

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

Mitigation Monitoring and Reporting Programs (MMRPs) are required by the California Environmental Quality Act (CEQA) Section 21081.6 to be adopted by CEQA Lead Agencies for projects having the potential to cause significant environmental impacts. The MMRP describes changes to the project or conditions of project approval that mitigate or avoid the project's potential significant effects on the environment. This MMRP addresses the Aramis Solar Energy Generation and Storage Project proposed by IP Aramis, LLC, a subsidiary of Intersect Power, LLC. A brief description of the proposed project is provided below. The proposed project is located within Alameda County (County); the County is the Lead Agency under CEQA and has discretionary authority over the proposed project.

MMRP FORMAT AND IMPLEMENTATION

Mitigation measures that would reduce or eliminate potential environmental impacts of the proposed project are identified in the Aramis Solar Energy Generation and Storage Project EIR. These mitigation measures will become conditions of project approval if the project is approved. The County is required to verify that all adopted mitigation measures are implemented properly and to ensure compliance, this MMRP (including the checklist) has been formulated. The MMRP shall be adopted, along with CEQA Findings, by the County (Lead Agency) and must be administered by County personnel from the Planning and Public Works departments. Specific responsibilities are delineated for each measure in the attached checklist table and these responsibilities may be delegated to qualified County staff or consultants.

The checklist, which follows as Table B-1, is intended to be used by the applicant, grading/construction contractors, and personnel from the above-listed County Departments, as the appointed mitigation implementation and monitoring entities. Information contained within the checklist clearly identifies each mitigation measure, defines the conditions required to verify compliance, and delineates the monitoring schedule. Following is an explanation of the three columns that constitute each MMRP checklist.

- Column 1 *Mitigation Measure:* An inventory of each mitigation measure is provided.
- Column 2 *Monitoring Responsibility:* Identifies who are responsible for determining compliance with each mitigation measure (e.g., Alameda County Planning Department, construction contractor, project applicant, qualified biologist).
- Column 3 *Implementation Schedule:* As scheduling is dependent upon the progression of the overall project, specific dates are not used within the "Schedule" column. Instead, scheduling describes a logical succession of events (e.g., prior to ground-disturbing activities, etc.) and, if necessary, delineates a follow-up program.
- Column 4 *Monitoring Compliance Record Name/Date:* Column is left blank and is to be signed and dated when compliance with the mitigation measure has been met.

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
Aesthetics			
<p>AES-1: Long-term Landscape Maintenance. To ensure the long-term effectiveness of the proposed landscaping, the project applicant shall ensure that the proposed landscaping is adequately irrigated to establish the long-term viability of the buffer and maintained throughout the life of the project. Should any of the proposed landscape plantings not survive the initial planting or expire at any time during the life of the project, the applicant shall provide replacement plantings consistent with the initial planting to screen the solar facility within one year of plant failure.</p>	<p>Alameda County Planning Department; Project Owner</p>	<p>Ongoing; Within one year of plant failure</p>	
Air Quality			
<p>Prior to issuance of any Grading Permit, the County shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with the BAAQMD CEQA Air Quality Guidelines, the following basic construction mitigation measures shall be implemented for all project construction activity:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. 	<p>Alameda County Public Works Department</p>	<p>Prior to issuance of any grading permit</p>	

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<ul style="list-style-type: none"> • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations. <p>AQ-2: Prior to issuance of any Grading Permit, the County shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, all diesel-powered off-road equipment with 50 or more horsepower be certified to meet the USEPA Tier 4 Final emissions standards, or be retrofitted with CARB verified diesel exhaust emissions reduction devices that reduce emissions of both NOX and PM to USEPA Tier 4 Final emissions standards.</p>	<p>Alameda County Public Works Department</p>	<p>Prior to issuance of any grading permit</p>	

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Biological Resources			
<p>BIO-1a: Prior to the issuance of grading or building permits, and for the duration of construction activities, the project proponent/operator shall demonstrate that it has in place a Construction Worker Environmental Awareness Training and Education Program for all new construction workers at the project site. All construction workers shall attend the Program prior to participating in construction activities. Any employee responsible for the operations and maintenance or decommissioning of the proposed project facilities shall also attend the Environmental Awareness Training and Education Program prior to starting work on the project.</p> <p>The Program will be developed and presented by biologist meeting the qualifications of an authorized biologist as defined by USFWS or designee. The training may be presented in video form. The Program shall include:</p> <ul style="list-style-type: none"> Information on the life history of the American badger, burrowing owl, Swainson’s hawk and other raptors, desert kit fox as well as other wildlife and plant species that may be encountered during construction activities, legal protection status of each species (including all nesting birds); A description of CRLF, CTS and its habitat, the avoidance and minimization measures that are being implemented to conserve the CRLF and CTS as they relate to the project, and the boundaries within which work may occur; A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an 	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Prior to the issuance of grading or building permits; Ongoing</p>	

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<p>explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the project site;</p> <ul style="list-style-type: none"> • The definition of “take” under the Federal Endangered Species Act and the California Endangered Species Act; • Measures the project proponent/operator is implementing to protect the species; and • Specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act. <p>The worker environmental awareness training material will be kept on-site for the duration of operations and all personnel will be instructed on the importance of CRLF and CTS, how to identify these amphibians, and what to do if CRLF or CTS is found on the facility.</p>			
<p>BIO-1b: Environmental tailboard trainings shall take place on an as-needed basis in the field. The environmental tailboard trainings will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects to these species during construction activities. Directors, Managers, Superintendents, and the crew foremen and forewomen will be responsible for ensuring that crewmembers comply with the guidelines.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Prior to any ground disturbance and as-needed</p>	

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BIO-1c: Contracts with contractors, construction management firms, and subcontractors shall obligate all contractors to comply with these mitigation measures.	Alameda County Planning Department; Project Owner	Prior to any ground disturbance and as-needed	
BIO1d: The following shall not be allowed at or near work sites: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.	Alameda County Planning Department; Construction Contractor	Ongoing	
BIO-1e: Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.	Alameda County Planning Department; Construction Contractor	Ongoing	
BIO-1f: Off-road vehicle travel shall be prohibited outside of designated areas.	Alameda County Planning Department; Construction Contractor	Ongoing	
BIO-1g: Vehicles shall not exceed a speed of 15 mph on unpaved roads within natural land cover types or during off-road travel.	Alameda County Planning Department; Construction Contractor	Ongoing	
BIO-1h: Vehicles or equipment shall not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area is constructed.	Alameda County Planning Department; Construction Contractor	Ongoing	

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<p>BIO-1i: Vehicles shall be washed only at approved areas. No washing of vehicles shall occur at job sites.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-1j: To discourage the introduction and establishment of invasive plant species, seed mixtures/straw used within natural vegetation shall be either rice straw or weed-free straw.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-1k: Pipes, culverts, and similar materials greater than four inches in diameter shall be stored so as to prevent covered wildlife species from using these as temporary refuges, and these materials shall be inspected each morning for the presence of animals prior to being moved.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Each morning during project construction</p>	
<p>BIO-1l: Erosion control measures shall be implemented to reduce sedimentation in wetlands and drainages adjacent to the site that could be occupied by special-status animal species when activities are the source of potential erosion problems. Plastic mono-filament netting (erosion control matting) or similar material containing netting shall not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-1m: Stockpiling of material shall occur such that direct effects to special-status species are avoided.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-1n: Grading shall be restricted to the minimum area necessary.</p>	<p>Alameda County Planning Department;</p>	<p>Ongoing</p>	

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	Construction Contractor		
<p>BIO-1o: Prior to ground disturbing activities adjacent to sensitive habitats, project construction boundaries and access areas shall be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Prior to ground disturbing activities adjacent to sensitive habitats</p>	
<p>BIO-2a: If construction commences during the wet season and active dispersal period for these species (between approximately October 16 and May 14, depending on the precipitation year), preconstruction surveys for CRLF and CTS shall be conducted in the project site approximately two weeks prior to the initiation of construction and decommissioning activities to ensure that CRLF and CTS are not actively using the project site or adjacent areas as a dispersal corridor. Pre-construction surveys shall be conducted by a qualified biologist familiar with all life stages of the amphibians and shall cover all aquatic habitats on and immediately adjacent to the project site (Cayetano Creek and its tributaries) that are suitable for CRLF and CTS dispersal.</p>	<p>Alameda County Planning Department; Qualified Biologist</p>	<p>During wet season (October 16 and May 14)</p>	
<p>BIO-2b: If any life stage of CRLF and/or CTS (e.g., egg, egg mass, larvae, tadpole, juvenile, or adult) is detected within the project site during any surveys or monitoring for the project during construction or decommissioning, USFWS and CDFW shall be notified within 48 hours. The biologist shall monitor the CRLF or CTS to make sure the amphibian is not harmed and that it leaves the site on its own. Construction activities will not be allowed within 100 feet of the animal. Handling of listed species without a take permit pursuant to the FESA and CESA is not allowed.</p>	<p>Alameda County Planning Department; Construction Contractor; Qualified Biologist</p>	<p>Ongoing; notification within 48 hours</p>	
<p>BIO-2c: Activities associated with construction and decommissioning conducted within 200 feet of on-site drainages shall be limited to a period outside of the active season for CRLF and CTS (approximately</p>	<p>Alameda County Planning Department;</p>	<p>Outside of active season for CRLF and CTS which</p>	

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<p>May 15 to October 15, depending on the precipitation year). This construction window is during the dry season in which creek levels are lower to dry, providing limited aquatic dispersal habitat for CRLF. The dry season is defined generally as that time between May 15th and the first qualifying rain event on or after October 15th defined as precipitation of more than one half of an inch for 24 hours. Any extension of the work window outside of the May 15 to October 15 timeframe due to abnormally dry conditions would require coordination with the USFWS and CDFW and compliance with MM BIO-2a and -2b.</p>	<p>Construction Contractor</p>	<p>occurs May 15 to October 15</p>	
<p>BIO-2d: Construction and decommissioning activities within 200 feet of on-site drainages shall be restricted to daylight hours to avoid CRLF and CTS that may be present in the project site during the time they are most active – between dusk and dawn. Construction and decommissioning activities shall cease one half hour before sunset and shall not begin prior to one half hour after sunrise.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Daylight hours; work to cease one half hour before sunset and begin no earlier than one half hour before sunrise</p>	
<p>BIO-2e: Construction and decommissioning activities and clearing within the project site shall be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive habitat outside of designated work areas, orange barrier fencing shall be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area on the project. The integrity and effectiveness of Environmentally Sensitive Area fencing and erosion control measures shall be inspected daily. Corrective actions and repairs shall be carried out immediately for fence breaches and ineffective erosion control BMPs.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-2f: To prevent CRLF and CTS from moving through the project site during construction and decommissioning, temporary exclusion fencing</p>	<p>Alameda County Planning</p>	<p>By October 15th of the year prior to</p>	

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<p>shall be <u>designed in consultation with CDFW and USFWS and placed along the boundary of the project site as agreed upon with the agencies</u> by October 15th of the year prior to commencement of construction and decommissioning. This will allow any CRLF or CTS potentially using the project site for upland refugia to leave the project site to access breeding habitat, but not return. The fence will be made of a material that does not allow amphibians to pass through, with one-way exit holes, and the bottom will be buried to a depth of two inches so that frogs cannot crawl under the fence. To avoid entanglement of amphibians and other wildlife, the use of plastic monofilament netting is prohibited. Exclusion fencing shall be removed within 72 hours of the completion of work.</p>	<p>Department; Construction Contractor</p>	<p>commencement of construction and decommissioning; Exclusion fencing will be removed within 72 hours of the completion of work.</p>	
<p>BIO-2g: A biologist meeting the qualifications of an authorized biologist as defined by USFWS and CDFW shall survey the project site immediately prior to installation of temporary exclusion fencing to ensure that this species is not present within the site. Once the temporary exclusion fencing is installed, the work area within the exclusion fence shall be surveyed again immediately prior to the onset of construction activities. If listed species are found in the project site during preconstruction surveys, construction activities shall not start within a 100-foot radius until the species has left the area of its own volition. Handling of CRLF or CTS without a take permit pursuant to the FESA and CESA is not allowed.</p>	<p>Alameda County Planning Department; USFWS- and CDFW-approved Biologist</p>	<p>Prior to installation of temporary exclusion fencing</p>	
<p>BIO-2h: A qualified biological monitor shall be present daily during initial construction and decommissioning activities including but not limited to equipment mobilization, site clearing, vegetation removal, and grading/ground disturbance to verify that no CRLF or CTS enter the project site during construction or are harmed. Daily monitoring can be reduced to weekly inspections at the discretion of the biological</p>	<p>Alameda County Planning Department; USFWS- and CDFW-approved Biologist</p>	<p>Daily during initial construction and decommissioning</p>	

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<p>monitor once site grading has been completed and no habitat/refugia is present for CRLF or CTS on the site.</p> <ul style="list-style-type: none"> Any mammal burrows providing potential refugia for CRLF or CTS shall be scoped to search for these animals. If CRLF or CTS are found, the burrow shall be flagged and avoided by a suitable buffer as determined by the biological monitor. If CRLF or CTS are found during construction or decommissioning, work shall immediately stop within 100 feet and the listed amphibian will be allowed to move out of harm's way on its own accord. The biological monitor shall monitor the CRLF or CTS to make sure the amphibian is not harmed and that it leaves the site on its own. Handling of listed species without a take permit pursuant to the FESA and CESA is not allowed. Sightings of special-status species will be reported to CNDDDB. <u>If take occurs, the Applicant shall be responsible for obtaining take authorization from CDFW and/or USFWS in accordance with federal and state laws.</u> Prior to the start of daily construction and decommissioning activities during initial ground disturbance, the biological monitor shall inspect the perimeter fence to ensure that it is neither ripped nor has holes and that the base is still buried. The fenced area shall also be inspected to ensure no amphibians are trapped. If listed amphibians are found inside or outside of the fence, work will immediately stop, and the animal will be allowed to leave the project site on its own accord. Any listed species shall be closely monitored until they move away from the construction area. 			
<p>BIO-2i: To ensure that amphibian diseases are not conveyed between work sites by the USFWS- and CDFW- approved biologist or biological</p>	<p>Alameda County Planning</p>	<p>Ongoing</p>	

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<p>monitor, the fieldwork code of practice developed by the Declining Amphibian Population Task Force shall be followed at all times.</p>	<p>Department; Qualified Biologist</p>		
<p>BIO-2j: Standard construction BMPs shall be implemented throughout construction and decommissioning, in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures shall be used (e.g., straw bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from the project site. The integrity and effectiveness of the BMPs shall be inspected on a daily basis by the resident engineer or site foreman. Corrective actions and repairs shall be carried out immediately.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Throughout construction and decommissioning</p>	
<p>BIO-2k: Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials should not be allowed to enter streams or other waters. A plan for the emergency clean-up of any spills of fuel or other materials should be available when construction equipment is in use.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-2l: Equipment shall be re-fueled and serviced at designated construction staging areas. All construction material and fill shall be stored and contained in a designated area that is located away from channel areas to prevent transport of materials into adjacent streams. The preferred distance is 100 feet from the wetted width of a stream. In addition, a silt fence shall be installed to collect any discharge, and adequate materials should be available for spill clean-up and during storm events.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-2m: Construction vehicles and equipment shall be monitored and maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Leaking vehicles and equipment shall be removed from the site.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	

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<p>BIO-2n: Building materials storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products shall be located outside of the 100-year flood zone, have an impermeable membrane between the ground and the hazardous material, and shall be bermed to prevent the discharge of pollutants to ground water and runoff water. The bermed area shall at a minimum have the capacity to store the volume of material placed in it.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-2o: All disturbed soils shall undergo erosion control treatment prior to October 15 and/or immediately after construction is terminated. Appropriate erosion control measures shall be used (e.g., straw bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from project sites. Erosion control blankets shall be installed on any disturbed soils steeper than a 2:1 slope or steeper.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Prior to October 15 (of construction year) and/or immediately after construction is terminated.</p>	
<p>BIO-2p: During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>During project construction and operation activities; Following construction completion.</p>	
<p>BIO-2q: To prevent inadvertent entrapment of animals during construction, all excavated, steep walled holes or trenches more than 8 inches deep shall be covered at the close of each working day with plywood or other suitable material or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day and before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist, or an on-site designee identified by the USFWS- and CDFW- approved biologist, will immediately place escape ramps or other appropriate</p>	<p>Alameda County Planning Department; Construction Contractor; Qualified Biologist</p>	<p>At the beginning of each working day and before such holes or trenches are filled</p>	

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structures to allow the animal to escape, or USFWS and CDFW will be contacted for guidance and notified of the incident. All holes and trenches more than 8 inches deep shall be filled or securely covered year-round.			
BIO-2r: No monofilament plastic will be used for erosion control.	Alameda County Planning Department; Construction Contractor	Ongoing	
BIO-3a: If feasible, construction-related ground disturbance activities shall begin outside of the burrowing owl nesting season (February 1 through August 31) and during construction the site shall be maintained in a manner that is inhospitable to burrowing owl such as keeping the site free of vegetation, ground squirrel control (the use of poison baits or other substances that could be potentially harmful to San Joaquin kit fox shall not be allowed), and maintaining regular site disturbance by construction equipment and personnel. This will discourage burrowing owl from occupying the project site. If feasible, decommissioning-related ground disturbing activities shall begin outside of the burrowing owl nesting season (February 1 through August 31).	Alameda County Planning Department; Construction Contractor	Outside of the burrowing owl nesting season which occurs between February 1 and August 31	
BIO-3b: No more than 14 days prior to initiation of ground disturbing activities associated with project construction or decommissioning, a qualified biologist shall conduct a pre-construction survey of the project site and surrounding areas to a distance of 150 meters in accordance with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (2012) or most recently adopted guidance. The first pre-construction survey will cover all areas within 150 meters of the portion of the site in which construction/ decommissioning is scheduled to start. Surveys will be phased based on the construction/ decommissioning schedule such that the surveys are conducted no	Alameda County Planning Department; Qualified Biologist	No more than 14 days prior to initiation of ground disturbing activities associated with project construction or decommissioning	

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<p>more than 14 days ahead of the start of ground disturbance in new areas. If construction/ decommissioning activities in portions of the site cease for a period of 14 days, those portions of the site will be resurveyed for burrowing owls prior to the resumption of construction/decommissioning activities. If no occupied breeding or wintering owl burrows are identified, no further mitigation will be required. If occupied burrows are identified on the site or within 150 meters, one of the following actions shall be taken: (1) permanent avoidance of the burrow or (2) establishment of a temporary avoidance buffer followed by passive relocation and compensatory mitigation for loss of habitat in conjunction with the measures below:</p> <ul style="list-style-type: none"> • If an occupied wintering burrow is discovered during pre-construction surveys, a 50-meter buffer area shall be established around the burrow until the owl leaves on its own (if the burrow is more than 50 meters offsite and/or more than 50 meters from the work area, no buffer is necessary). Ground-disturbing work conducted during the nonbreeding (winter) season (September 1 to January 31) can proceed near the occupied burrow so long as the work occurs no closer than 50 meters to the burrow, and the burrow is not directly affected by the project activity. A smaller buffer may be established in consultation with CDFW and monitored at the discretion of a qualified biologist. If the 50-meter buffer cannot be maintained for the duration of occupancy by the owl, owls may be excluded from an occupied wintering burrow in accordance with the conditions of the project's <i>Burrowing Owl Exclusion Plan</i>, which will be submitted for approval by CDFW prior to passive relocation of any burrowing owls. 			

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<ul style="list-style-type: none"> • If an occupied nesting burrow is discovered during pre-construction surveys, an avoidance buffer of 200 meters shall be established around the burrow location and maintained until a qualified biologist has determined that the nest has fledged or is no longer active (a 200-meter avoidance buffer is appropriate for low-intensity impacts near nesting burrows during breeding season [CDFW 2012]). No project activities shall take place within the 200-meter buffer during the time in which it is in place. A smaller buffer may be established in consultation with CDFW and monitored at the discretion of a qualified biologist. • If an occupied burrow cannot be avoided, and the burrow is not actively in use as a nest, a 200-meter buffer shall be established until the burrowing owls can be excluded from burrows in accordance with the project’s <i>Burrowing Owl Exclusion Plan</i>, which will be submitted for approval by CDFW prior to passive relocation of any burrowing owls. The <i>Burrowing Owl Exclusion Plan</i> is based on the recommendations made in the Staff Report on Burrowing Owl Mitigation (CDFW 2012) or most recently adopted guidance and shall include the following information for each proposed passive relocation: <ul style="list-style-type: none"> ○ Confirmation by site surveillance that the burrow(s) is empty of burrowing owls and other species; ○ Type of scope to be used and appropriate timing of scoping; ○ Occupancy factors to look for and what shall guide determination of vacancy and excavation timing; 			

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<ul style="list-style-type: none"> ○ Methods for burrow excavation; ○ Removal of other potential owl burrow surrogates or refugia on-site; ○ Methods for photographic documentation of the excavation and closure of the burrow; and ○ Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take. Methods for assuring the impacted site shall continually be made inhospitable to burrowing owls and fossorial mammals. 			
<p>BIO-3c: If an occupied burrow is identified off-site within 150 meters and passive exclusion is deemed necessary to protect the owls, burrowing owls may be excluded from burrows if permission is granted by the land owner, and in accordance with the project's <i>Burrowing Owl Exclusion Plan</i>, which will be submitted for approval by CDFW prior to passive relocation of any burrowing owls. If burrowing owls cannot be excluded from an off-site burrow and it is not feasible to maintain an avoidance buffer as stated above, coordination will be conducted with CDFW to determine appropriate measures to minimize impacts to off-site burrowing owls. Such measures could include, but are not limited to: (1) installation of barriers between the construction or decommissioning area and the occupied burrows to block noise and views of construction or decommissioning equipment and personnel, and (2) regular monitoring by a qualified biologist to determine if construction or decommissioning activities are resulting in disturbance of the owls that could lead to nest abandonment or harm to adult owls or their young. If such disturbance were occurring, the biological</p>	<p>Alameda County Planning Department; Construction Contractor; Qualified Biologist</p>	<p>Prior to passive relocation of any burrowing owls</p>	

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<p>monitor would have the authority to halt construction or decommissioning activities until further modifications could be made to avoid disturbance of the owls.</p>			
<p>BIO-3d: If burrowing owl pairs are passively relocated, compensatory mitigation for lost wintering/breeding habitat shall be provided either through dedication of 6 acres of suitable habitat (per pair of relocated owls) at an off-site location in accordance with the conditions of the project's <i>Burrowing Owl Exclusion Plan</i> or through purchase of credits at a CDFW-approved mitigation bank in the region. No compensatory mitigation is required for passive relocation or eviction of transient, unpaired owls.</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>If burrowing owl pairs are passively relocated</p>	
<p>BIO-3e: If permanent avoidance buffers are established, such areas shall be managed for the duration of the project to preserve current values as foraging habitat for burrowing owl. Management shall include: (1) exclusion of all project activities throughout the construction, operation, and decommissioning phases, including staging, parking, driving, or dumping; (2) vegetation management by grazing or mowing to preserve open, low-growing vegetation; (3) fencing to discourage human incursion; (4) signage identifying the area as a biologically sensitive area managed for burrowing owl, and; (5) a worker education and awareness program for all personnel working on the site including contractors and sub-contractors.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-4: A qualified biologist shall conduct a preconstruction survey for American badger no more than 14 days prior to the beginning of ground disturbance related to construction and decommissioning activities, or any other project activity likely to impact American Badger (such as staging, mowing, vegetation clearing), to determine if there are any American badger dens on the project site. If there are no American badger dens on the project site, no further mitigation is necessary. If American badger dens are located within the work area and cannot be</p>	<p>Alameda County Planning Department; Qualified Biologist</p>	<p>No more than 14 days prior to the beginning of ground disturbance related to construction and decommissioning activities</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>avoided, a qualified biologist will determine if the dens are occupied. If unoccupied, the dens will be collapsed under the supervision of the biologist. If occupied, the biologist will determine if it is a natal/pupping den or a solitary badger den. Dens of solitary badger may be collapsed under the supervision of the biologist once the animal has vacated the den. Natal/pupping dens will be avoided by establishment of an exclusion zone around the den determined by the qualified biologist until the young are old enough to leave the den and survive on their own.</p>			
<p>BIO-5a: A qualified biologist shall conduct a preconstruction survey no more than 14 days prior to the beginning of ground disturbance and/or construction/decommissioning activities, or any other project activity likely to impact San Joaquin kit fox, to determine if potential San Joaquin kit fox dens are present in or within 500 feet of the project site (inaccessible areas outside of the project site can be surveyed using binoculars or spotting scopes from public roads). The surveys shall be conducted in all areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to disturbance of any particular portion of the site. If potential dens are observed and avoidance of the dens is determined to be feasible, the following minimum buffer distances shall be established prior to construction/decommissioning activities (consistent with USFWS 2011):</p> <ul style="list-style-type: none"> • Potential den: 50 feet • Atypical den: 50 feet • Known den: 100 feet • Natal/pupping den: at least 500 feet – <u>USFWS and CDFW must be contacted.</u> 	<p>Alameda County Planning Department; Qualified Biologist</p>	<p>No more than 14 days prior to the beginning of ground disturbance and/or construction and decommissioning activities</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> ○ Buffer establishment shall follow the <i>USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance</i> (USFWS 2011) under “Exclusion Zones.” ○ If San Joaquin kit fox or occupied San Joaquin kit fox dens are observed on the site, USFWS and CDFW must be contacted. 			
<p>BIO-5b: If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:</p> <ul style="list-style-type: none"> • If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent foxes from re-using them during construction. • If the qualified biologist determines that a potential non-natal den may be active, an on-site passive relocation program may be implemented with prior concurrence from the USFWS and CDFW. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction with prior concurrence from USFWS and CDFW. 	<p>Alameda County Planning Department; Qualified Biologist</p>	<p>Ongoing</p>	
<p>BIO-5c: In addition, the following avoidance and minimization measures for San Joaquin kit fox shall be implemented during construction/decommissioning of the project (USFWS 2011):</p>	<p>Alameda County Planning Department;</p>	<p>Ongoing</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>a. Project-related vehicles shall observe a daytime speed limit of 20 mph and a nighttime speed limit of 10 mph throughout the project site, except on County roads, state and federal highways. Additionally, vehicles shall not exceed a speed limit of 15 mph on unpaved roads within natural land cover types or during off-road travel. Off-road traffic shall be prohibited outside of designated project areas.</p> <p>b. To prevent inadvertent entrapment of kit foxes or other animals during the construction or decommissioning phases of the project, all excavated, steep-walled holes or trenches more than 8 inches deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks should be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and the CDFW should be contacted as noted under measure j.). referenced below.</p> <p>c. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the USFWS and CDFW have been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.</p>	<p>Construction Contractor; Qualified Biologist</p>		

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>d. All food-related and plastic trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers daily and removed at least once a week from a construction or project site.</p> <p>e. No firearms shall be allowed on the project site.</p> <p>f. No pets, such as dogs or cats, shall be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.</p> <p>g. Use of herbicides or other substances potentially harmful to San Joaquin kit fox shall be restricted. Use of such compounds shall observe label and other restrictions mandated by the EPA, CDFA, and other State and federal legislation and regulation, as well as additional project-related restrictions deemed necessary by the USFWS. Use of rodenticides or poison baits intended for mammals shall be prohibited. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend.</p> <p>h. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program required by BIO-1a and their name and telephone number shall be provided to the Service.</p> <p>i. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if</p>			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be determined on a site-specific basis in consultation with the USFWS, CDFW, and revegetation experts.</p> <p>j. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox should immediately report the incident to their representative. This representative should contact the CDFW and USFWS immediately in the case of a dead, injured or entrapped kit fox. The Bay Delta Region of CDFW should be contacted at 2825 Cordelia Road, Suite 100, Fairfield, CA 94534, (707) 428-2002. They will contact the local warden or the wildlife biologist at (530) 934-9309. The USFWS should be contacted at Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, CA 95825, (916) 414-6620 or (916) 414-6600.</p> <p>k. The Sacramento Fish and Wildlife Office and CDFW shall be contacted immediately and also notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities if immediate notification was not provided in writing. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.</p> <p>l. New sightings of kit fox shall be reported to the CNDDDB. A copy of the reporting form and a topographic map clearly marked with the</p>			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>location of where the kit fox was observed should also be provided to the USFWS at the address listed under measure l.</p> <p>m. Fencing of the project site, with the exception of the project substation and energy storage areas, shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow kit foxes to pass through the fence while still providing for project security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the project site would be appropriate designs.</p>			
<p>BIO-6a: If project (construction/decommissioning) ground-disturbing or vegetation clearing, and grubbing activities commence during the avian breeding season (February 1 through August 31), a qualified biologist shall conduct a pre-construction nesting bird survey no more than 7 days prior to initiation of project activities. The survey area shall include suitable raptor nesting habitat within 300 feet of the project boundary (inaccessible areas outside of the project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project activities have been continuous since prior to February 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season must be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure is required:</p>	<p>Alameda County Planning Department; Qualified Biologist</p>	<p>No more than seven days prior to initiation of project activities</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> A suitable buffer (e.g., 660 feet for golden eagle, 300 feet for common raptors; 100 feet for passerines) shall be established by a qualified biologist around active nests and no construction/decommissioning activities within the buffer shall be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer shall be monitored by a qualified biologist to determine whether nesting birds are being impacted. 			
<p>BIO-6b: Should any vertical tubes, such as solar mount poles, chain link fencing poles, or any other hollow tubes or poles be used on the project site, the poles shall be capped immediately after installation to avoid entrapment of birds.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Immediately after installation</p>	
<p>BIO-7a: Project facility lighting shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not extend below the shields. This will prevent impacts to bird species nesting and foraging in riparian areas in Cayetano Creek and other sensitive habitats adjacent to the site.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-7b: Rodenticides shall not be used at the project site. Rodents will be controlled by encouraging raptor foraging. If additional rodent control is required to minimize impacts on adjacent agricultural operations, non-chemical methods will be employed.</p>	<p>Alameda County Planning Department; Construction Contractor; Qualified Biologist</p>	<p>Ongoing</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>BIO-7c: During operations, trash – including plastic trash and microtrash that can be harmful to birds and other wildlife – shall be disposed of in securely closed containers daily and removed at least once a week from the project site to avoid impacts to birds using the project site. The area of trash cleanup will include both the project site within the fence lines, in addition to focused trash pickup along the fence on the interior and exterior sides of the fence.</p>	<p>Alameda County Planning Department; Project Owner</p>	<p>Ongoing; during project operation</p>	
<p>BIO-7d: The project shall be designed to underground electrical wiring to the maximum extent feasible. In particular, guy wires will be avoided to the maximum extent feasible without compromising public safety.</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to construction</p>	
<p>BIO-7e: In compliance with the Avian Power Line Interaction Committee’s (APLIC) guidance, Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC, 2012), transmission lines and all electrical components shall be designed, installed, and maintained in accordance with APLIC (2012) guidance to reduce the likelihood of large bird electrocutions and collisions.</p>	<p>Alameda County Planning Department; Project Applicant; Construction Contractor</p>	<p>Ongoing</p>	
<p>BIO-7f: The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels and proposed fencing.</p> <ul style="list-style-type: none"> • A qualified biologist shall prepare an Avian Monitoring Plan to assess and monitor the potential for avian collisions with solar panels and fencing on the site. The Plan will include monitoring for levels of avian activity as well as avian mortality in treated and untreated (control) portions of the solar facility to determine if avian mortality is occurring and if there is any apparent difference in avian mortality between treated and untreated panels and fencing. The Plan shall also include methods to install visual deterrents or cues to encourage bird avoidance of the Project site. Implementation of the Plan will provide quantitative data on the 	<p>Alameda County Planning Department; Project Applicant; Qualified Biologist</p>	<p>Prior to project construction; within 30 days after project commissioning; avian monitoring shall occur year-round for first three consecutive years in operation</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>effectiveness of the avian deterrent in terms of overall bird use and large-bird mortality in treated portions of the project versus an untreated control.</p> <ul style="list-style-type: none"> • Within 30 days after project commissioning, avian deterrent materials shall be installed on a portion of the fence and in a total of four 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to evaluate potential avian collision issues. These deterrents shall be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Examples of the types of material that could be used include plastic compact discs and reflective tape. • Upon installation of deterrent measures, avian monitoring shall occur year-round to account for seasonal variation in potential bird fatalities; this will be repeated for the first three consecutive years of operation. During each monitoring event, bird abundance in each block (4 treatment blocks and one untreated control block) will be quantified using a point count method and the number, species, and behavior of birds observed within each block will be recorded. Behaviors will be recorded for each species and will reflect the modal (or typical) behavior observed for all individuals of the species, not for each individual bird. The observer will also record temperature, average wind speed, and percent cloud cover at the start of each observation period. 			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> • Mortality of large birds in each block will be assessed by surveying the block for carcasses of large birds (crow-sized and larger). During the surveys, the location and species of each carcass will be recorded using a handheld GPS receiver, a photograph will be taken of the carcass, and the cause of mortality will be noted if apparent. Carcasses will not be collected or preserved. • Overall bird abundance, species diversity, and large-bird mortality will be compared among all blocks, and between the control block and the treatment blocks combined. Analysis may include t-Test comparisons of means for overall abundance and large-bird mortality; however, statistical power may be low depending on the overall level of bird activity at the site. • Facility operator or agent will provide a brief analysis of the effects of the deterrent measures on panel performance and the feasibility of maintaining avian deterrents for inclusion in the analysis. • Following the initial 3-month period and based on the results of the Plan, visual deterrents will either be discontinued if there is no significant difference between avian mortality between the treatment and control blocks, adjusted to reduce performance issues and reexamined on a continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of “feasible” in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County. 			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>BIO-7g: Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014).</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to construction</p>	
<p>BIO-7h: Dryland pasture will be established on the site and used for grazing livestock (sheep) between and under the solar panels for a two-month period each year, pursuant to an Agricultural Management Plan. Portions of the site in and around the solar panels would be maintained as dryland pasture containing a combination of grassland species and non-invasive forbs and would be maintained for grazing for the duration of the life of the solar facility. The mixture of grassland and native forbs, managed by targeted sheep grazing, is expected to provide high value and consistently available habitat conditions for small mammal prey species (voles, pocket gophers, deer mice, and house mice) preferred by raptors in the region.</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Ongoing</p>	
<p>BIO-7i: The Agricultural Management Plan shall include grazing management methods to ensure that the vegetation composition and structure provides a combination of areas with lower vegetation heights and density to provide accessibility to raptors, and areas with denser, taller vegetation to attract and maintain prey on the site. Management conditions will include ensuring that the vegetation cover is not reduced to the extent that vegetation would not naturally regenerate; there are openings in the vegetation to allow foraging access for raptors; and there are areas where the vegetation would be allowed to grow taller. In general, vegetation heights below the panels should be allowed to be higher to provide cover for prey species (12-18 inches), and the vegetation heights between the panels should be maintained at a suitable height to provide foraging accessibility (<12 inches).</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to construction</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>BIO-8a: The project shall be designed to avoid impacts to jurisdictional waters on and adjacent to the site. If jurisdictional waters cannot be avoided prior to the start of construction, the project applicant shall secure any required aquatic resources permits for impacts to jurisdictional waters of the State from the San Francisco Bay RWQCB and CDFW, and shall comply with all conditions of such permits including providing compensatory mitigation as required, to achieve no net loss of wetlands or other waters.</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to project construction</p>	
<p>BIO-8b: For those waters of the State and CDFW jurisdictional areas that are not avoided by project construction, compensatory mitigation shall be provided. As approved by the San Francisco Bay RWQCB and CDFW, the project applicant may purchase mitigation credits from an approved mitigation bank at a minimum 1:1 ratio or implement another method of mitigation satisfactory to the San Francisco Bay RWQCB and CDFW.</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to project construction</p>	
<p>BIO-8c: Impacts shall also be minimized by the use of Best Management Practices (BMPs) to protect preserved waters of the U.S./State adjacent to the site and to ensure that water quality standards are not compromised in preserved wetlands and other waters within the watershed. These practices can include installing orange construction fencing buffers, straw waddles to keep fill from entering preserved/avoided wetlands and other waters, and other protective measures.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Ongoing</p>	
Cultural Resources			
<p>CUL-1: Prior to project construction, the project applicant shall retain an Architectural Historian who meets the Secretary of Interior's Professional Qualification Standards to complete photographic documentation of the historical resources located at 4400 North Livermore Avenue. The photographic documentation shall adhere to the standards and guidelines for Historical American Buildings Survey</p>	<p>Alameda County Planning Department; Project Applicant; Qualified Architectural Historian</p>	<p>Prior to project construction</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
(HABS) documentation, as outlined in the updated June 2015 HABS Guidelines set by the Heritage Documentation Program instituted by the National Parks Service.			
CUL-2: Prior to the initiation of construction or ground-disturbing activities, all construction personnel shall be trained in the protection of cultural resources, the recognition of buried cultural remains, and the notification procedures to be followed upon the discovery of archaeological materials, including Native American burials. The training should be presented by an archaeologist who meets the Secretary of Interior's Standards for Prehistoric and Historic Archaeology and should include recognition of both prehistoric and historic resources. Personnel should be instructed that unauthorized collection or disturbance of artifacts or other cultural materials is illegal, and that violators will be subject to prosecution under the appropriate state and federal laws. Supervisors should also be briefed on the consequences of intentional or inadvertent damage to cultural resources.	Alameda County Planning Department; Construction Contractor; Qualified Archaeologist	Prior to project construction or ground-disturbing activities	
CUL-3: In the event that cultural or tribal cultural resources are exposed during ground-disturbing activities, construction activities (e.g., grading, grubbing, or vegetation clearing) shall be halted in the immediate vicinity of the discovery. An archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards shall then be retained to evaluate the resource's significance under CEQA. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and shall be discussed in consultation with the County.	Alameda County Planning Department; Qualified Archaeologist	Immediately upon discovery	
CUL-4: If discovery of human remains occurs during ground-disturbing activities or construction activities (e.g., grading, grubbing, or vegetation clearing), the specific procedures outlined by the NAHC, in accordance with Section 7050.5 of the California Health and Safety	Alameda County Planning Department; Project	Immediately upon discovery	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>Code and Section 5097.98 of the Public Resources Code, must be followed:</p> <ol style="list-style-type: none"> 1. All excavation activities within 60 feet of the remains will immediately stop, and the area will be protected with flagging or by posting a monitor or construction worker to ensure that no additional disturbance occurs. 2. The project owner or their authorized representative will contact the County Coroner. 3. The coroner will have two working days to examine the remains after being notified in accordance with HSC 7050.5. If the coroner determines that the remains are Native American and are not subject to the coroner’s authority, the coroner will notify NAHC of the discovery within 24 hours. 4. NAHC will immediately notify the Most Likely Descendant (MLD), who will have 48 hours after being granted access to the location of the remains to inspect them and make recommendations for their treatment. Work will be suspended in the area of the find until the County approves the proposed treatment of human remains. 	<p>Owner; County Coroner</p>		
<p>Geology, Soils, Mineral Resources, and Paleontological Resources</p>			
<p>GEO-1: Prior to issuance of a grading permit, the project applicant shall retain a geotechnical firm with local expertise in geotechnical investigation and prepare a final site-specific geotechnical report. The report shall be prepared by a licensed geotechnical engineer or engineering geologist and be submitted to the County building department for approval prior to the issuance of a grading permit. This report shall be based on data collected from subsurface exploration, laboratory testing of samples and surface mapping, and address the</p>	<p>Alameda County Public Works Department; Project Applicant; Licensed Geotechnical Engineer or Engineering Geologist</p>	<p>Prior to issuance of any Grading Permit</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>potential for surface fault rupture, ground shaking, slope failure, expansive soils, and unstable cut or fill slopes, and make recommendations based on those findings. The project applicant shall implement the recommendations identified in the final site-specific geotechnical report.</p>			
<p>GEO-2: In the event a paleontological or other geologically sensitive resources (such as fossils or fossil formations) are identified during any phase of project construction, all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the County of Alameda who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the County shall implement those measures which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code Section 21083.2.</p>	<p>Alameda County Planning Department; Construction Contractor; Qualified Paleontologist</p>	<p>Immediately upon discovery</p>	
<p>Hydrology and Water Quality</p>			
<p>HYD-1: The project applicant shall file an NOI to comply with the Construction General Permit with the San Francisco Bay RWQCB prior to each phase of construction and project decommissioning. Individual SWPPPs shall be prepared for each NOI (project construction and project decommissioning) and shall detail the treatment measures and BMPs to control pollutants that shall be implemented and complied with during the construction and post-construction phases of the project. The SWPPP(s) required for decommissioning will specify BMPs to be implemented during that final project phase. The SWPPPs are subject to approval by the San Francisco Bay RWQCB, which makes the final determination on which BMPs are required for the project. The construction contracts for each project phase and for the</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to each phase of construction and project decommissioning.</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>decommissioning phase will include the requirement to implement the BMPs in accordance with the SWPPPs, and proper implementation of the specified BMPs is subject to inspection by the San Francisco Bay RWQCB staff. Example BMPs may include practices such as: designation of restricted-entry zones, sediment tracking control measures (e.g., crushed stone or riffle metal plate at construction entrance), truck washdown areas, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection, provision mulching for soil stabilization during construction, and provision for revegetation upon completion of construction within a given area. The SWPPPs will also prescribe treatment measures to trap sediment once it has been mobilized, such as straw bale barriers, straw mulching, fiber rolls and wattles, silt fencing, and siltation or sediment ponds.</p>			
Noise			
<p>NOI-1: Prior to issuance of any project Grading Permit or Building Permit, the County shall confirm that the Grading Plan, Building Plans, and construction specifications stipulate that the following construction noise mitigation measures shall be implemented for all project construction activity:</p> <ul style="list-style-type: none"> • Restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours between 7:00 a.m. to 7:00 p.m., Monday through Friday, and between 8:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and County recognized public holidays; and • Post a publicly visible sign at the primary project construction entrance listing the permitted construction days and hours, complaint procedures, and who to notify in the event of a problem. The sign shall also include a listing of telephone numbers to be used 	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Prior to issuance of any project grading or building permits</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>during regular construction hours and off-hours to contact both the County and the construction contractor regarding noise complaints.</p> <ul style="list-style-type: none"> If construction activities occur outside of the specified hours, noise levels shall be subject to the limits listed in Table 6.60.040A of the Alameda County Noise Control Ordinance. 			
Applicant-Proposed Measures			
<p>Decommissioning Security: In order to ensure that the County or other public agency is not burdened with the cost to remove equipment and debris from the project site in the event of default by the applicant to operate, maintain, and eventually decommission the facility, however unlikely such bankruptcy may be, the project applicant <u>shall</u> post a decommissioning security bond to Alameda County based on the following stipulations.</p> <ul style="list-style-type: none"> Prior to issuance of Building Permits, the project owner will submit to the County a Decommissioning Plan, and a Reclamation Cost Estimate to cover the work in the Decommissioning Plan, the latter prepared by a licensed engineer, and provide to the County a financial security to cover the total amount of the Reclamation Cost Estimate. The Decommissioning Plan shall include the requirement to remove all aboveground infrastructure except for landscaping, irrigation equipment, and well pumps and equipment. The Decommissioning Plan shall also include the requirement to remove below-ground infrastructure to a depth of 4 feet. Finally, the Decommissioning Plan shall include the 	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to issuance of building permits</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>requirement to amend soils with compost and, if not substantially vegetated, stabilize them to manage dust.</p> <ul style="list-style-type: none"> • The decommissioning security shall be issued by a creditworthy financial institution or be provided in cash. • The decommissioning security shall be returned to the project owner upon verification by the County that the site has been decommissioned. 			
<p>Stormwater Management Plan: Prior to issuance of Building Permits, the project owner <u>shall</u> submit to the County pre- and post-construction site drainage calculations prepared by a qualified hydrologist or civil engineer and supported by a 2-dimensional hydrologic model to understand whether the project would generate increased runoff. If an increase in runoff is projected, then sizing and location of additional appropriate detention basins or other stormwater best management practices <u>shall</u> be recommended to mitigate any projected increase in offsite runoff and to protect downstream properties against adverse impacts.</p> <p>A SWPPP <u>shall</u> be prepared by qualified engineer, and the approved stormwater management practices in the SWPPP shall be carried out by on-site construction and operations personnel to ensure that off-site stormwater sedimentation would not occur.</p>	<p>Alameda County Planning Department; Project Applicant; qualified engineer</p>	<p>Prior to issuance of building permits</p>	
<p>Agricultural Management Plan: Project operations shall adhere to a County-approved Agricultural Management Plan (AMP) to ensure consistency of the facility with adjacent agricultural land uses. The AMP would fulfill the following project objectives:</p>	<p>Alameda County Planning Department; Project Applicant</p>	<p>Prior to issuance of building permits</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> • Promote continued agricultural use of the project site • Promote wool production • Promote honey-bee forage vegetation and control invasive weeds • Promote pollination services and honey production • Maintain soil capability and minimize agricultural water use • Manage onsite fuel load of vegetation <p>The project owner shall work with commercial beekeepers and sheep operators to both ensure the project is developed for viable sheep and bee operations and to provide for routine, periodic access to the project site when forage conditions are favorable.</p>			
<p>Trash Cleanup: The construction site shall generally be maintained free of debris, and when debris is generated, it shall be stored in an orderly condition in designated laydown areas. Trash shall be removed from the site and County road frontages that border the project site on a routine schedule to maintain community aesthetics. All trash and construction debris shall be removed from the site at the conclusion of construction.</p>	<p>Alameda County Planning Department; Construction Contractor</p>	<p>Throughout project construction and decommissioning</p>	
<p>Construction Waste Recycling: In accordance with California law, 50 percent of recyclable construction waste shall be recycled. A larger component of construction waste shall be recycled if feasible.</p>	<p>Alameda County Planning Department; Project Applicant; Construction Contractor</p>	<p>Throughout project construction and decommissioning</p>	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
Dust Suppression: Dust would be contained on site by regular dampening of soils, and by laying a gravel or aggregate road base and spraying environmentally friendly soil binders where necessary.	Alameda County Planning Department; Project Applicant; Construction Contractor	Throughout project construction and decommissioning	
Fire Protection and Coordination: Prior to construction, the project team would coordinate with the Alameda County Fire Department <u>and CAL FIRE</u> to ensure <u>opportunities for firefighter training, pre-incident planning, and access</u> in an emergency. On-site vegetation would be managed to minimize fire risk. Emergency fire kits would be kept on site during construction and operation.	Alameda County Planning Department; Project Applicant; Alameda County Fire Department; CAL FIRE	Prior to construction	
Hazardous Materials Management: Hazardous materials used during construction and operation would be limited to de minimis levels of fuels and lubricants. All fuels and lubricants would be contained and labeled in tanks or sealed containers.	Alameda County Planning Department; Project Applicant; Construction Contractor	Throughout project construction, operation, and decommissioning	
Community Engagement and Communication: Site signage shall include contact information for any community complaints. Complaints would be addressed within 72 hours of receipt.	Alameda County Planning Department; Project Applicant	Prior to construction	
<u>Planting and Landscaping Plan: Planting and maintenance of honeybee forage shall be included as part of the proposed project, and plants shall be placed in locations that would be visible from public vantage points from North Livermore Avenue and North Manning Road. Pollinator-friendly plant species would be used in landscaping along with seed mixes to promote honeybee forage.</u>	Alameda County Planning Department; Project Applicant	Prior to project operation	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p><u>In addition to the honeybee forage planting plan, the proposed project shall include a landscape buffer to provide visual interest, frame scenic views, and screen less than desirable views in compliance with the Countywide Scenic Route Element. The landscape buffer is proposed along the public street frontages that border the project site, specifically on the west side of North Livermore Avenue and north and south sides of North Manning Road. The planting area would be established between the County road rights-of-way and project fence line and would include a mixture of evergreen and deciduous shrubs and trees of varying heights. The proposed landscaping would include planting of between 2 to 3 rows of shrubs offset to screen views of the site with trees interspersed primarily along Manning Road. All plants included in the landscaping plan would be drought tolerant and climate appropriate.</u></p>			

