00000-00044
County Planning Commission Hearing
October 11, 2018



ATTACHMENT I

SITE PLANS

SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
AND BATTERY ENERGY STORAGE FACILITY
CUYAMA, CA

GENERAL NOTES

SCOPE OF WORK:
THE INSTALLATION OF A SOLAR PHOTOVOLTAIC (PV) PLANT AND BATTERY ENERGY STORAGE SYSTEM INCLUDING PV MODULES, GRID-INTERACTIVE INVERTERS AND SINGLE-AXIS TRACKERS TO SUPPLY POWER DIRECTLY TO THE EXISTING ELECTRIC UTILITY GRID. THE BATTERIES WILL BE STORED INSIDE ENERGY STORAGE CONTAINERS.

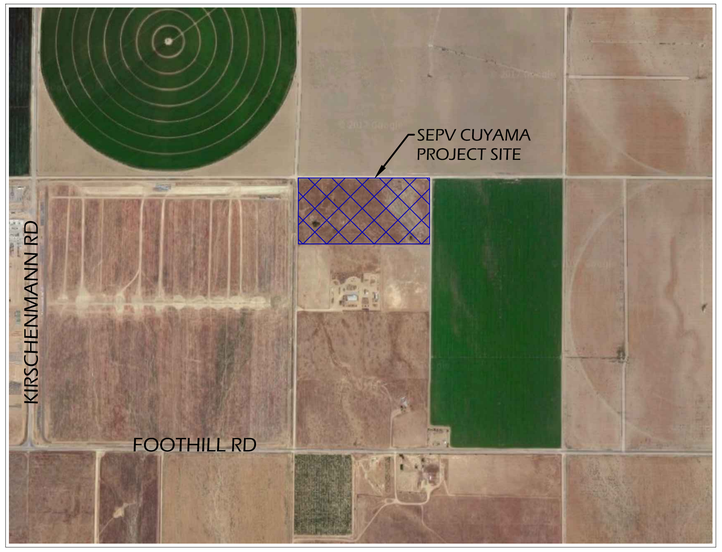
PROJECT LOCATION:
APPROXIMATELY 0.4 MILES NORTH OF FOOTHILL ROAD AND 0.5 MILES EAST OF KIRSCHENMANN ROAD, CUYAMA,
SANTA BARBARA COUNTY, CALIFORNIA
34° 54' 16" N, 119° 35' 4" W

APPLICANT:
SEPV CUYAMA, LLC
FREEMAN HALL
11726 SAN VICENTE BLVD., SUITE 414
LOS ANGELES, CA 90049

AUTHORITY HAVING JURISDICTION:
COUNTY OF SANTA BARBARA

ELECTRIC UTILITY SERVICE PROVIDER:
PACIFIC GAS AND ELECTRIC (PG&E)

DRAWING LIST



SATELLITE VIEW

MAP VIEW

COUNTY VIEW

PRELIMINARY NOT FOR CONSTRUCTION

SEPV CUYAMA, LLC
11726 SAN VICENTE BLVD.
SUITE 414
LOS ANGELES, CA 90049
PHONE: (310) 826-8511

CHECKED BY: MS
DRAWING NAME:288262-G-100
PLOT DATE: 06/06/2018

SEPV CUYAMA

REV#	APPR	DATE	REVISION DESCRIPTION	PLAN CKR APPR	CITY ENGR APPR	DATE
1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

COVER SHEET

SEPV CUYAMA
SOLAR PV ELECTRIC AND BATTERY ENERGY STORAGE FACILITIES
SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
G-100

SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
AND BATTERY ENERGY STORAGE FACILITY
CUYAMA, CA

EASEMENT NOTES:

3. A RIGHT OF WAY FOR DITCHES AND CANALS AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED DECEMBER 10, 1919 IN BOOK G OF PATENTS, PAGE 103. (THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION.)

4. AN EASEMENT FOR ROAD AND INCIDENTAL PURPOSES, RECORDED JANUARY 26, 1956 AS BOOK 1358, PAGE 246 OF OFFICIAL RECORDS.

LEGAL DESCRIPTION

APN 149-150-33-00-0

THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 10 NORTH, RANGE 25 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, ALSO DESCRIBED AS PARCEL A, AS SHOWN ON THAT CERTAIN PARCEL MAP FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, ON APRIL 21, 1971, IN BOOK 7, PAGE 88.

ZONING

AGRICULTURE II/MINIMUM LOT SIZE - 40 ACRES GROSS (AG-II-40)

GROSS LAND

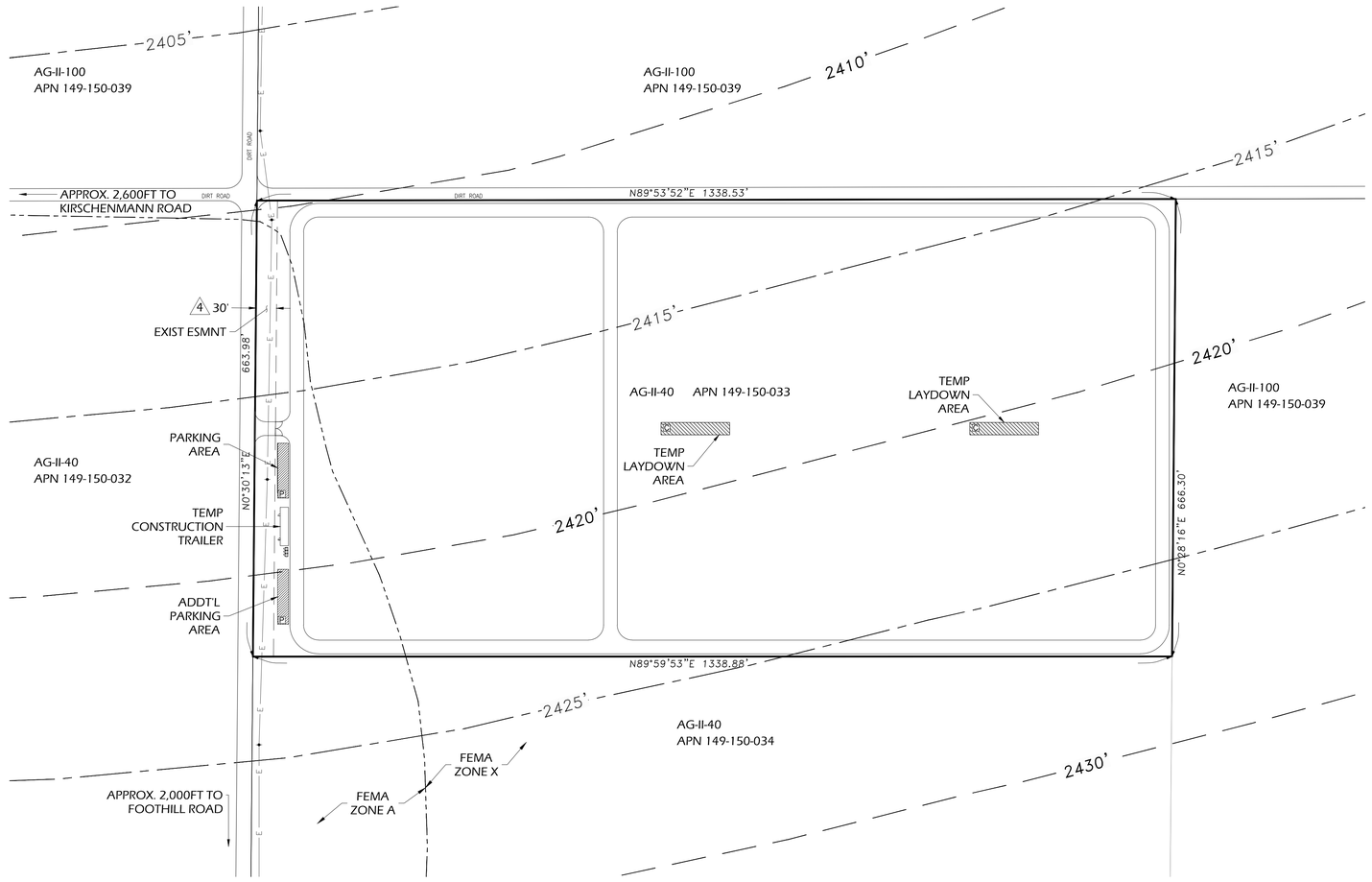
AREA ±20.44 ACRES

PROJECT AREA

AREA COVERED BY SOLAR ARRAYS, EQUIPMENT PADS AND ACCESS ROAD: ±6.0 ACRES

FLOOD INFORMATION

FEMA INSURANCE RATE MAP: 06083C0365G
PORTIONS OF LAND IS CLASSIFIED AS ZONE X AND ZONE A AS SHOWN



1 E-100 EXISTING CONDITIONS
SCALE: 1" = 100'

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- E E EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE

ABBREVIATION

APN	ASSESSOR'S PARCEL NUMBER
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EQUIP	EQUIPMENT
PROP	PROPOSED
P/L	PROPERTY LINE
R/W	RIGHT OF WAY
TYP	TYPICAL

NORTH
0 100' 200' 300' 400'
SCALE 1"= 100'

PRELIMINARY NOT FOR CONSTRUCTION

SEPV CUYAMA, LLC
11726 SAN VICENTE BLVD.
SUITE 414
LOS ANGELES, CA 90049
PHONE: (310) 826-8511

CHECKED BY: MS
DRAWING NAME:288262-E-100
PLOT DATE: 06/06/2018

SEPV CUYAMA

REV#	APPR	DATE	REVISION DESCRIPTION	PLAN CKR APPR	CITY ENGR APPR	DATE
1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

EXISTING CONDITIONS

SEPV CUYAMA
SOLAR PV ELECTRIC AND BATTERY ENERGY STORAGE FACILITIES
SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
E-100

SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
AND BATTERY ENERGY STORAGE FACILITY
CUYAMA, CA

EARTHWORK QUANTITY ESTIMATE		
DSCRIPTION	CUT (CUBIC YARDS)	FILL (CUBIC YARDS)
LOT(S) RAW	AMOUNT RAW CUT = 3,388 CY	AMOUNT RAW FILL = 3,388 CY
OVER-EXCAVATION (ACCESS ROADS)	3,270 CY	3,270 CY
OVER-EXCAVATION (ELECTRICAL EQUIPMENT PAD)	118 CY	118 CY
TOTAL	3,388 CY	3,388 CY
	EXPORT/IMPORT = 0 CY	

LEGAL DESCRIPTION

APN 149-150-33-00-0

THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 10 NORTH, RANGE 25 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA. ALSO DESCRIBED AS PARCEL A, AS SHOWN ON THAT CERTAIN PARCEL MAP FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, ON APRIL 21, 1971, IN BOOK 7, PAGE 88.

ZONING

AGRICULTURE II/MINIMUM LOT SIZE - 40 ACRES GROSS (AG-II-40)

GROSS LAND

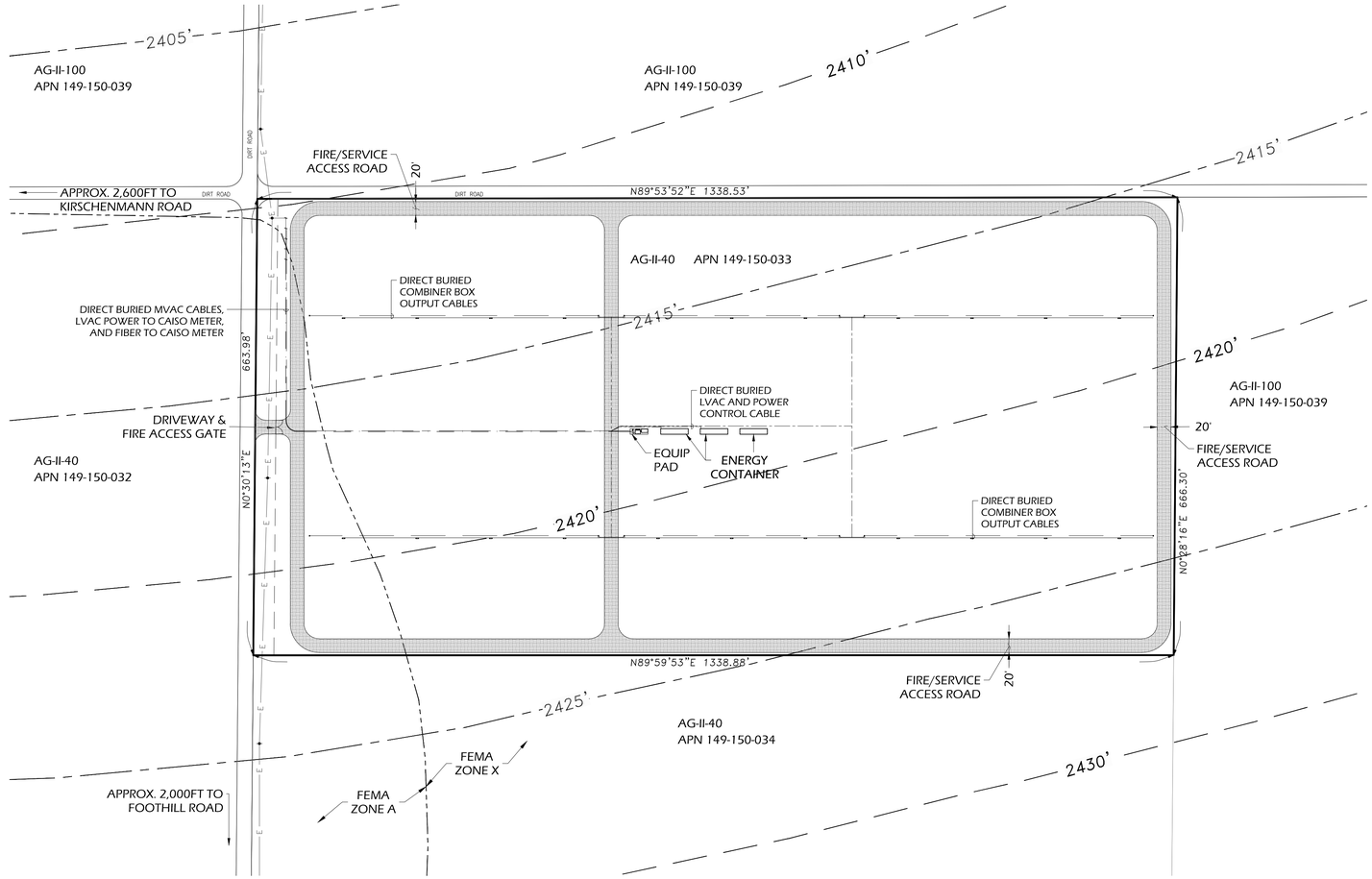
AREA ±20.44 ACRES

PROJECT AREA

AREA COVERED BY SOLAR ARRAYS, EQUIPMENT PADS AND ACCESS ROAD: ±6.0 ACRES

FLOOD INFORMATION

FEMA INSURANCE RATE MAP: 06083C0365G
PORTIONS OF LAND IS CLASSIFIED AS ZONE X AND ZONE A AS SHOWN



1 E-200 CONCEPTUAL GRADING PLAN
SCALE: 1" = 100'

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE

ABBREVIATION

APN	ASSESSOR'S PARCEL NUMBER
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EQUIP	EQUIPMENT
PROP	PROPOSED
P/L	PROPERTY LINE
R/W	RIGHT OF WAY
TYP	TYPICAL

NORTH
0 100' 200' 300' 400'
SCALE 1"= 100'

PRELIMINARY NOT FOR CONSTRUCTION

SEPV CUYAMA, LLC
11726 SAN VICENTE BLVD.
SUITE 414
LOS ANGELES, CA 90049
PHONE: (310) 826-8511

CHECKED BY: MS
DRAWING NAME:288262-E-200
PLOT DATE: 06/06/2018

SEPV CUYAMA

REVISION BLOCK				PLAN CKR	CITY ENGR	
REV#	APPR	DATE	REVISION DESCRIPTION	APPR	APPR	DATE
1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

CONCEPTUAL GRADING PLAN

SEPV CUYAMA
SOLAR PV ELECTRIC AND BATTERY ENERGY STORAGE FACILITIES
SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
E-200

SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
AND BATTERY ENERGY STORAGE FACILITY
CUYAMA, CA

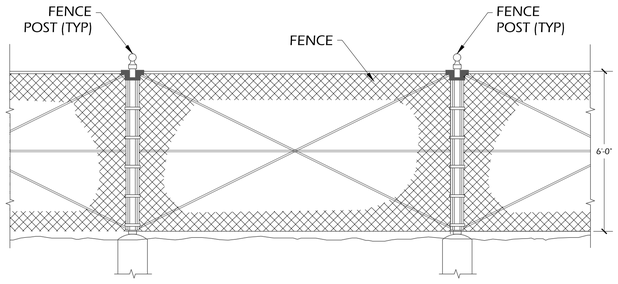
LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED CHAINLINK FENCE
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED OVERHEAD ELECTRIC LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ONSITE FIRE/SERVICE ACCESS ROADS (NATIVE SOIL COMPACTED TO 90%)

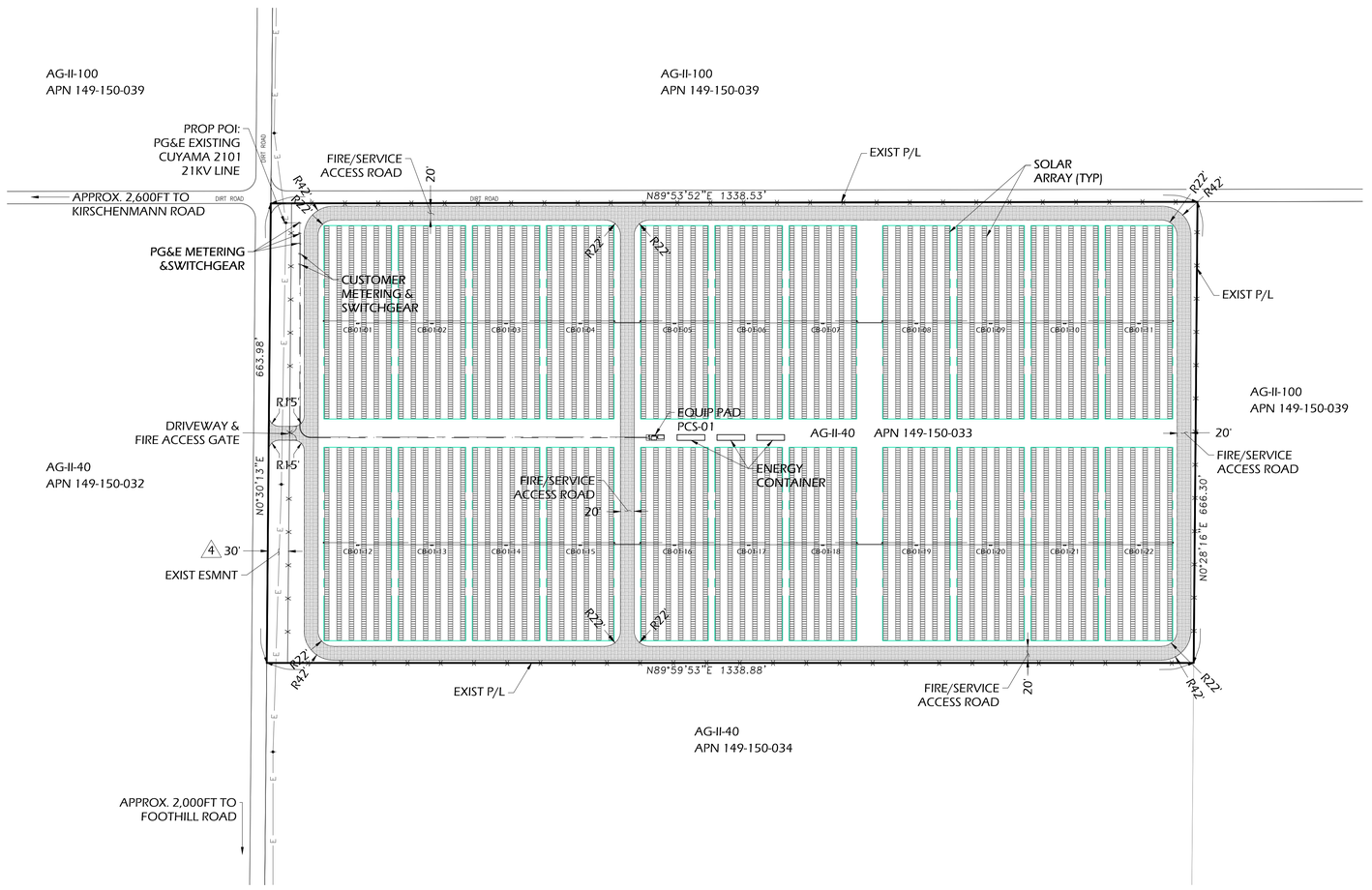
ABBREVIATION

APN	ASSESSOR'S PARCEL NUMBER
CB	COMBINER BOX
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EQUIP	EQUIPMENT
PCS	POWER CONDITIONING SYSTEM
PROP	PROPOSED
P/L	PROPERTY LINE
R/W	RIGHT OF WAY
TYP	TYPICAL

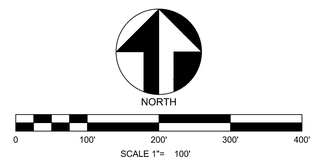
COMBINER ID: CB-01-01
PCS # — COMBINER #



2 / E-300 FENCE DETAIL
SCALE: NTS



1 / E-300 OVERALL SITE PLAN
SCALE: 1" = 100'



PRELIMINARY NOT FOR CONSTRUCTION

SEPV CUYAMA, LLC
11726 SAN VICENTE BLVD.
SUITE 414
LOS ANGELES, CA 90049
PHONE: (310) 826-8511

CHECKED BY: MS
DRAWING NAME:288262-E-300
PLOT DATE: 06/06/2018

SEPV CUYAMA

REVISION BLOCK

REV#	APPR	DATE	REVISION DESCRIPTION	PLAN CKR APPR	CITY ENGR APPR	DATE
1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

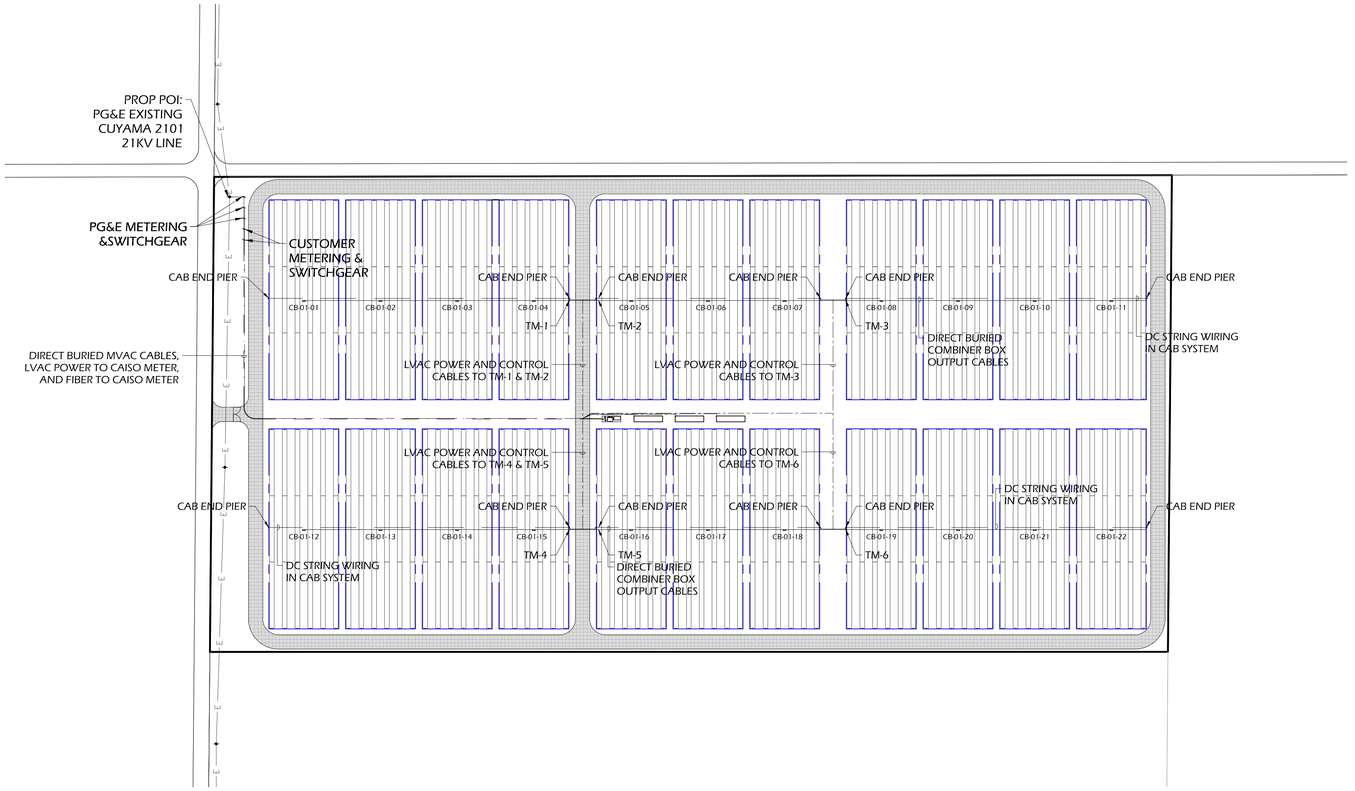
OVERALL SITE PLAN

SEPV CUYAMA
SOLAR PV ELECTRIC AND BATTERY ENERGY STORAGE FACILITIES
SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
E-300

SEPV CUYAMA, LLC

SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
AND BATTERY ENERGY STORAGE FACILITY
CUYAMA, CA



1 E-400 ELECTRICAL SITE PLAN
SCALE: 1" = 100'

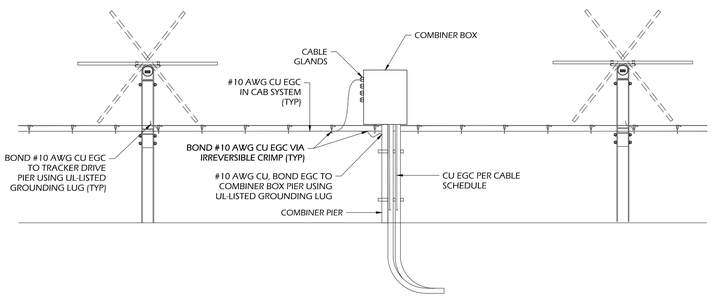
COMBINER ID: CB-01-01
PCS # — COMBINER #

LEGEND

- PROPERTY LINE
- MVAC UNDERGROUND
- LVAC UNDERGROUND
- DC UNDERGROUND
- CAB SYSTEM
- E — E EXISTING OVERHEAD ELECTRIC LINE
- COMBINER BOX GROUP
- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ONSITE FIRE/SERVICE ACCESS ROADS (NATIVE SOIL COMPACTED TO 90%)

ABBREVIATION

APN	ASSESSOR'S PARCEL NUMBER
CB	COMBINER BOX
EGC	EQUIPMENT GROUNDING CONDUCTOR
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EQUIP	EQUIPMENT
PCS	POWER CONDITIONING SYSTEM
PROP	PROPOSED
P/L	PROPERTY LINE
R/W	RIGHT OF WAY
TYP	TYPICAL



2 E-400 COMBINER BOX GROUNDING ELEVATION
SCALE: NTS

NORTH
0 100' 200' 300' 400'
SCALE 1"= 100'

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DRAWING NAME:288262-E-400
PLOT DATE: 06/06/2018

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1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

ELECTRICAL SITE PLAN

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SANTA BARBARA COUNTY, CA
N1/2 OF NW 1/4 OF SW 1/4 OF SEC. 32, T.10N., R.25W., S.B.B.M.

SHEET
E-400

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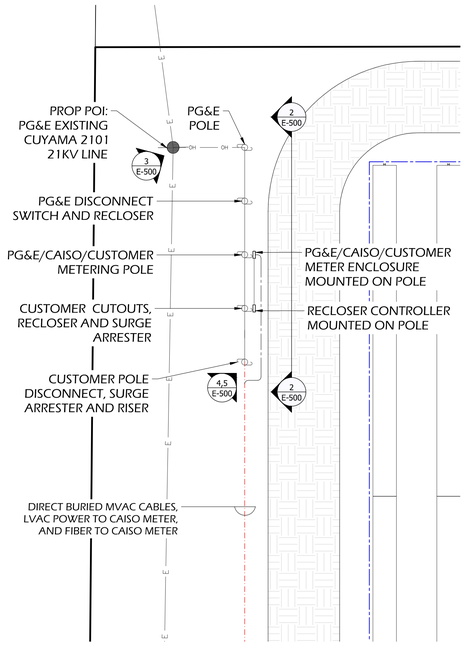
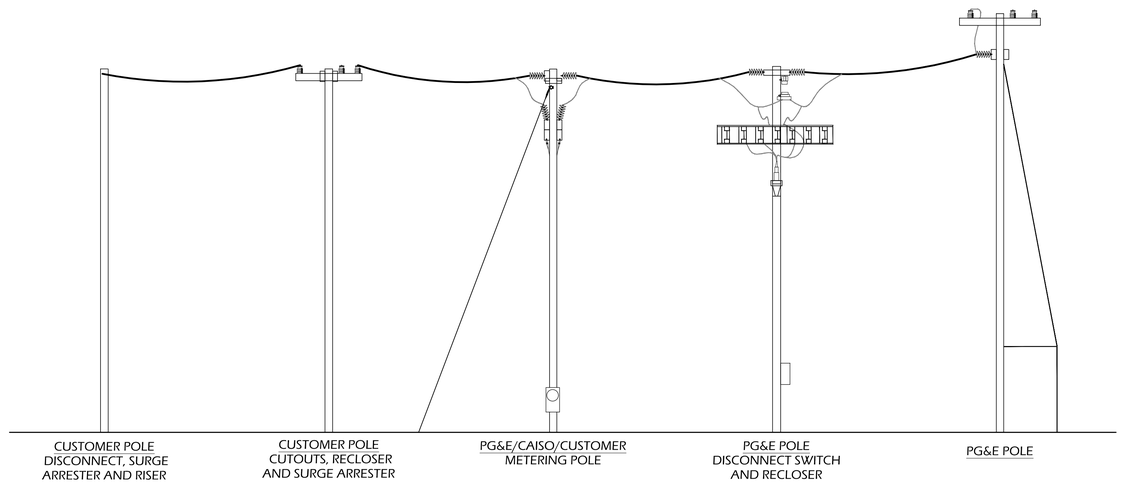
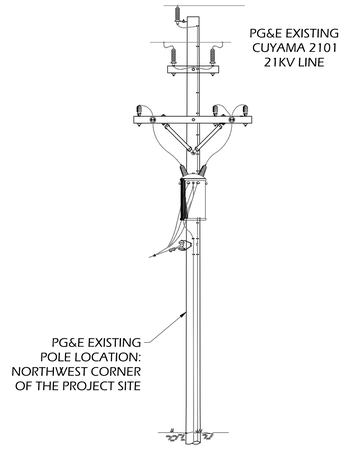
CUYAMA, CA



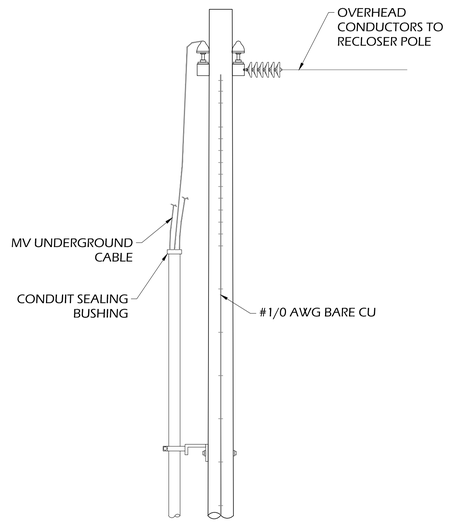
1 E-500 ENLARGED PLAN - POI
SCALE: 1" = 20'



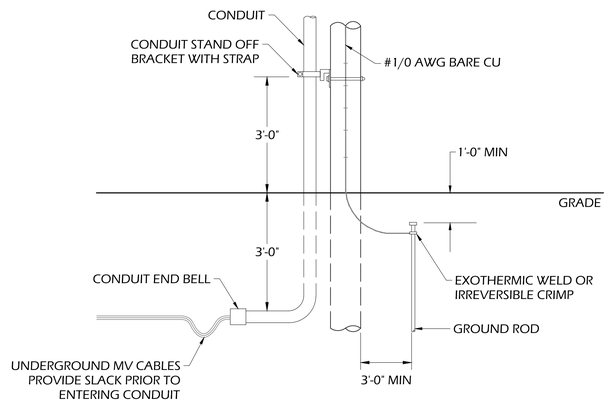
2 E-500 POINT OF INTERCONNECTION
SCALE: NTS



3 E-500 PG&E EXISTING POLE STRUCTURE
SCALE: NTS



4 E-500 TYPICAL UNDERGROUND TO OVERHEAD DETAIL
SCALE: NTS



5 E-500 TYPICAL RISER POLE ELEVATION
SCALE: NTS

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ENLARGED PLANS & ELEVATIONS

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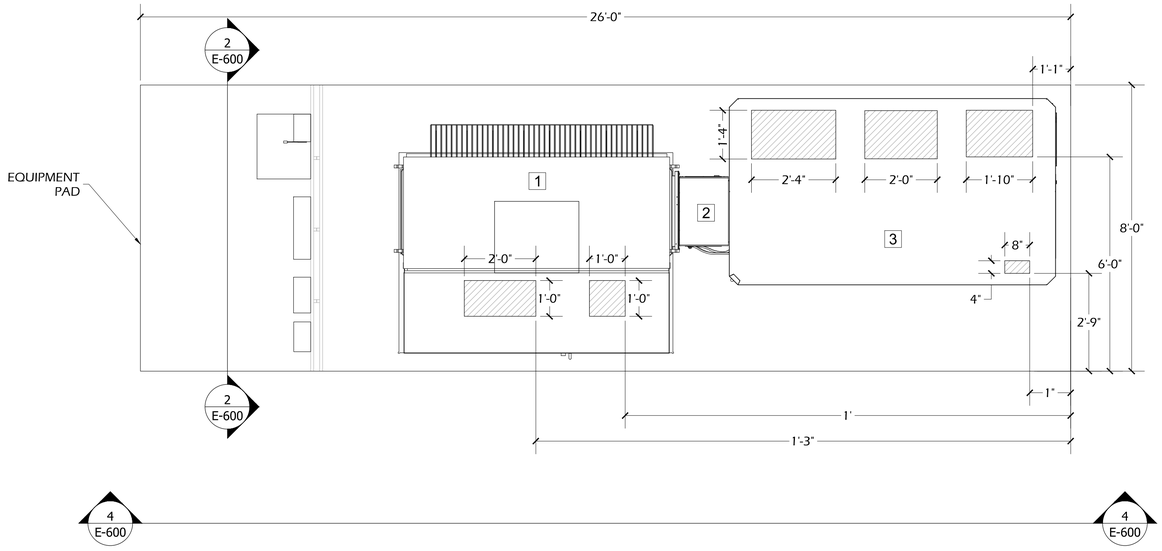
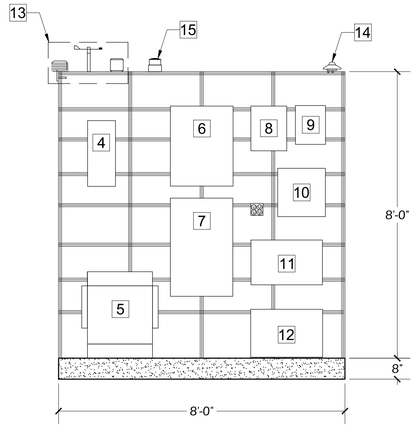
CUYAMA, CA



1 E-600 PCS EQUIPMENT PAD PLAN
SCALE: 1/2" = 1'

N

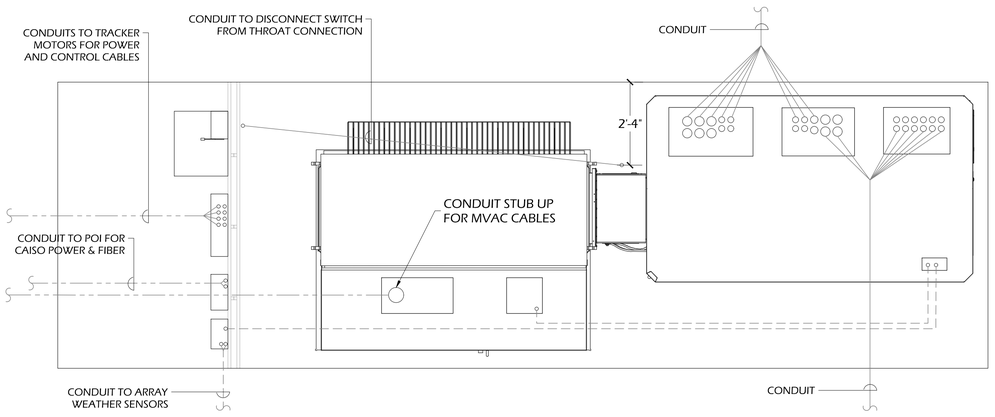


2 E-600 AUX EQUIPMENT RACK
SCALE: 1/2" = 1'

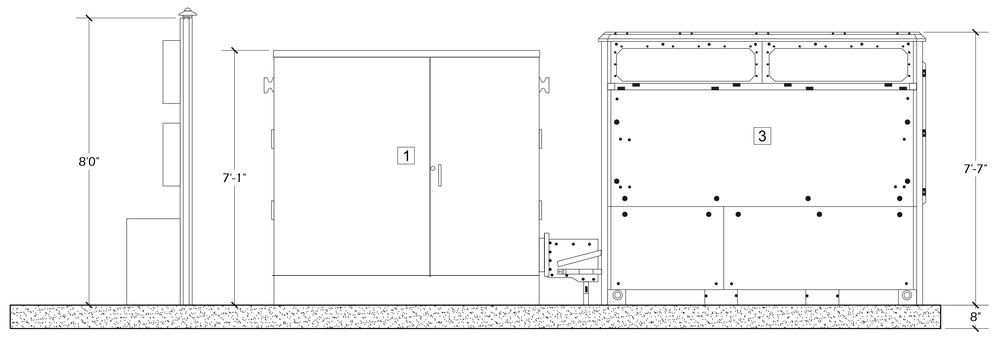
EQUIPMENT LIST	
#	DESCRIPTION
1	MV TRANSFORMER "XFM-01"
2	BUSWAY
3	INVERTER "INV-01"
4	AUX DISCONNECT "DS-01"
5	AUX TRANSFORMER "XFMR-01A"
6	PANEL BOARD "PNL-1L"
7	PANEL BOARD "PNL-1H"
8	MOTOR CONTROL UNIT "MCU-1"
9	TRACKER SITE CONTROLLER
10	CAISO WEATHER STATION ENCLOSURE
11	MONITORING SYSTEM UPS
12	MAIN COMMUNICATIONS ENCLOSURE
13	WEATHER SENSORS
14	GHI PYRANOMETER
15	TRACKER GPS UNIT

LEGEND

- POWER ONLY
- SCADA ONLY
- POWER & SCADA



3 E-600 PCS EQUIPMENT PAD CONDUIT ROUTING
SCALE: 1/2" = 1'



4 E-600 PCS EQUIPMENT PAD ELEVATION
SCALE: 1/2" = 1'

N

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1		6/6/18	ADD BATTERY ENERGY STORAGE SYSTEM IN CONTAINERS.			

EQUIPMENT PAD DETAILS

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E-600

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SOLAR PHOTOVOLTAIC ELECTRICITY GENERATING
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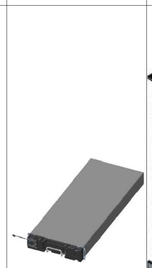
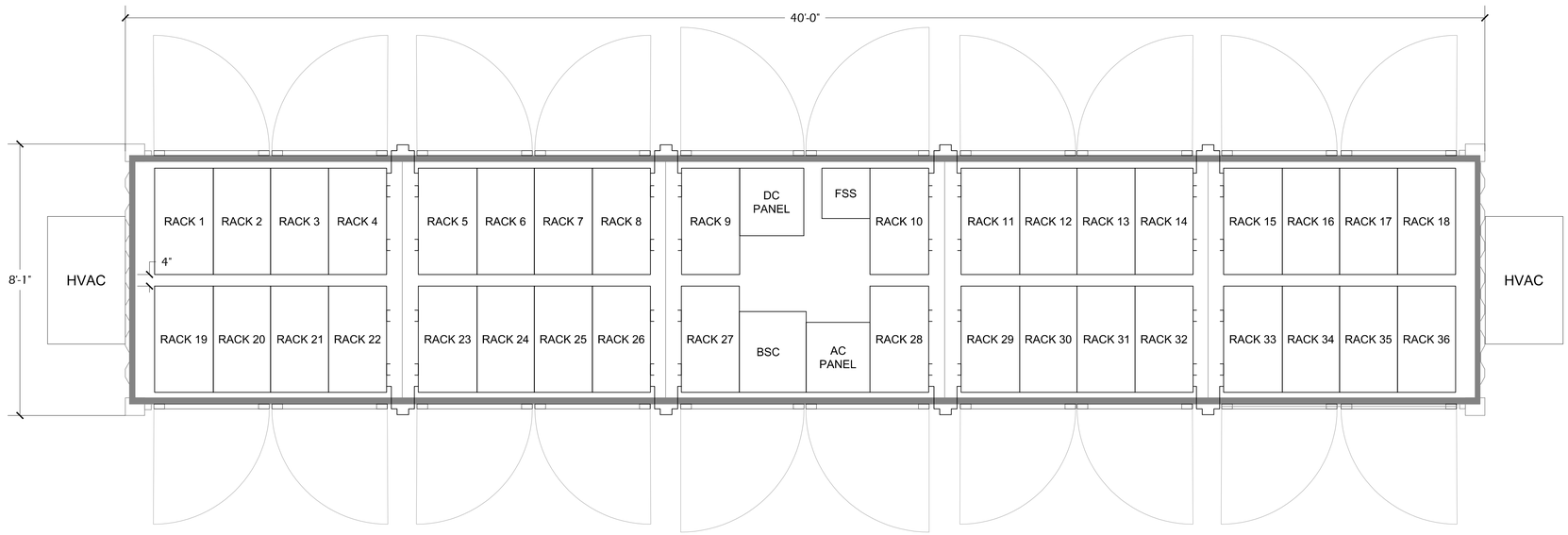
CUYAMA, CA

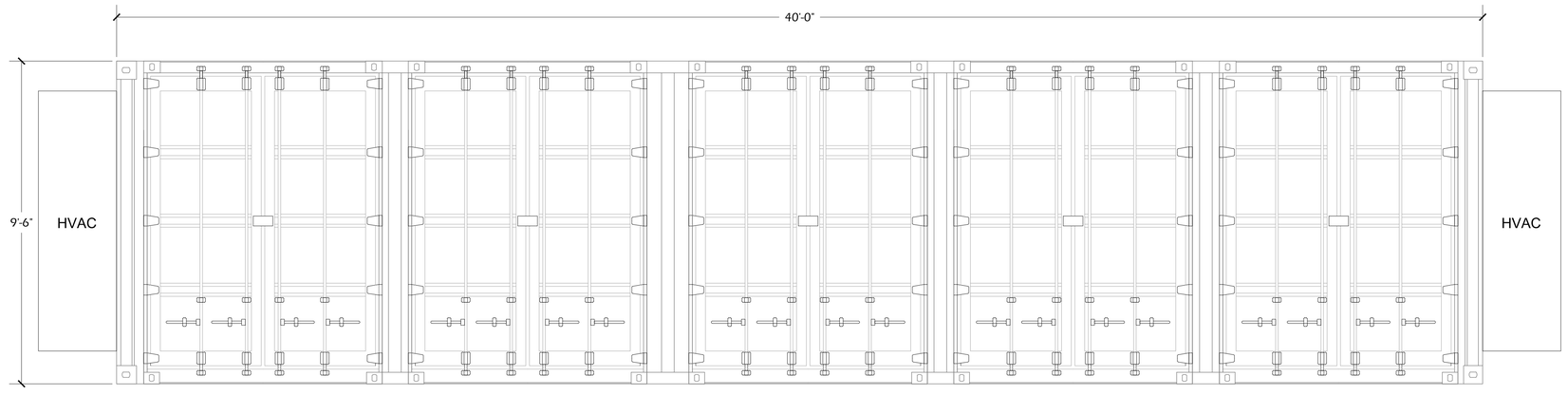
GRID ENERGY MODULE AND RACK			
		MODULE - 4P (EM048290P5B1)	RACK - SR32_4P
STRUCTURE	CONFIGURATION	14S4P	336S 4P(24Modules)
	DIMENSION (W x H x D), MM	445 x 110 x 1162	520 x 3150 x 1200
	WEIGHT (KG)	88.6	2480
ELECTRICAL	NOMINAL VOLTAGE (VDC)	51.38	1233.12
	NOMINAL CAPACITY (AH)	290	290
	CP-RATE	0.4	0.4
	PEAK CURRENT (A)	141.9	141.9
	ENERGY (KWH)	14.896	357.504
ENERGY DENSITY	WH/L	261.9	181.880
IMAGE			

ENERGY CONTAINER - INWARD VIEW
NTS

ENERGY CONTAINER - OUTWARD VIEW
NTS



1 E-600 40FT ISO HIGH-CUBIC ENERGY CONTAINER (UNMANNED) - TOP VIEW
SCALE: 1/2" = 1'



2 E-600 ENERGY CONTAINER (UNMANNED) - SIDE VIEW
SCALE: 1/2" = 1'

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ENERGY STORAGE CONTAINER DETAILS

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