

**Alameda Grant Line Solar Project 1 Project
Written Findings of Significant Effects**

The California Environmental Quality Act (CEQA) Public Resources Code Sections 21000 et seq., state that if a project would result in significant environmental impacts it may be approved, if feasible mitigation measures or feasible alternatives can avoid or substantially lessen the impact or if there are specific economic, social, or other considerations which make it infeasible to substantially lessen or avoid the impacts. Therefore, when an environmental impact report ("EIR") has been completed which identifies one or more potentially significant environmental impacts, the approving agency must make one or more of the following findings for each identified significant impact:

- a) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- c) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

In accordance with CEQA Guidelines Section 15091, the following findings and supporting facts summarize each significant environmental impact and the mitigation measures adopted to avoid or substantially reduce the magnitude of the effect, as identified in the Alameda Grant Line Solar Project Final Environmental Impact Report and the EIR addendum (collectively "FEIR") prepared pursuant to CEQA Guidelines Section 15162. The findings described below are organized by resource issue, in the same order as the effects are discussed in the FEIR. The Lead Agency's findings regarding the Project follow the individual effect findings. The findings reference the FEIR (part of the record upon which the East County Board of Zoning Adjustments [EBZA] bases its decision on the project) and mitigation measures in support of the findings. For specific resource mitigation measures, the section number where the full text of the mitigation measure occurs is noted in the finding.

INTRODUCTION

Soltage, LLC is proposing to construct, install, operate, and maintain an approximately 2-megawatt (MW) alternating current (AC) solar photovoltaic (PV) facility known as the Alameda Grant Line Solar 1 (project). The project is located on a 23.07-acre site at West Grant Line Road and Great Valley Parkway in eastern unincorporated Alameda County, adjacent to the unincorporated community of Mountain House in San Joaquin County. The project would include a gravel access road, and a 500 square foot pad for the inverter. The solar panels would be a silicon model that does not use Teflon coating, and would use a non-toxic anti-reflective coating. Each panel consists of a module assembly (with frame) that is approximately 80 inches by 40 inches in size. The solar panels would be mounted on a steel racking frame that is positioned three to nine feet above ground to allow for vegetation control and periodic maintenance. The panels would include a single axis tracking system that is mounted on steel posts driven into the ground and would have a +/- 60-degree range of motion driven by electric motors. The solar arrays will be in three rows with the longest row in the rear.

RECORD OF PROCEEDINGS AND CUSTODIAN OF RECORD

The record upon which all findings and determinations related to the approval of the project are based comprises the items listed below.

- The FEIR and all documents referenced in or relied upon by the FEIR, including its addendum.
- All information (including written evidence and testimony) provided by County staff to the Board relating to the FEIR, the approvals, and the project.
- All information (including written evidence and testimony) presented to the Board of Supervisors by the environmental consultants who prepared the FEIR or incorporated into reports presented to the Board.
- All applications, letters, testimony, and presentations relating to the project.
- All information (including written evidence and testimony) presented at any County hearing related to the project and the FEIR.
- All County-adopted or County-prepared land use plans, ordinances, including without limitation general plans, specific plans, and ordinances, together with environmental review documents, findings, mitigation monitoring programs, and other documents relevant to land use within the area.
- The Mitigation Monitoring and Reporting Program for the project.
- All other documents composing the record pursuant to Public Resources Code Section 21167.6(e).

The custodian of the documents and other materials that constitute the record of the proceedings upon which the County's decisions are based is Albert Lopez, Planning Director, or his designee. Such documents and other material are located at 224 Winton Avenue, Room 111, Hayward, California 94544.

Findings and Recommendations Regarding Significant Impacts that are Mitigated to a Less-Than-Significant Level

AIR QUALITY

Impact AQ-2: Uncontrolled fugitive dust (PM₁₀ and PM_{2.5}) could expose the areas that are downwind of construction sites to air pollution from construction activities without the implementation of the Air District's best management practices.

Mitigation Measure AQ-1: The applicant shall require their construction contractor to comply with the following BAAQMD Best Management Practices for reducing construction emissions of PM₁₀ and PM_{2.5}:

- Water all active construction areas at least twice daily or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- Apply water twice daily or as often as necessary to control dust or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material.
- Hydro-seed or apply non-toxic soil stabilizers to inactive construction areas.

- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (e.g., dirt, sand).
- Limit vehicle traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Install sandbags or other erosion control measures to prevent silt runoff from public roadways.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Mitigation Measure AQ-1 would require implementation of the BAAQMD Best Management Practices for fugitive dust control. Therefore, with compliance with this mitigation measure, construction-related fugitive dust would be reduced to less-than-significant levels.

Remaining Impacts: Any remaining impacts related to air quality will be less than significant.

BIOLOGICAL RESOURCES

Impact BIO-1: Construction of the project could potentially kill, injure, or alter the behavior of special-status species on the site.

Mitigation Measure BIO-1.1: A qualified biologist will conduct an environmental education program for all persons employed or otherwise working on the project site before they perform any work. The program shall consist of a presentation from the biologist that includes a discussion of the biology and general behavior of special-status species on or near the site; information about the distribution and habitat needs of the species; sensitivity of the species to human activities; the status of the species pursuant to the Federal Endangered Species Act, the California Endangered Species Act, and the California Fish and Game Code including legal protection; recovery efforts; penalties for violations; and any project-specific protective measures described in this document or any subsequent documents or permits. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers before their performing work on the site. The biologist shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on the site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all the protection measures.

Mitigation Measure BIO-1.2: A qualified biologist will be on the site daily to monitor initial grubbing/vegetation clearing, grading, and ground disturbing activities. The biologist will have the authority to stop work that may impact special-status species.

California tiger salamander, California red-legged frog, San Joaquin coachwhip, California glossy snake, and coast horned lizard: Construction of the project has the potential to injure or kill California tiger salamander, California red-legged frog, San Joaquin coachwhip, California glossy snake, and coast horned lizard that may be in rodent burrows during grading or installation of the monopoles. These species could become entangled in the plastic netting wrapped around erosion-control devices. These species could become entrapped in steep-sided trenches or walls. The proposed project would not impact any potential breeding habitat for California tiger salamander or California red-legged frog. Because California tiger salamander and California red-legged frog generally migrate at night during rain events and construction activities would occur during daylight hours, no impact on migrating individuals is expected. Operation of the proposed solar facility is not anticipated to impact California tiger salamander

or glossy snake because the adults are only active on the surface at night. Potential impacts to these species would be reduced to *less than significant* with implementation of Mitigation Measures BIO-1.1, 1.2, 1.3, 1.4, and 1.5.

Mitigation Measure BIO-1.3: The Applicant shall include in the contract specifications a requirement to use tightly woven fiber of natural materials (e.g., coir rolls or mats) or similar material for erosion control. Plastic mono-filament netting (erosion control matting) or similar material shall be prohibited, to prevent the entrapment of wildlife.

Mitigation Measure BIO-1.4: Surveys for California tiger salamander, California red-legged frog, San Joaquin coachwhip, California glossy snake, and coast horned lizard shall be conducted by a qualified biologist within 24 hours prior to the initiation of any vegetation clearing or ground disturbing activities. All suitable habitat including refuge such as burrows, under rocks, duff, debris, etc., shall be thoroughly inspected. Any listed wildlife that are encountered will be allowed to leave the work area of their own volition.

Mitigation Measure BIO-1.5: To avoid entrapment, injury, or mortality of listed species resulting from falling into steep-sided holes or trenches, all excavated holes or trenches deeper than 12 inches shall be covered at the end of each workday with plywood or similar materials. Larger excavation that cannot easily be covered shall be ramped at the end of the workday to allow trapped animals an escape method.

Burrowing Owl: Construction of the project has the potential to crush or entomb burrowing owls in burrows. Construction work near an occupied burrow could impact breeding or wintering western burrowing owls through general disturbance. Installation of the solar panels will permanently impact 11 acres of burrowing owl habitat by lowering the habitat quality. Potential impacts to burrowing owl would be reduced to *less than significant* with implementation of Mitigation Measures BIO-1.1, 1.2, 1.6, 1.7, 1.8, and 1.9.

Mitigation Measure BIO-1.6: Prior to initiating construction activities, a California Department of Fish and Wildlife (CDFW)-approved biologist shall conduct surveys for burrowing owl within 500 feet of the project site, where safely accessible. This measure incorporates avoidance and minimization guidelines from the CDFW 2012 Staff Report on Burrowing Owl Mitigation. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls. Surveys shall take place near sunrise or sunset in accordance with CDFW survey guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

Mitigation Measure BIO-1.7: If burrowing owls are found during the breeding season (February 1–August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the nest is inactive. During the nonbreeding season (September 1–January 31), the project proponent shall avoid the owls and the burrows they are using. Avoidance shall include the establishment of a buffer zone.

Mitigation Measure BIO-1.8: If occupied burrows for nonbreeding burrowing owls are not avoided, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within an appropriate buffer zone as recommended by the biologist in coordination with the California Department of Fish and Wildlife (CDFW) by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

Mitigation Measure BIO-1.9: To mitigate for the alteration of burrowing owl habitat, 10 acres on the western and northern edges of the site will be protected in perpetuity under a conservation easement or deed restriction. This land is contiguous with the levee and open space associated with the Mendota Canal. A mitigation and management plan (MMP) with success criteria will be developed for this area and approved by the California Department of Fish and Wildlife (CDFW).

Swainson's Hawk: Impacts on Swainson's hawk foraging habitat will include the permanent loss of approximately 11 acres of open grassland foraging habitat. The project will temporarily affect approximately 5 acres of mostly non-native annual grassland within the project site. Much of this area is characterized by ruderal, often sparse vegetation, trash accumulation, roadside gravel, and fill. The area next to the roadway is also subject to noise from passing vehicles and presents a strike risk to the birds and is thus a sub-optimal foraging area. There are no suitable nest trees on or adjacent to the project site. The project site is a relatively small, disjunct parcel of habitat adjacent to dense residential development; by itself it cannot support a breeding pair of Swainson's hawk. However, the incremental loss of foraging habitat could be a significant impact. Potential impacts to Swainson's hawk would be reduced to *less than significant* with implementation of Mitigation Measures BIO-1.1, 1.2, 1.9, and 1.10.

Mitigation Measure BIO-1.10: The mitigation and management plan (MMP) described in Mitigation Measure BIO-1.9 for the 10-acre conservation area shall include a prescription for managing the area as habitat for Swainson's hawk. The MMP will include success criteria for Swainson's hawk habitat.

San Joaquin Kit Fox: Kit fox are extirpated from the area and are not expected to use the site. In the event kit fox recolonize the northern part of their range and move into the project site area at some future time, they will be able to move through the wildlife-friendly fence and use the protected 10 acres described in Measure BIO-1.9. Therefore, impacts to San Joaquin kit fox will be *less than significant*.

American Badger: Initial grading and ground disturbance of the site could injure or kill American badgers in dens or burrows, in the event any are present on the site at the time of the disturbance. Potential impacts to these species would be reduced to *less than significant* with implementation of Mitigation Measures BIO-1.1, 1.2, 1.11, and 1.12.

Mitigation Measure BIO-1.11: Pre-construction surveys shall be conducted for the American badger no more than 14 days prior to the initiation of ground-disturbing activities. Surveys shall be conducted by a qualified wildlife biologist with experience and knowledge in identifying badger burrows and include walking parallel transects looking for badger burrows and sign. Any badger dens identified shall be flagged and mapped.

Mitigation Measure BIO-1.12: In the event active badger dens are identified, a no-work buffer of 200 feet shall be established around the den and associated occupied areas. If avoidance is not feasible, a biologist shall determine if the burrow is being used as an active maternity den through utilization of

remote cameras. If young are determined to be present, the burrow shall be avoided until the young have vacated the burrow as determined by a qualified biologist. If the burrow is determined not to be an active maternity den and young are not present, in coordination with the California Department of Fish and Wildlife (CDFW), a one-way eviction door shall be installed between September 1 and January 1 to passively relocate the badger and to avoid impacts during the breeding season. If the badger digs back into the burrow, CDFW staff may allow the use of live traps to relocate badgers to suitable habitat from the area of project impact.

Monarch Butterfly: Development of the project site would result in the loss of small numbers of narrow-leaved milkweed, the larval food plant for the monarch butterfly. If monarch eggs, larvae, or chrysalides are on the milkweed at the time they are removed it would result in mortality. After construction, the solar panels would lead to the loss of milkweed plants and therefore monarch breeding habitat. Potential impacts to monarch butterfly would be reduced to *less than significant* with implementation of Mitigation Measures BIO-1.1, 1.2, 1.9, 1.13, 1.14, and 1.15.

Mitigation Measure BIO-1.13: The mitigation and management plan (MMP) described in Measure BIO-1.9 for the 10-acre conservation area shall include prescription of an appropriate seed mix and planting plan targeted for the monarch butterfly, including milkweed and native flowering plant species known to be visited by monarch butterflies and containing a mix of flowering plant species with continual floral availability through the entire breeding season for monarch butterfly (early spring to fall). The MMP will include success criteria for monarch butterfly.

Mitigation Measure BIO-1.14: A qualified biologist will conduct a minimum of two pre-construction surveys conducted within 30 days during appropriate activity periods (i.e., March through September) and conditions prior to the start of ground disturbing activities to look for milkweed host plants and signs of monarch breeding activity (larvae or chrysalides). Appropriate conditions for conducting the survey include surveying when temperatures are above 60 degrees Fahrenheit (15.5 degrees Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey should be conducted at least 2 hours after sunrise and 3 hours before sunset and should occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour) but surveying during partially cloudy days or overcast conditions are permissible if the surveyors can still see their own shadow.

Mitigation Measure BIO-1.15: If monarch butterflies are observed within the project site, a plan to protect monarch butterflies shall be developed and implemented in consultation with the United States Fish and Wildlife Service. The plan shall include, but not be limited to, the following measures:

- Specifications for construction timing and sequencing requirements;
- Establishment of appropriate no-disturbance buffers for milkweed and construction monitoring by a qualified biologist to ensure compliance if milkweed is identified;
- Restrictions associated with construction practices, equipment, or materials that may harm monarch butterflies (e.g., avoidance of pesticides/herbicides, best management practices to minimize the spread of invasive plant species); and
- Provisions to avoid monarch butterflies if observed away from a milkweed plant during project activity (e.g., ceasing of project activities until the animal has left the active work area on its own volition).

Crotch's and Western Bumblebee: If Crotch's and/or Western Bumblebees are observed within the project site, a plan to protect the bees shall be developed and implemented in consultation with the California Department of Fish and Wildlife Service. The plan shall include, but not be limited to, the following measures:

Mitigation Measure BIO-1.16: Within 1 year prior to vegetation removal and/or the initiation of construction, a qualified biologist familiar with Crotch's and western bumble bee behavior and life history should conduct surveys to determine the presence/absence of the species. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between approximately March 1 to September 1. A reference site should be visited to confirm bumble bee activity because flight periods likely vary geographically and with weather. Surveys should be conducted within the project site and accessible adjacent areas with suitable habitat. Survey results including negative findings should be submitted to the CDFW prior to project-related vegetation removal and/or ground-disturbing activities. At a minimum, a survey report should provide the following:

- a) A description and map of the survey area, focusing on areas that could provide suitable habitat for the two bumble bee species;
- b) Field survey conditions that should include the name(s) of qualified biologist(s) and their qualifications, date and time of the survey, survey duration, general weather conditions, survey goals, and species searched.
- c) Map(s) showing the location of nests/colonies; and,
- d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within the impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

Mitigation Measure BIO-1.17: If a qualified biologist determines Crotch's and/or western bumble bees are present, and if "take" or adverse impacts to the bumble bees cannot be avoided either during project activities or over the life of the project, the CDFW will be consulted to determine if a CESA Section 2080 Incidental Take Permit is required.

Mitigation Measure BIO-1.18: If a qualified biologist determines Crotch's and/or western bumble bees are present, information on the species shall be included in the environmental education program described in Mitigation Measure BIO-1.1 of the EIR.

Mitigation Measure BIO-1.19: If a qualified biologist determines Crotch's and/or western bumble bees are present, the mitigation and management plan (MMP) for the conservation area, described in Mitigation Measure BIO-1.9 of the EIR, shall include a prescription for managing the area as habitat for bumble bees. The MMP will include a prescription for an appropriate seed mix and planting plan that targets bumble bee nectar plants, including native flowering plant species known to be visited by bumble bees and containing a mix of flowering plant species with continual floral availability through the flight season (early spring through late fall). The MMP will include success criteria for bumble bee habitat.

Mitigation Measure BIO-1.20: Rodenticides and pesticides will not be used anywhere on the project site during the life of the project.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, BIO-1.6, BIO-1.7, BIO-1.8, BIO-1.9, BIO-1.10, BIO-1.11, BIO-1.12, BIO-1.13, BIO-1.14, BIO-1.15, BIO-1.16, BIO-1.17, BIO-1.18, BIO-1.19 and BIO-1.20 would result in monitoring and protection of special-status wildlife species that may occur on-site, and impacts would be reduced to a less than significant level. The project applicant will be required to implement general protection measures during construction, restore disturbed annual grasslands, conduct preconstruction surveys, install exclusionary fencing, and retain a qualified biological monitor during ground disturbing activities to avoid disturbance of wildlife species.

Remaining Impacts: Any remaining impacts related to special-status species, either directly or through habitat modification, will be less than significant.

TRIBAL CULTURAL RESOURCES

It remains possible that a currently unknown tribal cultural resource could be encountered during construction activities. Without mitigation measures, unearthing tribal cultural resources could result in a significant impact. In the unlikely event that tribal cultural resources are unearthed on the project site, however, Mitigation Measures CULT (b) and CULT (c) provided in the Initial Study included in Appendix A, *Notice of Preparation and Scoping Comments* of the Draft EIR, would apply, which include procedures to follow.

TCR-1 The proposed project would have potential to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Sections, 21074, 5020.1(k), or 5024.1.

Mitigation Measure TCR-1.1: Implement Mitigation Measure CULT (b).

Mitigation Measure CULT (b): If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, representatives from the County and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the County shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be instituted. Work may proceed on other parts of the subject property outside the 50-foot area while mitigation for historical resources or unique archaeological resources is being carried out.

Impact TCR-1.2: Implementation of the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Mitigation Measure TCR-1.2: Implement Mitigation Measure CULT (c).

Mitigation Measure CULT (c): Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Alameda County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

TCR-2 The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to cultural resources.

Cumulative impacts to TCRs occur when a series of actions leads to adverse effects on local Native American tribes or tribal lands. No TCRs have been identified on the project site or within the immediate vicinity. Further, in association with CEQA review, future AB 52 consultations with Native American tribes in order to identify TCRs would be required for projects that have the potential to cause significant impacts to tribal cultural resources.

As discussed in the Cultural Resources section of the Initial Study that was included in the Notice of Preparation for the proposed project (see Appendix A, *Notice of Preparation and Scoping Comments* in the Draft EIR), development of the proposed project would comply with federal and State laws protecting cultural resources. Implementation of Mitigation Measures TCR-1.1 and TCR-1.2 identified above would ensure that archaeological, cultural resources, and TCRs if discovered on the project site, are protected, and that discovered human remains, including those associated with Native American, tribes are handled appropriately. Thus, given that the proposed project would have a *less than significant* impact on TCRs with mitigation, the proposed project's impacts to TCRs would not be considered cumulatively considerable. Therefore, cumulative impacts to TCRs would be *less than significant*.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigation measures recommended by MMs TCR-1.1 and TCR-1.2 will ensure that in the event that previously unknown cultural or tribal cultural resources are exposed during ground-disturbing activities, proper protocols would be followed to evaluate the resource and appropriate parties contacted.

Remaining Impacts: Any remaining impacts to cultural or tribal cultural resources will be less than significant.

Findings and Recommendations Regarding Impacts that are Less Than Significant

AESTHETICS

AES-1 The proposed project would not have a substantial adverse effect on a scenic vista

Scenic vistas are generally interpreted as long-range views of a specific scenic feature (e.g., open space lands, mountain ridges, and bay or ocean views). The ECAP Polices 105 and 112 designate major visually sensitive ridgelines and prominent visual features within the county, some of which can be seen from the subject property. Long-range views of the scenic vistas would be impacted by the proposed project if the project were to block or obstruct these views. As described in Section 4.1.1.2, of the DEIR, Existing Conditions, the project site is in a relatively flat area, is undeveloped with little vegetation, and is not located in or near a scenic vista, ridgeline, or corridor.

The primary components of the proposed project that could affect long-range views are the solar arrays and the transformers. The midpoint of the mounted solar panels would be approximately 7 feet above ground, and at maximum tilt, the height of the solar arrays would be less than 14 feet above the finished grade elevation. Therefore, regardless of the project site's proximity to scenic vistas, ridgelines, or corridors, the low height of the PV facility would not substantially block any views.

Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista and the impact would be *less than significant*.

AES-2 The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

As discussed in Section 4.1.1.2, of the Draft EIR, Existing Conditions, Grant Line Road bordering the project site on the south is a Scenic Thoroughfare, Mountain House Road to the east of the project site is a Scenic Rural-Recreation Route, and I-580 1 mile south of the project site is a State-designated scenic highway. North Livermore Avenue adjacent to the proposed project is considered a County-designated scenic corridor. However, in compliance with the Countywide Scenic Route Element, the proposed project would not include structures of a greater height than 15 feet. As described under Impact Discussion AES-1, the maximum height of the PV facility would be less than this. Additionally, in accordance with Policy 115 of the East County Area Plan, a fence around the proposed project would provide screening to minimize the visual impact of development and blend with the surrounding area. Accordingly, no impact would occur in this respect.

Furthermore, there are no notable trees, rock outcroppings, or historical buildings on the subject property that would be affected, and the proposed project would not alter long-range views to ridgelines or other natural features. Therefore, the proposed project would not substantially damage scenic resources within State-designated Scenic Highway or County-designated Scenic Rural-Recreation Route and the impact would be *less than significant*.

AES-3 The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality.

Installation of the proposed PV facility would represent a change in the existing visual character of the subject property and its surrounding. However, as described in Section 4.1.1.2, Existing Conditions, the project site is in a relatively flat area, is undeveloped with little vegetation, and is not located in or near a scenic vista, ridgeline, or corridor. The maximum height would be less than 14 feet, and the project site would be surrounded by fencing which would help shield views of the PV facility, as shown in Figure 3-

5, *Project Figure Renderings*, in Chapter 3, *Project Description*. It would not substantially degrade the existing visual character or quality of the site and its surroundings.

The proposed project would also not conflict with applicable zoning and other regulations governing scenic quality. As described in Impact Discussion AES-2, it would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and therefore would not conflict with regulations pertaining to State-designated Scenic Highways. The project site is located adjacent to County-designated scenic routes, however pursuant to the development standards outlined in the Countywide Scenic Route Element, the proposed project would not include structures more than one story in height. As the project site is not included in or in the vicinity of visually sensitive ridgelines or prominent visual features as identified in the ECAP, it would not conflict with related policies governing scenic quality. In accordance with Policy 115, and as shown in Figure 3-5 in Chapter 3, *Project Description*, the proposed project would include fencing which would largely shield views of the PV facility.

Implementation of the proposed project would alter but not degrade the existing visual character or quality of the site and its surroundings. The project would be implemented in compliance with applicable zoning and other regulations governing scenic quality. Therefore, impacts in this regard would be *less than significant*.

AES-4 The project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

A Glare Study was prepared for the proposed project, and is included in the Draft EIR as Appendix B. The Glare Study utilized software to provide a quantified assessment of when and where glare would be predicted to occur throughout the year for the solar installation, potential effects on the human eye, and estimated maximum annual energy production. As described in the Glare Study, PV panels typically produce some glare mostly during sunrise and sunset through the spring through fall months.

As described in Chapter 3, *Project Description*, of the Draft EIR, the proposed project would not include any on-site lighting, including security or emergency lighting as the project would be inactive during the nighttime. In addition, the iridescent blue panels of the PV arrays are textured with indentations in order to reduce the amount of sunlight reflect off of their surfaces and are also coated with anti-reflective materials to maximize light absorption and reduce glare as much as possible. PV panels are designed to maximize refracted light through the panels, and do not produce as much glare and reflectance as standard window glass, car windshields, white concrete, or snow.¹ As such, the proposed project would not create a new source of substantial light or glare and impacts in this regard would therefore be *less than significant*.

AES-5 The proposed project, in combination with past, present, and reasonably foreseeable projects, would not result in cumulative impacts with respect to aesthetics.

The method used for cumulative impact analysis is described in Chapter 4.0, *Environmental Analysis*, of the Draft EIR. This cumulative analysis considers the effects of the proposed project together with other cumulative development projects in the vicinity of the subject property.

¹ SunPower, PV Systems, Low Levels of Glare and Reflectance vs. Surrounding Environment, <https://us.sunpower.com/sites/sunpower/files/media-library/white-papers/wp-pv-systems-low-levels-glare-reflectance-vs-surrounding-environment.pdf>, accessed on April 9, 2018.

As described in Chapter 4.0, *Environmental Analysis* of the Draft EIR, the cumulative development project in the vicinity of the proposed project includes proposed subdivisions, a proposed apartment building, a telecommunications tower, and an office/warehouse development within two miles of the project site in San Joaquin County.

The project site is not located in a State- or County-designated scenic vista. As discussed above, the proposed project would not block views of the ridgelines from the public rights-of-way. The project site does not contain notable trees, rock outcroppings, or historical buildings and the proposed project would not alter long-range views to the ridgelines or other natural features. The proposed project, in addition to the cumulative projects, would be required to meet the development standards required by the Scenic Route Element of the Alameda General Plan. Therefore, the proposed project would not contribute to any cumulative impacts associated with scenic highways.

The installation of the proposed PV facility would represent a change in the existing visual character of the subject property and surroundings, however, based on project site location and existing conditions, it would not substantially degrade existing visual character. Therefore, it would not contribute to cumulative impacts in this regard.

The proposed project would not create a new source of substantial light or glare, and therefore would not contribute to any cumulative impacts associated with light and glare.

The proposed project, in addition to cumulative projects, would not significantly change the visual character of the subject property and the surrounding area. Therefore, cumulative impacts would be *less than significant*.

AGRICULTURE AND FORESTRY RESOURCES

AG-2 The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

The project site is zoned Agricultural (A) District, for which, according to APMC Section 17.06.030, permitted uses include one-family dwelling or one-family mobile home; one secondary dwelling unit; crop, vine or tree farm, truck garden, plant nursery, greenhouse, apiary, aviary, hatchery, horticulture; raising or keeping of poultry, fowl, rabbits, sheep or goats or similar animals; grazing, breeding or training of horses or cattle; winery or olive oil mill; fish hatcheries; and public or private hiking trails. Additionally, per APMC Section 17.06.040, conditional uses may also include privately owned wind-electric generators. While solar electric facilities are not specifically listed under the categories of permitted or conditional uses within the A District, other uses not specifically listed as a permitted or conditional use may be allowed if they are similar in nature to other allowed uses. Solar energy facilities were previously determined by the County to be similar to wind electric generators. As described in Section 3.1.3.2, Zoning, in Chapter 3, *Project Description*, the County Planning Commission made findings in 2008 pursuant to APMC Sections 17.54.050 and 17.54.060 regarding district classifications of uses not listed within the Ordinance, including that a solar electric facility would not be contrary to the specific intent clauses or performance standards established for the A District and could be permitted under a conditional use permit. The County reiterated these findings to reconfirm the conditional permissibility of similar solar uses within the A District in 2011 and 2012. Accordingly, the proposed project would not conflict with existing zoning. Therefore, impacts in this regard would be *less than significant*.

AG-4 The proposed project would not result in loss of forest land or conversion of forest land to non-forest use.

There is no forest land on the project site or in close proximity to the project site. The surrounding areas currently feature agricultural and residential land uses. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Accordingly, there would be *no impact*.

AG-6 The proposed project, in combination with past, present, and reasonably foreseeable projects, would not result in less-than-significant cumulative impacts with respect to agricultural and forestry resources.

Cumulative impacts would occur when a series of actions leads to a loss of agricultural resources, which occurs when agricultural lands are converted to non-agricultural uses. This generally occurs in newly urbanized areas where development encroaches into agricultural areas through general plan and zoning amendments leading to the long-term conversion of agricultural lands.

As noted above, the proposed project would not involve conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; would not conflict with existing agricultural zoning or a Williamson Act contract; would not involve changes to forest land, timberland, or timberland zoned for Timberland Production; would not result in the loss of forest land or the conversion of forest land to non-forest use; and would not involve other changes that would result in the conversion of farmland to non-agricultural use. In addition, the installation of solar panels as described under the proposed project involves minimal ground disturbance that would not permanently alter the viability of the project site to be used for agriculture, should the intent for the site change in the future.

The analysis of cumulative impacts to agricultural lands is based on impacts of the proposed project plus development in the vicinity of the project site. As described in Table 4-1, *Cumulative Projects within the Vicinity of the Proposed Project*, in Chapter 4.0, *Environmental Analysis* of the Draft EIR, development within approximately 2 miles of the proposed project include proposed major subdivisions, a proposed apartment building, a telecommunications tower, and an office/warehouse development. Similar projects to the proposed project within Alameda County include another solar facility, a battery energy storage facility, and a grow facility.

Because the proposed project would not result in impacts to agriculture or forestry resources, it would not contribute to cumulative impacts. Similarly, the Aramis Solar Energy Generation and Storage project in Alameda County (approximately 12 miles west of the project site) was determined not to have any agricultural and forestry resource impacts.² The office/warehouse development in nearby San Joaquin County also was determined not to have any agricultural and forestry resource impacts.³ While the telecommunications tower and the battery energy storage facility are within agricultural-designated lands, the other San Joaquin County projects within the vicinity of the project site are not.

Therefore, in combination with past, present, and reasonably foreseeable projects, the proposed project would result in a *less than significant* cumulative impact with respect to agricultural resources

² HELIX Environmental Planning, Inc., 2020. *Aramis Solar Energy Generation and Storage Final Environmental Impact Report*, SCH No. 2020059008.

³ San Joaquin County Community Development Department, 2020. *PA-2000063(MP), PA-2000064(SP), & PA-2000065(SA) – Initial Study/Mitigated Negative Declaration*, SCH No. 2020070583.

AIR QUALITY

AQ-1 The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

The proposed project would install solar PV facility on the project site. The project is not a regionally significant project that would affect regional vehicle miles traveled and warrant Intergovernmental Review by MTC pursuant to the CEQA Guidelines Section 15206(b)(2)(D). In addition, a solar PV facility would not result in the increase of population or housing foreseen in County or regional planning efforts. Therefore, the proposed project would not have the potential to substantially affect housing, employment, and population projections within the region, which is the basis of the Clean Air Plan projections.

Lastly, the net increase in regional emissions generated by the proposed project would not exceed BAAQMD's emissions thresholds (see impact discussion AQ-2 below). These thresholds are established to identify projects that have the potential to generate a substantial amount of criteria air pollutants. Because the proposed project would not exceed these thresholds, the proposed project would not be considered by the BAAQMD to be a substantial emitter of criteria air pollutants. Therefore, the project would not conflict with or obstruct implementation of the 2017 Clean Air Plan, and impacts would be *less than significant*.

AQ-2 The proposed project would not result in a 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.

Construction Emissions

Construction emissions are based on the preliminary construction schedule developed for the proposed project. The proposed project is estimated to take approximately 2-months to complete and is anticipated to be finished by fall 2022. To determine potential construction-related air quality impacts, criteria air pollutants generated by project-related construction activities are compared to the BAAQMD significance thresholds. Average daily emissions are based on the annual construction emissions divided by the total number of active construction days. As shown in Table 4.3-6, *Construction-related Criteria Air Pollutant Emissions Estimates* in the Draft EIR, criteria air pollutant emissions from construction equipment exhaust would not exceed the BAAQMD average daily thresholds. Therefore, construction-related criteria pollutant emissions from exhaust are *less than significant*.

Operational Emissions

Project operation would only generate occasional trips by project maintenance workers to perform routine maintenance and repairs, and a 500-gallon water truck that would make one trip delivery to wash the solar modules with an electronic cleaning system 1-2 times per year. Accordingly, long-term air pollutant emissions generated by a PV facility would be minimal. Therefore, operational phase criteria air pollutant emissions would be *less than significant*.

AQ-3 The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Off-Site Community Risk and Hazards During Construction

- Cancer risk for the maximum exposed off-site resident (MER), a single-family residence

southeast of the site along Grant Line Road, from unmitigated construction activities related to the project were calculated to be 0.1 in a million and would not exceed the 10 in a million significance threshold. The cancer risk for the maximum exposed preschool receptor was calculated to be 0.023 in a million, which also would not exceed the significance threshold. The calculated total cancer risk for the off-site residents incorporates the individual risk for infant and childhood exposures into one risk value.

- For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than 1 for off-site sensitive receptors. Therefore, chronic non-carcinogenic hazards would not exceed acceptable limits.
- The highest construction exhaust PM_{2.5} annual concentration of 0.002 µg/m³ at the off-site MER and 0.0003 µg/m³ at the preschool were all calculated to be less than the 0.3 µg/m³ significance threshold. Therefore, impacts from PM_{2.5} concentrations are less than significant.

Consequently, prior to mitigation, cancer risk impacts to off-site residences would be *less than significant*.

Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of carbon monoxide (CO) called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. The proposed project would construct a solar PV facility, and would only generate vehicle trips from employees and deliveries to the project site. The proposed project would not exceed BAAQMD screening criteria by increasing traffic volumes at affected intersections by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Thus, localized air quality impacts related to mobile-source emissions, including water delivery trucks would therefore be *less than significant*.

AQ-4 The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Construction and operation of solar PV facilities would not generate odors that would adversely affect a substantial number of people. The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. PV facilities do not emit foul odors that constitute a public nuisance.

During project-related construction activities on the project site, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. By the time such emissions reach any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Impacts would be *less than significant*.

AQ-5 The proposed project, in combination with past, present, and reasonably foreseeable projects, would not result in less-than-significant cumulative impacts with respect to air quality.

Criteria Air Pollutants

Impact AQ-2 analyzed potential cumulative impacts to air quality that could occur from construction and operation of the proposed project in combination with regional growth projections in the air basin. Mitigation Measure AQ-1 would reduce impacts from fugitive dust generated during construction activities. With this mitigation measure, regional and localized construction emissions would not exceed the Air District's significance thresholds. Consequently, the proposed project would not cumulatively contribute to the nonattainment designations of the Air Basin and impacts would be *less than significant* following mitigation measures.

Toxic Air Contaminants

There are no other stationary or mobile sources of TACs within 1,000 feet of the project site. As shown in Table 4.3-7, the health risks are well below BAAQMD's thresholds for individual projects. Therefore, the cumulative health risks from the project would also be less than the BAAQMD's cumulative thresholds of 100 in a million for a lifetime cancer risk, 10.0 for chronic hazards, and the PM_{2.5} concentration for all emission sources of 0.8 µg/m³. Consequently, cumulative health risk impacts from TACs would be *less than significant*.

BIOLOGICAL RESOURCES

BIO-2 The proposed project would not have a substantial adverse effect on any riparian habitat, but it could have a substantial adverse effect on other sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

No riparian habitats or other sensitive natural communities are present on or immediately adjacent to the project site. Thus, the proposed project would have *no impact* on riparian habitats or other sensitive natural communities.

BIO-3 The proposed project would not have a substantial adverse effect on state or federally protected wetlands (marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

No wetlands or other federal or state waters occur on or immediately adjacent to the project site. Therefore, the proposed project would have *no impact* on jurisdictional wetlands.

BIO-4 The proposed project would not interfere with the movement of a native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Environmental corridors are segments of land that provide a link between different habitat types while also provided cover. Development fragments natural habitats, breaking them into smaller disjunct pieces. As habitat patches become smaller, they are unable to support as many individuals. Additionally, the area between the habitat patches may become unsuitable for wildlife species to traverse.

The proposed project is surrounded by some existing development, including residential development and agricultural lands where the footprint is already disturbed. Removal of vegetation and solar input of the proposed project would further reduce the value of the project site for use by dispersing animals. Development of grassland on the project site would remove natural habitat that is used by resident and dispersing wildlife. The grassland would be mostly separated from similar nearby habitats by the

Mendota Canal, a busy road, an orchard, and residential development. Noise and human activity would increase during construction of the proposed project, potentially alerting animal behavior and discouraging species movement through the site. As a result, the project site does not provide high-quality areas for wildlife movement.

However, the project's impacts on wildlife movement are not anticipated to substantially impede the movement of any species within the project site vicinity. Many animals are still expected to move through the site, despite incremental increase of human activity or noise. Furthermore, the project site is not the only path where animals can move between the open space to the north and south. There is a vegetated strip similar to that of the project site to the west of the site along the Mendota Canal that would serve as an alternative route. Therefore, the proposed project would not result in fragmentation of natural habitats or substantial impediments to wildlife movement. As such there would be no interference with the movement of a native resident or migratory wildlife species or corridors and impacts would be *less than significant*.

BIO-5 The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As described in Section 4.4.1.1, *Regulatory Framework* of the Draft EIR, ECAP Policies 123, 124, and 125 discuss the County's encouragement of mitigation of site-specific impacts to biological resources, maintenance of biological diversity, and preservation of areas known to support special-status species. The implementation of the proposed Mitigation Measures BIO-1.1 through 1.20 will ensure that the proposed project complies with these policies. Therefore, the proposed project would not conflict with any local policies or ordinance regarding biological resources and impacts would be *less than significant*.

BIO-6 The proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

As described in Section 4.4.1.1, *Regulatory Framework* of the Draft EIR, the EACCS provides a framework to protect, enhance, and restore natural resources in eastern Alameda County; however, the EACCS does not directly result in permits from any regulatory agencies and is not a formally adopted Habitat Conservation Plan.⁴ Nevertheless, for the purposes of this analysis, the EACCS is considered a local habitat conservation plan.

The project site is within the EACCS Conservation Zone 7 (CZ7), which encompasses the extreme northeastern corner of the county. The CZ7 is comprised of annual grassland, alkali meadow and scald, and pond, which provide habitat for the San Joaquin spearscale, recurved larkspur, longhorn fairy shrimp, and vernal pool fairy shrimp. Conservation priorities within the CZ7 are based on the rarity of the feature and the risk of losing conservation opportunities in the future.⁵ Such priorities include the protection of recurved larkspur and San Joaquin spearscale, enhancement of and creation of additional linkages for the San Joaquin kit fox, protection of alkali meadows and scalds, which in turn would protect its inhabitants, and protection of critical habitat for California red-legged frog.

⁴ East Alameda County Conservation Strategy Steering Committee, October 2010. East Alameda County Conservation Strategy, Final Draft, Section 1.3, Scope of Conservation Strategy, pages 1-7 to 1-8.

⁵ East Alameda County Conservation Strategy Steering Committee, October 2010. East Alameda County Conservation Strategy, Final Draft, Section 4.7, Conservation Zone 7, pages 4-15 to 4-17.

As summarized in Table 4.4-2, *Special-Status Animal Species Evaluated* of the Draft EIR, there is no potential for any of these species to occur, with the exception of the California red-legged frog which has a low potential for occurrence. Mitigation Measures BIO-1.1 through BIO-1.20 discussed above would ensure that any occurrence(s) shall be avoided and adequately mitigated as part of the proposed project. Therefore, the proposed project would not conflict with the provisions of a habitat conservation plan or natural community conservation plan and impacts would be *less than significant*.

BIO-7 The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to biological resources.

The cumulative development projects in the vicinity of the proposed project are described in Chapter 4.0, *Environmental Analysis*, of this Draft EIR. The geographic scope of the cumulative analysis for biological resources is the area surrounding the project site. Therefore, projects included in this cumulative analysis are 19550 W Grant Line Road 0.3 miles away, 22261 South Mountain House Parkway 0.9 miles away, Arnaudo Boulevard at Mountain House II Apartments 1.4 miles away, Telecommunications Tower/21000 South Mountain House Park 1.6 miles away, and 17400 West Bethany Road 2 miles away.

Development of the surrounding projects would occur in areas largely surrounded by existing development where sensitive biological resources are generally considered to be absent. Projects would be required to comply with relevant federal, state, or local policies or ordinances. Further environmental review of specific development should serve to ensure that important biological resources are identified, protected, and properly managed to prevent any significant adverse impacts.

As discussed above, construction and operation of the proposed project would result in less than significant impacts on species identified as a candidate, sensitive, or special-status species through implementation of Mitigation Measures BIO-1.1 through BIO-1.20. There would be no impacts to riparian habitats, other sensitive natural communities, wetlands, or federal or state jurisdictional waters, as there are none located on the project site. The proposed project would not interfere with wildlife corridors or native wildlife nursery sites. The proposed project would also comply with local policies or ordinances protecting biological resources, and the local habitat conservation plan.

Therefore, in combination with past, present, and reasonably foreseeable projects, the proposed project would result in a *less than significant* cumulative impact with respect to biological resources.

GREENHOUSE GAS EMISSIONS

GHG-1 The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment.

Construction

BAAQMD does not have thresholds of significance for construction related GHG emissions. GHG emissions from construction activities are one-time, short-term emissions and therefore would not significantly contribute to long term cumulative GHG emissions impacts of the proposed project. Therefore, construction emissions would be *less than significant*.

Operational Phase

Due to the nature of the proposed PV facility, its development and operation would generate minimal emissions of GHG from transportation sources, water use, wastewater generation, and solid waste

generation. Project operation would only generate occasional trips by project maintenance workers to perform routine maintenance and repairs, and a water truck that would make deliveries to the project site approximately two times per year. In addition, the proposed project would generate renewable energy, and thus would provide a carbon neutral energy use that would be utilized to meet the State's Renewable Portfolio Standards. The proposed project would generate 5,819,172 kilowatt hours (Kwh) (5,819 megawatt hours [Mwh]) of carbon neutral electricity per year. Electricity produced by the proposed PV facility would help lower the overall GHG emissions in California by creating a cleaner energy portfolio. Based on PG&E's 2018 carbon intensity of 206 pounds of CO_{2e} per MWH⁶, the project would reduce GHG emission by 544 MTCO_{2e} annually.⁷ Overall, the proposed project would result in a beneficial environmental impact and would further State climate change goals. Thus, the impact is *less than significant*.

GHG-2 The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, the MTC/ABAG Plan Bay Area, and the Alameda County General Plan Community CAP. A consistency analysis with these plans is presented below.

The proposed project would be constructed to achieve the standards in effect at the time of development and would not conflict with statewide programs adopted for the purpose of reducing GHG emissions. While measures in the CARB Scoping Plan apply to state agencies and not the proposed project, the project's construction GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the impact would be *less than significant*.

The proposed project is not within a priority development area, but would be consistent with the GHG reduction goals of Plan Bay Area 2050. In addition, the project is not a suitable candidate for infill because of the nature of the proposed project as an energy generation facility requiring large amounts of land. Additionally, the proposed project is not a trip generating land use and would result in a net GHG benefit by providing a renewable source of energy. Therefore, the proposed project would not conflict with regional programs adopted for the purpose of reducing GHG emissions and impacts would be *less than significant*.

Development of the solar photovoltaic facility would further the goals of the Alameda County General Plan Community CAP's Building Energy Action Area, which aims to reduce the carbon intensity of energy provided to buildings within the County. Within the Building Energy Action Area, renewable energy is identified as a key strategy to reduce the use of fossil fuel-based energy and achieve the County's GHG reduction target. In addition to the GHG benefits provided by the project's solar electricity generation, the project itself will be water efficient by requiring up to two washing phases per year through an electronic cleaning system, in line with the CAP's Water Use Action Area. Overall, the proposed project would provide a net GHG benefit in line with the goals of the CAP. Therefore, the impact would be *less than significant*.

Overall, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and the impact would be *less than significant*.

⁶ Pacific Gas & Electric (PG&E). 2022 (accessed). Fighting Climate Change. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/fighting-climate-change/fighting-climate-change.page

⁷ 206 pounds of CO_{2e}/MWH x 0.000453592MT/pound x 5,719 MWH = 543.7 MTCO_{2e}

HAZARDS AND HAZARDOUS MATERIALS

HAZ-1 The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

As discussed in the Initial Study included in Appendix A, *Notice of Preparation and Scoping Comments* in the Draft EIR, the proposed project would not involve the routine transport of hazardous waste. Potential impacts during construction of the proposed project could include potential spills associated with the use of fuels and lubricants in construction equipment. These potential impacts would be short-term in nature and would be reduced to less-than-significant levels through compliance with applicable local, State, and federal regulations, as well as the use of standard equipment operating practices by experienced, trained personnel. Additionally, during the operation phase of the proposed project, common cleaning substances, PV facility maintenance products, and similar items could be used on the project site. These potentially hazardous materials, however, would not be of a type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment. Compliance with the applicable laws, regulations, and conditions of approval, would minimize hazards associated with the routine transport, use, or disposal of hazardous materials to the maximum extent practicable.

With respect to materials used for the solar panels, the proposed project would use silicon PV modules that have an anti-reflective coating.⁸ As described in product safety data sheets for silicon PV modules, these modules do not contain hazardous chemicals, and therefore would not result in leaching that would potentially contaminate groundwater.⁹ Additionally, anti-soiling coatings applied to the front and back of the PV modules, such as Teflon, would not be used on the silicon PV modules for the proposed project, nor would any other aftermarket coatings be used.¹⁰

The USEPA established a test protocol, Method 1311, known as “toxicity characteristic leaching procedure” (TCLP) to determine whether or not an item may contain components considered toxic above set limits established by RCRA. This test protocol can be applied to the PV modules to ensure that the module would not leach toxins into the environment when it is disposed of. Testing of similar silicon PV solar modules under the TCLP have shown that the modules do not exceed limits of any of the substances tested for under the TCLP. A copy of representative TCLP test results is included in Appendix H, *Hazardous Materials Information*. Additionally, the solar panels would undergo Method 1311 testing when disposed of at the end of the project’s lifetime.

Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be *less than significant*.

HAZ-2 The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

As discussed in impact discussion HAZ-1, the operation phase of the proposed project could involve the use of common cleaning substances and PV facility maintenance products; however, these potentially

⁸ Bilella, Lori. Vice President, Soltage, LLC. Personal communication with Allison Dagg, PlaceWorks, January 6, 2022.

⁹ VSUN. VSUN Solar PV Modules Product Safety Datasheet.

¹⁰ Bilella, Lori. Vice President, Soltage, LLC. Personal communication with Allison Dagg, PlaceWorks, January 6, 2022.

hazardous substances would not be of a type or occur in sufficient quantities on-site to pose a significant hazard to public health and safety or the environment. The use of these materials would be subject to existing federal and State regulations. Compliance with these regulations would ensure that the risk of accidents and spills are minimized to the maximum extent practicable.

Additionally, as discussed under impact discussion HAZ-1, the proposed project would use silicon PV modules that do not contain hazardous chemicals and would not use Teflon coatings. The panels would use anti-reflective coating, which is considered nontoxic. Disposal of the solar panels after the project's lifetime would be subject to Method 1311 testing to ensure they do not require hazardous materials waste disposal. Testing of similar solar panels as would be used for the proposed project have shown that the modules do not exceed levels of any of the substances analyzed in the TCLP.

Therefore, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and impacts would be *less than significant*.

HAZ-3 The proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in cumulative impacts with respect to hazards and hazardous materials.

As discussed above under impact discussions HAZ-1 and HAZ-2, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, nor through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As such, the proposed project would not contribute to cumulative impacts in this regard as well.

Because the proposed project would not result in impacts with respect to hazards and hazardous materials, and would not contribute to cumulative impacts, cumulative impacts with respect to hazards and hazardous materials would be *less than significant*.

LAND USE AND PLANNING

LU-1 The proposed project would not physically divide an established community.

The proposed project would develop the 23.07-acre site with a solar PV facility. The project site is currently undeveloped. The proposed project would retain the existing roadway patterns and would not introduce any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers. Therefore, the proposed project would not divide any established community and impacts would be *less than significant*.

LU-2 The proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The ECAP and APMC Title 17, Zoning, are the primary planning documents for eastern Alameda County. As discussed above in Section 4.7.1.2, Existing Conditions, both the General Plan land use designation and zoning district would permit the development of a renewable energy facility on the subject property, such as a windfarm, and the development of a solar PV facility would be allowed as a conditional use. Similar to a windfarm, the proposed solar PV facility would generate renewable energy, reduce greenhouse gases emitted into the atmosphere, and further the State's climate change goals.

In 2008, the County approved a conditional use permit for the GreenVolts Utility-Scale Solar Field project (State Clearinghouse Number 2008052076) which would develop a 20.5-acre parcel designated Large Parcel Agriculture with solar PV facility.¹¹ Alameda County made findings in 2008 pursuant to Alameda CGOC Sections 17.54.050 / 17.54.060 (Determination of Use) regarding district classifications of uses not listed within the Ordinance.¹² The Alameda County Planning Commission made findings that a solar electric facility would not be contrary to the specific intent clauses or performance standards established for the A District and could be permitted under a conditional use permit. In addition, in 2012, the Alameda County Counsel determined that solar facilities are consistent with ECAP policies because they constitute quasi-public uses consistent with “windfarms and related facilities, utility corridors and similar uses compatible with agriculture” which are allowed on parcels designated Large Parcel Agriculture.¹³ In 2012, the County approved “Cool Earth”, a conditional use permit for the Altamont Solar Energy Center project (State Clearinghouse Number 2011082074) which would develop a 140-acre parcel designated Large Parcel Agriculture and zoned as an Agricultural District with solar PV facility, similar to the proposed Project. Accordingly, with approval of two solar PV facilities on parcels designated Large Parcel Agriculture and the County Counsel’s determination that solar facilities are consistent with ECAP policies, the County has set a precedent for approval of similar projects.

Furthermore, the County is currently developing solar policies to allow Large Commercial Solar.¹⁴ Although the County has started the process nearly a decade ago, the need to formalize the County’s regulations is timely, given the continued interest in developing Large Commercial Solar in rural portions of Alameda County, specifically the East County. As outlined in the draft Statement of Policy Components, the policies would allow for solar/battery projects in the Large Parcel Agriculture area only.¹⁵ The proposed project would comply, as the site is designated as Large Parcel Agriculture. Therefore, with approval of a conditional use permit pursuant to APMC Section 17.06.040, the proposed project would not conflict with the subject property’s land use designation and zoning district and would have a *less than significant* impact.

As discussed in Chapter 4.4, *Biological Resources*, and in Section 4.7.1.1 of the Draft EIR, Regulatory Framework, the EACCS was developed to address anticipated impacts to biological resources from projected future development in eastern Alameda County through implementation of standardized mitigation measures. With implementation of the mitigation measures discussed in Chapter 4.4, including safer erosion control materials (to prevent animal entrapment), buffer zones, and pre-construction work such as worker training and biological surveying, mitigation measures for the proposed project would be consistent with the goals of the EACCS, and impacts would be *less than significant*.

¹¹ East County Board of Zoning Adjustments, Greenvolts, Inc., Conditional Use Permit C-8179, Staff Report, June 26, 2008.

¹² County of Alameda Planning Commission, June 16, 2008, Meeting Minutes.

¹³ Alameda County Community Development Agency, Planning Department, September 13, 2012, Memorandum, <http://www.acgov.org/cda/planning/landuseprojects/documents/TP-solar-memo-9-13-12.pdf>, accessed December 27, 2021.

¹⁴ Alameda County Planning Department, March 2022, Large Commercial Solar in Rural Alameda County, <https://www.acgov.org/cda/planning/landuseprojects/solarpolicies.htm>, accessed April 4, 2022.

¹⁵ Alameda County Planning Department, March 28, 2022, Large Commercial Solar and Battery Storage Statement of Policy Components, <https://www.acgov.org/cda/planning/landuseprojects/documents/StatementofPolicyFINAL32822.pdf>, accessed April 4, 2022.

LU-3 The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to land use and planning.

The cumulative setting for land use and planning considers the effects of the proposed project when considered along with other projects in the vicinity of the subject property that are pending. Therefore, based on Table 4-1, *Cumulative Projects within the Vicinity of the Proposed Project*, in Chapter 4.0, *Environmental Analysis*, this analysis of cumulative impacts to land use and planning is based on the proposed project in combination with 19550 W Grant Line Road 0.3 miles away, 22261 South Mountain House Parkway 0.9 miles away, Arnaudo Boulevard at Mountain House II Apartments 1.4 miles away, Telecommunications Tower/21000 South Mountain House Park 1.6 miles away, and 17400 West Bethany Road 2 miles away.

Development of the surrounding projects would occur in urbanized areas and are not expected to physically divide an existing community. Projects would be required to comply with relevant land use plans, policies, or regulations.

As discussed above, the proposed project would not conflict with any applicable land use plans, policies, or regulations. In addition, the proposed project would not physically divide an existing community, nor would the proposed project conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Therefore, the proposed project would not result in a cumulatively considerable contribution to cumulative impacts related to land use changes, and cumulative impacts would be *less than significant*.

NOISE

NOI-1 The proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards.

Construction

Construction activities would increase noise levels at and near the proposed area of improvements. Based on the provided construction equipment information, the loudest construction phases are expected to be the utility trenching and installation of solar equipment. Since proposed construction activities are expected to be at least 400 feet from the nearest sensitive receptors to the southeast, construction noise levels associated with the proposed project are expected to be up to 64 dBA L_{eq} , which would not exceed the threshold of 80 dBA L_{eq} . Therefore, this impact would be *less than significant*.

Operation

The proposed solar PV facility would include various equipment including panels, one inverter, and one transformer. The only equipment expected to generate notable levels of noise would be the inverter and, to a lesser extent, the transformer.¹⁶ The sound level of a PowerOne Aurora Trio 20.0, a commonly used

¹⁶ From previous project work on a similar PV project, representative transformer portions had measured noise levels that were from 5 to 10 dBA lower than the inverter (City of Industry 2 MW Carport Photovoltaic Solar and Electric Charging Project, PlaceWorks (formerly The Planning Center | DC&E), 2012).

commercial inverter, is approximately 71 dBA at 3.28 feet (1 meter).¹⁷ Though the specific equipment expected to be used for the proposed project is unknown at this time, the reference sound level of a PowerOne Aurora Trio 20.0 is used herein as being representative for this type and size of solar PV facility. The solar inverter would be placed on an equipment pad approximately 775 feet from the nearest sensitive receptors to the southeast. At this distance, the sound level of a single commonly used commercial inverter would be reduced to approximately 24 dBA, which is well below the ACOM noise limit of 50 dBA L₅₀ for residential receivers. Further, as the solar equipment would not be operating after sunset, the nearest sensitive receptors would not be exposed to project-related mechanical equipment noise at night. Thus, project-related, equipment-generated noise would be *less than significant*.

Project operation is anticipated to generate occasional trips by project maintenance workers to perform routine maintenance and repairs. The occasional and sporadic maintenance activities would not generate substantial noise levels at off-site receptors. While maintenance employees would travel to the site periodically, their total trips, combined with the existing traffic flows, would result in negligible increases in roadway noise. Thus, maintenance activity- and traffic-generated noise during project operations would be *less than significant*.

NOI-2 Implementation of the proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.

Table 4.8-4, *Vibration Levels for Typical Construction Equipment* in the Draft EIR, summarizes vibration levels for typical construction equipment at a reference distance of 25 feet. Typical construction equipment can generate vibration levels ranging up to 0.21 in/sec PPV at 25 feet. Vibration levels at a distance greater than 25 feet would attenuate to 0.2 in/sec PPV or less. The nearest structure to proposed construction activities is the residence approximately 525 feet or more southeast of the limit of work. At this distance, construction vibration would attenuate to well below the 0.2 in/sec PPV threshold. Therefore, construction vibration would be *less than significant*.

The proposed project, in combination with past, present, and reasonably foreseeable projects, would not result in less-than-significant cumulative impacts with respect to noise.

There are several cumulative projects near the project site (see Chapter 4.0, *Environmental Analysis*). The closest cumulative project is a residential subdivision project located at 19550 W. Grant Line Road approximately 0.3 miles from the project site. At this distance (i.e., greater than 1,000 feet), cumulative construction noise impacts would not be substantially greater than those described in Impact NOI-1, which were determined to be less than significant. Operational equipment from the residential project would not contribute substantially to the existing noise environment at the sensitive receptors closest to the project site. Therefore, the proposed project would not contribute to a significant cumulative noise impact, resulting in a *less than significant* impact.

¹⁷ Malén, J., 2013. Analysis of noise emissions of solar inverters (Master's Thesis, Aalto University School of Science and Technology).

REVISED MITIGATION
MONITORING AND REPORTING
PROGRAM



Alameda Grant Line Solar 1 Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Alameda Grant Line Solar 1 project. The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR for the proposed project are implemented. The MMRP includes the following information:

- The full text of the mitigation measures;
- The party responsible for implementing the mitigation measures;
- The timing for implementation of the mitigation measure;
- The agency responsible for monitoring the implementation; and
- The monitoring action and frequency.

Alameda County must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
AIR QUALITY					
<p>Mitigation Measure AQ-2: The applicant shall require their construction contractor to comply with the following BAAQMD Best Management Practices for reducing construction emissions of PM10 and PM2.5:</p> <ul style="list-style-type: none"> ▪ Water all active construction areas at least twice daily or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible. ▪ Apply water twice daily or as often as necessary to control dust or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). ▪ Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material. ▪ Hydro-seed or apply non-toxic soil stabilizers to inactive construction areas. ▪ Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (e.g., dirt, sand). ▪ Limit vehicle traffic speeds on unpaved roads to 15 mph. ▪ Replant vegetation in disturbed areas as quickly as possible. ▪ Install sandbags or other erosion control measures to prevent silt runoff from public roadways. 	Project applicant/ construction contractor	Prior to issuance of building permits authorizing grading or other construction activities and during construction	County Building Department	Review construction plans and specifications. Conduct site inspections	During scheduled construction site inspections
BIOLOGICAL RESOURCES					
<p>Mitigation Measure BIO-1.1: A qualified biologist will conduct an environmental education program for all persons employed or otherwise working on the project site before they perform any work. The program shall consist of a presentation from the biologist that includes a discussion of the biology and general behavior of special-status species on or near the site; information about the distribution and habitat needs of the species; sensitivity of the species to human activities; the status of the species pursuant to the Federal Endangered Species Act, the California Endangered Species Act, and the California Fish and Game Code including legal protection; recovery efforts; penalties for violations; and any project-specific protective measures described in this document or any subsequent documents or permits. Interpretation shall be provided for non-English speaking workers, and the</p>	Project applicant/ qualified biologist	Prior to construction activities	County Planning Department	Review forms stating employees attended the program and understood all the protection measures	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
same instruction shall be provided for any new workers before their performing work on the site. The biologist shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on the site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all the protection measures.					
Mitigation Measure BIO-1.2: A qualified biologist will be on the site daily to monitor initial grubbing/vegetation clearing, grading, and ground disturbing activities. The biologist will have the authority to stop work that may impact special-status species.	Project applicant/qualified biologist	During construction activities	County Planning Department	Conduct site inspections	During scheduled construction site inspections
Mitigation Measure BIO-1.3: The Applicant shall include in the contract specifications a requirement to use tightly woven fiber of natural materials (e.g., coir rolls or mats) or similar material for erosion control. Plastic mono-filament netting (erosion control matting) or similar material shall be prohibited, to prevent the entrapment of wildlife.	Project applicant/construction contractor	Prior to issuance of building permits authorizing grading or other construction activities and during construction	County Building Department	Review construction plans and specifications. Conduct site inspections	During scheduled construction site inspections
Mitigation Measure BIO-1.4: Surveys for California Tiger Salamander, California red-legged frog, San Joaquin coachwhip, California glossy snake, and Coast horned lizard shall be conducted by a qualified biologist within 24 hours prior to the initiation of any vegetation clearing or ground disturbing activities. All suitable habitat including refuge such as burrows, under rocks, duff, debris, etc., shall be thoroughly inspected. Any listed wildlife that are encountered will be allowed to leave the work area of their own volition.	Project applicant/qualified biologist	Within 24 hours prior to the initiation of vegetation clearing or ground disturbing activities	County Planning Department	Review survey reports	Once, prior to construction activities
Mitigation Measure BIO-1.5: To avoid entrapment, injury, or mortality of listed species resulting from falling into steep-sided holes or trenches, all excavated holes or trenches deeper than 12 inches shall be covered at the end of each workday with plywood or similar materials. Larger excavation that cannot easily be covered shall be ramped at the end of the workday to allow trapped animals an escape method.	Project applicant/construction contractor	During construction activities	County Planning Department	Conduct site inspections	During scheduled construction site inspections
Mitigation Measure BIO-1.6: Prior to initiating construction activities, a California Department of Fish and Wildlife (CDFW)-approved biologist shall conduct surveys for burrowing owl within 500 feet of the project site, where safely accessible. This measure incorporates avoidance and minimization guidelines from the CDFW 2012 Staff Report on Burrowing Owl Mitigation. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls. Surveys shall take place near sunrise or sunset in accordance with CDFW	Project applicant/CDFW-approved biologist	No more than 30 days prior to construction activities	County Planning Department	Review survey reports	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
survey guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted.					
Mitigation Measure BIO-1.7: If burrowing owls are found during the breeding season (February 1–August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a no disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the nest is inactive. During the nonbreeding season (September 1–January 31), the project proponent shall avoid the owls and the burrows they are using. Avoidance shall include the establishment of a buffer zone.	Project applicant/ construction contractor, qualified biologist	During construction activities	County Planning Department	Conduct site inspections	During scheduled construction site inspections
Mitigation Measure BIO-1.8: If occupied burrows for nonbreeding burrowing owls are not avoided, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within an appropriate buffer zone as recommended by the biologist in coordination with the California Department of Fish and Wildlife (CDFW) by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.	Project applicant/ construction contractor, CDFW-approved biologist	48 hours prior to excavation and 1 week of daily monitoring	County Planning Department	Review survey reports	As needed, if occupied burrows cannot be avoided
Mitigation Measure BIO-1.9a: To mitigate for the alteration of burrowing owl habitat, approximately 11.6 acres on the southern, western, and northern edges of the site will be protected under a conservation easement or deed restriction for the duration of the project. This land is contiguous with the levee and open space associated with the Mendota Canal. A mitigation and management plan (MMP) with success criteria to ensure the site is maintained as burrowing owl habitat, and to facilitate its continued use by burrowing owls, will be developed for this area and approved by the Alameda County Planning Director in coordination with California	Project applicant/ construction contractor	Prior to construction activities	County Planning Department, CDFW	MMP review and approval	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
Department of Fish and Wildlife (CDFW). The MMP shall include measures to rehabilitate any habitat temporarily disturbed by construction activities.					
Mitigation Measure BIO-1.9b: No later than 6 months following the operational period of the project, the project site will be restored to as near as possible to its original condition. The MMP described in Mitigation Measure BIO-1.9a will include a post-project restoration plan to facilitate the future suitability of the site for burrowing owl.	Project applicant/ construction contractor	No later than 6 months following operation	County Planning Department	Conduct site inspection	Once, during first 6 months of operation
Mitigation Measure BIO-1.10: The mitigation and management plan (MMP) described in Mitigation Measure BIO-1.9 for the approximately 11.6-acre conservation area shall include a prescription for managing the area as habitat for Swainson’s hawk. The MMP will include success criteria for Swainson’s hawk habitat.	Project applicant/ construction contractor	Prior to construction activities	County Planning Department	MMP review and approval	Once, prior to construction activities
Mitigation Measure BIO-1.11: Pre-construction surveys shall be conducted for the American badger no more than 14 days prior to the initiation of ground-disturbing activities. Surveys shall be conducted by a qualified wildlife biologist with experience and knowledge in identifying badger burrows and include walking parallel transects looking for badger burrows and signs of badgers. Any badger dens identified shall be flagged and mapped.	Project applicant/ construction contractor, qualified biologist	No more than 14 days prior to ground-disturbing activities	County Planning Department	Review survey reports	Once, prior to construction activities
Mitigation Measure BIO-1.12: In the event active badger dens are identified, a no-work buffer of 200 feet shall be established around the den and associated occupied areas. If avoidance is not feasible, a biologist shall determine if the burrow is being used as an active maternity den through utilization of remote cameras. If young are determined to be present, the burrow shall be avoided until the young have vacated the burrow as determined by a qualified biologist. If the burrow is determined not to be an active maternity den and young are not present, in coordination with the California Department of Fish and Wildlife (CDFW), a one-way eviction door shall be installed between September 1 and January 1 to passively relocate the badger and to avoid impacts during the breeding season. If the badger digs back into the burrow, CDFW staff may allow the use of live traps to relocate badgers to suitable habitat from the area of project impact.	Project applicant/ construction contractor, qualified biologist	Prior to construction activities	County Planning Department, CDFW	Review survey reports	Once, prior to construction activities and as needed, if the badger digs back into the burrow
Mitigation Measure BIO-1.13: The mitigation and management plan (MMP) described in Measure BIO-1.9 for the 11.6-acre conservation area shall include prescription of an appropriate seed mix and planting plan targeted for the monarch butterfly, including milkweed and native flowering plant species known to be visited by monarch butterflies and containing a mix of flowering plant species with	Project applicant/ construction contractor	Prior to construction activities	County Planning Department	MMP review and approval	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
continual floral availability through the entire breeding season for monarch butterfly (early spring to fall). The MMP will include success criteria for monarch butterfly.					
Mitigation Measure BIO-1.14: A qualified biologist will conduct a minimum of two pre-construction surveys conducted within 30 days during appropriate activity periods (i.e., March through September) and conditions prior to the start of ground disturbing activities to look for milkweed host plants and signs of monarch breeding activity (larvae or chrysalides). Appropriate conditions for conducting the survey include surveying when temperatures are above 60 degrees Fahrenheit (15.5 degrees Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey should be conducted at least 2 hours after sunrise and 3 hours before sunset and should occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour) but surveying during partially cloudy days or overcast conditions are permissible if the surveyors can still see their own shadow.	Project applicant/ construction contractor, qualified biologist	30 days prior to construction activities	County Planning Department	Review survey reports	Once, prior to construction activities
Mitigation Measure BIO-1.15: If monarch butterflies are observed within the project site, a plan to protect monarch butterflies shall be developed and implemented in consultation with the United States Fish and Wildlife Service. The plan shall include, but not be limited to, the following measures: <ul style="list-style-type: none"> ▪ Specifications for construction timing and sequencing requirements; ▪ Establishment of appropriate no-disturbance buffers for milkweed and construction monitoring by a qualified biologist to ensure compliance if milkweed is identified; ▪ Restrictions associated with construction practices, equipment, or materials that may harm monarch butterflies (e.g., avoidance of pesticides/herbicides, best management practices to minimize the spread of invasive plant species); and Provisions to avoid monarch butterflies if observed away from a milkweed plant during project activity (e.g., ceasing of project activities until the animal has left the active work area on its own volition).	Project applicant/ construction contractor, qualified biologist	Prior to and during construction activities	County Planning Department	Plan review and approval	Once, prior to construction activities
Mitigation Measure BIO-1.16: Within 1 year prior to vegetation removal and/or the initiation of construction, a qualified biologist familiar with Crotch's and western bumble bee behavior and life history should conduct surveys to determine the presence/absence of the species. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between approximately March 1 to September 1. A reference site should be visited to confirm bumble bee activity because flight periods likely vary geographically and with weather. Surveys should be conducted within the project site and accessible	Project applicant/ qualified biologist	Within one year prior to the initiation of vegetation clearing or ground disturbing activities	County Planning Department	Review survey reports	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
adjacent areas with suitable habitat. Survey results including negative findings should be submitted to the CDFW prior to project-related vegetation removal and/or ground-disturbing activities. At a minimum, a survey report should provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for the two bumble bee species; b) Field survey conditions that should include the name(s) of qualified biologist(s) and their qualifications, date and time of the survey, survey duration, general weather conditions, survey goals, and species searched. c) Map(s) showing the location of nests/colonies; and, d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within the impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).					
Mitigation Measure BIO-1.17: If a qualified biologist determines Crotch’s and/or western bumble bees are present, and if “take” or adverse impacts to the bumble bees cannot be avoided either during project activities or over the life of the project, the CDFW will be consulted to determine if a CESA Section 2080 Incidental Take Permit is required.	Project applicant/ qualified biologist	Prior to construction activities	County Planning Department, CDFW	Consultation with CDFW	Once, prior to construction activities
Mitigation Measure BIO-1.18: If a qualified biologist determines Crotch’s and/or western bumble bees are present, information on the species shall be included in the environmental education program described in Mitigation Measure BIO-1.1 of the EIR.	Project applicant/ qualified biologist	Prior to construction activities	County Planning Department	Review forms stating employees attended the program and understood all the protection measures	Once, prior to construction activities
Mitigation Measure BIO-1.19: If a qualified biologist determines Crotch’s and/or western bumble bees are present, the mitigation and management plan (MMP) for the conservation area, described in Mitigation Measure BIO-1.9 of the EIR, shall include a prescription for managing the area as habitat for bumble bees. The MMP will include a prescription for an appropriate seed mix and planting plan that targets bumble bee nectar plants, including native flowering plant species known to be visited by bumble bees and containing a mix of flowering plant species with	Project applicant/ construction contractor	Prior to construction activities	County Planning Department	MMP review and approval	Once, prior to construction activities

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
continual floral availability through the flight season (early spring through late fall). The MMP will include success criteria for bumble bee habitat.					
Mitigation Measure BIO-1.20: Rodenticides and pesticides will not be used anywhere on the project site during the life of the project.	Project applicant	During both construction and operation activities	County Planning Department	Conduct site inspection	During both construction and operation activities
CULTURAL RESOURCES					
Mitigation Measure CULT (b): If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, representatives from the County and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the County shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be instituted. Work may proceed on other parts of the subject property outside the 50-foot area while mitigation for historical resources or unique archaeological resources is being carried out.	Project applicant/ construction contractor, qualified archaeologist	During construction activities	County Planning Department	Determine appropriate avoidance measures or mitigation	As needed, if resources are unearthed
Mitigation Measure CULT (c): Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Alameda County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not	Project applicant/ construction contractor	During construction activities	County Coroner	Verification of remains and appropriate reinterment on site	As needed, if remains are unearthed

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD’s recommendations, the owner or the descendent may request mediation by the NAHC.					
GEOLOGY AND SOILS					
<p>Mitigation Measure GEO (f): The construction contractor shall incorporate the following in all grading, demolition, and construction plans:</p> <ul style="list-style-type: none"> In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted. The contractor shall notify the Alameda County Building Department and a County-approved qualified paleontologist to examine the discovery. The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. <p>If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the proposed project based on the qualities that make the resource important. The excavation plan shall be submitted to the County for review and approval prior to implementation.</p>	Project applicant/ construction contractor, qualified paleontologist	Prior to issuance of building permits authorizing grading or other construction activities and during construction	County Building Department	Review construction plans and specifications. Excavation plan review and approval	As needed, if fossils are unearthed
TRIBAL CULTURAL RESOURCES					
<p>Mitigation Measure TCR-1.1: Implement Mitigation Measure CULT (b): If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, representatives from the County and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to</p>	Project applicant/ construction contractor, qualified archaeologist	During construction activities	County Planning Department	Determine appropriate avoidance measures or mitigation	As needed, if resources are unearthed

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>mitigate impacts to historical resources or unique archaeological resources, the County shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be instituted. Work may proceed on other parts of the subject property outside the 50-foot area while mitigation for historical resources or unique archaeological resources is being carried out.</p>					
<p>Mitigation Measure TCR-1.2: Implement Mitigation Measure CULT (c): Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Alameda County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.</p>	<p>Project applicant/ construction contractor</p>	<p>During construction activities</p>	<p>County Coroner</p>	<p>Verification of remains and appropriate reinterment on site</p>	<p>As needed, if remains are unearthed</p>

