

Appendix O

Mitigation Monitoring and Reporting Program

Table O-1. Mitigation Monitoring and Reporting Program

Aesthetics

MITIGATION MEASURE **MM AES-1: Night Lighting Management Plan.** To the extent feasible, consistent with safety and security considerations, the Project owner shall design and install all permanent exterior lighting and all temporary construction lighting such that (a) lamps and reflectors are not visible from beyond the Project site, including any off-site security buffer areas; (b) lighting does not cause excessive reflected glare; (c) direct lighting does not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which should be an on-demand, audio-visual warning system that is triggered by radar technology); (d) illumination of the Project and its immediate area is minimized, and (e) the plan complies with local policies and ordinances. The Project owner shall also consult with the NPS Night Sky Program Manager in the development of the Night Lighting Management Plan and comply with stricter standards for light intensity. All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall have cutoff angles not to exceed 45 degrees of nadir. The use of LED lighting with a Correlated Color Temperature (CCT) above 2,700 would introduce blue light into the environment that would have negative impacts on the night skies and wildlife of that area. If LED light bulbs are used, they will have a CCT of 2,700 or less. A CCT above 2,700 would increase blue light into the environment that would impact wildlife and visors and increase light pollution. All lights, temporary and permanent, are to be fully shielded such that the emission of light above the horizontal will be prevented. Prior to construction, the Applicant shall submit to Riverside County, BLM and NPS JTNP for review, and for approval by Riverside County, a Night Lighting Management Plan that includes the following:

- A. Location and direction of light fixtures shall take the lighting mitigation requirements into account;
- B. Lighting design shall consider setbacks of Project features from the site boundary to aid in satisfying the lighting mitigation requirements;
- C. Lighting shall incorporate fixture hoods/shielding, with light directed downward or toward the area to be illuminated;
- D. Light fixtures that are visible from beyond the Project boundary shall have cutoff angles that are sufficient to prevent lamps and reflectors from being visible beyond the Project boundary, except where necessary for security;
- E. All lighting shall be of minimum necessary brightness consistent with operational safety and security;
- F. Lights in high illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have (in addition to hoods) switches, timer switches, or motion detectors so that the lights operate only when the area is occupied;
- G. Specification that LPS or amber LED lighting will be emphasized, and that white lighting (metal halide) would (a) only be used when necessitated by specific work tasks, (b) not be used for dusk-to-dawn lighting, and (c) would be less than 3500 Kelvin color temperature;
- H. Specification and map of all lamp locations, orientations, and intensities, including security, roadway, and task lighting;
- I. Specification of each light fixture and each light shield;
- J. Total estimated outdoor lighting footprint expressed as lumens or lumens per acre;
- K. Definition of the threshold for substantial contribution to light pollution in JTNP, in coordination with the Night Sky Program Manager (see below);
- L. Specifications on the use of portable truck-mounted lighting;
- M. Specification of motion sensors and other controls to be used, especially for security lighting;
- N. Surface treatment specification that will be employed to minimize glare and skyglow;
- O. Results of a Lumen Analysis (based on final lighting plans), in consultation with the NPS Night Sky Program Manager, in order to determine the extent of night lighting exposures in the surrounding NPS lands. If the lighting exposure on NPS lands exceeds the allowable threshold (which is to be determined in consultation with the NPS Night Sky Program Manager), additional control measures will be instituted to reduce the lighting exposures to levels below the action threshold; and
- P. Documentation that the necessary coordination with the NPS Night Sky Program Manager has occurred.

If the County does not respond to submittal of the draft Plan within 60 days, the Project owner may consider this a waiver of the County's authority to comment and the Plan may be considered approved.

Responsible Party	Project Owner
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Responsible Monitoring Party	Riverside County, BLM, and NPS JTNP
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM AES-2: Surface Treatment of Project Structures and Buildings. To the extent commercially feasible, the Project owner shall treat the surfaces of all non-temporary large Project structures and buildings (O&M building, inverters, electrical enclosures, gen-tie poles and conductors) visible to the public such that (a) their colors minimize visual intrusion and contrast by blending with (matching) the existing characteristic landscape colors; (b) their colors and finishes do not create excessive glare; and (c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive.</p> <p>Following consultation with the Riverside County Visual Resources specialist (for solar and gen-tie facilities on non-BLM lands) and the BLM Visual Resources specialist (for gen-tie facilities on BLM lands) and other representatives as deemed necessary, the Project owner shall submit for the County's (for solar and gen-tie facilities on non-BLM lands) and BLM's (for gen-tie facilities on BLM lands) review and approval, a specific Surface Treatment Plan that will satisfy these requirements. The consultation would be in-field at the agencies' election, or desktop review if preferred by the agencies. The treatment plan shall include:</p> <ul style="list-style-type: none"> A. A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes based on the characteristic landscape. Colors will be fielded tested using the actual distances from the KOPs to the proposed structures, using the proposed colors painted on representative surfaces; B. A list of each major Project structure, building, tank, pipe, and wall; the transmission line towers and/or poles; and fencing, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and pantone number; or according to a universal designation system; C. One set of color brochures or color chips showing each proposed color and finish; D. A specific schedule for completion of the treatment; and E. A procedure to ensure proper treatment maintenance for the life of the Project. The Project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture or perform the final treatment on any buildings or structures treated in the field, until the Project owner receives notification of approval of the treatment plan by Riverside County and the BLM (gen-tie only). Subsequent modifications to the treatment plan are prohibited without the County's and BLM's approval for components under their respective authorities; however, the project owner may consider the agencies' failure to respond to a request for review within 60 days an acceptance of the proposal.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	<p>MM AES-3: Project Design. To the extent possible, the Project owner will use proper design fundamentals to reduce the visual contrast to the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color and texture of the landscape; and reduction of unnecessary disturbance. Design strategies to address these fundamentals will be based on the following factors:</p> <ul style="list-style-type: none"> ▪ <i>Vegetation Manipulation:</i> Retain as much of the existing vegetation as possible. Use existing vegetation to screen the development from public viewing. Use scalloped, irregular cleared edges to reduce line contrast. Use irregular clearing shapes to reduce form contrast. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes. ▪ <i>Structures:</i> Minimize the number of structures and combine different activities in one structure. Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast. Bury all or part of structures to the extent practical. Use natural appearing forms to complement the characteristic landscape. Screen the structure from view by using natural land forms and vegetation. Reduce the line contrast created by straight edges.

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	<ul style="list-style-type: none"> ▪ <i>Linear Alignments:</i> Use existing topography to hide induced changes associated with roads, lines, and other linear features. Select alignments that follow landscape contours. Avoid fall-line cuts. Hug vegetation lines. ▪ <i>Reclamation and Restoration:</i> Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Where feasible, replace soil, brush, rocks, and natural debris over disturbed area. Newly introduced plant species should be of a form, color, and texture that blends with the landscape.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	MM AES-4: Retention of Roadside Vegetation. Retain SR-177 roadside vegetation along both directions of travel. Specifically, maintain a minimum 50-foot natural vegetation buffer as measured from the outer edge of the road shoulder along both northbound and southbound lanes for the purpose of providing visual screening of Project facilities and reducing visible contrast.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	During construction
Verification Approval Party	Riverside County and BLM
Air Quality	
MITIGATION MEASURE	<p>MM AQ-1: Fugitive Dust Control Plan. The Project owner would prepare and implement a Fugitive Dust Control Plan to address fugitive dust emissions during Project construction, operation, maintenance, and decommissioning. The plan would include measures to minimize fugitive dust emissions from development of laydown and staging areas, site grading, vegetation management, and installing all Project facilities through post-construction cleanup. The Project owner would take every reasonable precaution to prevent all airborne fugitive dust plumes from leaving the Project site and to prevent visible particulate matter from being deposited upon public roadways. The plan would be subject to review and approval by the SCAQMD (Rule 403).</p> <p>The following measures would be included within the plan:</p> <ul style="list-style-type: none"> ▪ During construction, all unpaved roads, disturbed areas (e.g., areas of scraping, excavation, backfilling, grading, and compacting), and loose materials generated during construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent or watered two times daily or as frequently as necessary to minimize fugitive dust generation. Non-water-based soil stabilizers shall be as efficient as or more efficient for fugitive dust control than ARB-approved soil stabilizers and shall not increase any other environmental impacts, including loss of vegetation, adverse odors, or emissions of ozone precursor reactive organic gases (ROG) or volatile organic compounds (VOC). ▪ The main access roads through the site shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction. Delivery, laydown, and staging areas for construction or O&M supplies shall be paved or treated prior to taking initial deliveries. ▪ Grading and earthwork activities, including vegetation removal, cut and fill movement, and soil compacting, shall be phased across the site to minimize the amount of exposed or disturbed area on any single day. ▪ No vehicle shall exceed 15 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions. ▪ Visible speed limit signs shall be posted at the construction site entrances. ▪ All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.

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	<ul style="list-style-type: none"> ▪ All unpaved exits from the construction site shall be graveled or treated to prevent track-out onto public roadways. ▪ All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris. ▪ At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads to access the construction site or staging areas shall be swept as needed when dirt or runoff resulting from the construction activities is visible on the paved public roadway.
Responsible Party	Project Owner
Responsible Monitoring Party	SCAQMD and Riverside County
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	SCAQMD
MITIGATION MEASURE	<p>MM AQ-2: Control On-Site Off-Road Equipment Emissions. The Project owner, when entering into construction contracts or when procuring off-road equipment or vehicles for on-site construction or O&M activities, shall ensure that only new model year equipment or vehicles are obtained. The following measures would be included with contract or procurement specifications:</p> <ul style="list-style-type: none"> ▪ All construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, with a rating of 50 hp or higher shall meet the Tier 4 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 4 engine is not available for any off-road equipment larger than 100 hp, a Tier 3 engine shall be used or that equipment shall be equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 3 levels unless certified by the engine manufacturers that the use of such devices is not practical for specific engine types. ▪ All diesel-fueled engines used in the construction of the facility shall have clearly visible tags showing that the engine meets the standards of this measure. ▪ All equipment and trucks used in the construction or O&M of the facility shall be properly maintained and the engines tuned to the engine manufacturer's specifications. ▪ All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to and during construction; during operations
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM AQ-3: Require Newer Vehicles for On-Road Vendor and Hauling Trucks. The Project owner, when entering into construction contracts or when selecting vendors, shall specify that vendors and haulers use model year 2010 and newer diesel haul trucks (e.g., for material delivery trucks, water trucks, and other hauling trucks). If 2010 model year or newer diesel trucks cannot be obtained, the Project owner shall specify that vendors and haulers use trucks that meet EPA 2007 model year NOx emissions control requirements.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Riverside County

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MITIGATION MEASURE	MM AQ-4: Construction Activity Management Plan. The Project owner shall prepare and implement a construction activity or phasing plan that requires construction contractors to schedule the overlapping activities of on-road motor vehicles and off-road equipment to avoid excessive daily emissions. The activity management plan shall reflect the ultimate design of the solar facility and gen-tie line development timing, and shall reflect the anticipated make-up of the construction equipment fleet and workforce. The plan would need to reflect dust control practices (Mitigation Measure AQ-1), off-road equipment engine standards (Mitigation Measure AQ-2), and use of newer vehicles for vendor and hauling trucks (Mitigation Measure AQ-3). The plan shall be submitted to the County and accepted by the County prior to the County issuing final permits.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Riverside County
Biological Resources	
MITIGATION MEASURE	APM B-1: Wildlife Relocation. The Applicant will prepare and implement a Wildlife Relocation Plan (POD Appendix M) to ensure that special-status wildlife species, including (but not limited to) desert tortoise, burrowing owl, and desert kit fox, are safely avoided or relocated off the Project site prior to construction. The Wildlife Relocation Plan will conform to USFWS guidelines for desert tortoise surveys, avoidance, and relocation, and to CDFW guidelines for burrowing owl and desert kit fox passive relocation, including scheduling to avoid disturbance to natal dens or burrows. The Wildlife Relocation Plan will specify methodology for pre-construction clearance surveys on the proposed solar fields and gen-tie routes; monitoring or tracking special-status species, burrows, or dens that may be located during the surveys; construction of off-site artificial burrows if needed; avoidance to allow for wildlife to safely move out of harm's way, or methods for localized "out of harm's way" desert tortoise relocation; passive relocation methods for burrowing owl or desert kit fox; qualifications of field personnel who may handle desert tortoises; and follow-up monitoring of translocated animals.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	MM BIO-1: Biological Monitoring. The Applicant will assign a Lead Biologist as the primary point of contact for the lead and resource agencies regarding biological resources mitigation and compliance. For desert tortoise protection measures (BIO-9, below), the Lead Biologist will serve as the Field Contact Representative (FCR). The Applicant will provide the resume of the proposed Lead Biologist to the County (as appropriate) for concurrence prior to onset of ground-disturbing activities. The Lead Biologist will have demonstrated expertise with the biological resources within the Project area. The Lead Biologist duties will vary during the construction, O&M, and decommissioning phases. In general, the duties will include, but will not be limited to those listed below: <ul style="list-style-type: none"> ▪ Regular, direct communication with representatives of Riverside County, and other agencies, as appropriate. ▪ Train and supervise additional Biological Monitors to ensure that all biological monitoring activities are completed properly and according to schedules. Monitoring will include inspections of any area or activity that may impact biological resources to ensure compliance with all mitigation measures for biological resources. ▪ Conduct or oversee Worker Environmental Awareness Program (WEAP) training (Mitigation Measure BIO-2). ▪ Conduct or oversee clearance surveys and monitoring duties as defined in all adopted mitigation measures. ▪ Halt any activities in any area if it is determined that the activity, if continued, would cause an unauthorized adverse impact to biological resources.

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- Clearly mark sensitive biological resource areas during construction, O&M, and decommissioning, and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions.
- Conduct or oversee bi-weekly compliance inspections during ground disturbing construction activities. Inspections will include delineating limits of disturbance, fence construction activities, pre-construction clearance surveys; and initial clearing, grubbing, and grading.
- Inspect or oversee daily inspection of active construction or O&M activity areas where animals may have become trapped. At the end of each work day, either inspect installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way and relocate them if necessary.
- During the operations phase of the Project, conduct quarterly compliance inspections (fencing condition, trash management, wildlife mortality logs, etc.); conduct weed monitoring and control (according to the Integrated Weed Management Plan).
- Immediately notify the Applicant, County, and resource agencies (as applicable) in writing of dead or injured special-status species, or of any non-compliance with biological mitigation measures or permit conditions.
- During construction, provide weekly verbal or written updates to Riverside County, and, for any information pertinent to state or federal permits, to the BLM or resource agencies.
- During construction and O&M, prepare and submit monthly and annual compliance reports, respectively.

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to ground disturbance; during construction and operations
Verification Approval Party	Riverside County

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	<p>MM BIO-2: Worker Environmental Awareness Training. The Lead Biologist will prepare and implement a Worker Environmental Awareness Program (WEAP). The Applicant will be responsible for ensuring that all workers at the site receive WEAP training prior to beginning work on the Project and throughout construction and operations. The WEAP will be available in English and Spanish. The Applicant will submit the WEAP to Riverside County for approval prior to implementation. If the County does not respond to submittal of the draft Plan within 60 days, the Project owner may consider this a waiver of the County's authority to comment and the Plan may be considered approved. The WEAP will:</p> <ul style="list-style-type: none"> ▪ Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation with supporting written material and electronic media, including photographs of protected species, available to all participants. ▪ Provide an explanation of the function of flagging that designates authorized work areas; specify the prohibition of soil disturbance or vehicle travel outside designated areas. ▪ Discuss general safety protocols such as vehicle speed limits, hazardous substance spill prevention and containment measures, and fire prevention and protection measures. ▪ Review mitigation and biological permit requirements. ▪ Explain the sensitivity of the vegetation and habitat within and adjacent to work areas, and proper identification of these resources. ▪ Discuss the federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act and the consequences of non-compliance with these acts. ▪ Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas and explain the reasons for protecting these resources. ▪ Inform participants that no snakes, other reptiles, birds, bats, or any other wildlife will be harmed or harassed. ▪ Place special emphasis on species that may occur on the Project site and/or gen-tie lines, including special-status plants, desert tortoise, Mojave fringe-toed lizard, burrowing owl, golden eagle, nesting birds, desert kit fox, American badger, and burro deer. ▪ Specify guidelines for avoiding rattlesnakes and reporting rattlesnake observations to ensure worker safety and avoid killing or injuring rattlesnakes. Wherever feasible, rattlesnakes should be safely removed from the work area using appropriate snake handling equipment, including a secure storage container for transport. ▪ Describe workers' responsibilities for avoiding the introduction of invasive weeds onto the Project site and surrounding areas, describe the Integrated Weed Management Plan. ▪ Provide contact information for the Lead Biologist and instructions for notification of any vehicle-wildlife collisions or dead or injured wildlife species encountered during Project-related activities; ▪ Include a training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to beginning work on the project and throughout construction and operations
Verification Approval Party	Riverside County

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MITIGATION MEASURE	<p>MM BIO-3: Minimization of Vegetation and Habitat Impacts. Prior to ground-disturbing activities, work areas (including, but not limited to, staging areas, access roads, and sites for temporary placement of construction materials and spoils) will be delineated with construction fencing (e.g., the common orange vinyl material) or staking to clearly identify the limits of work and will be verified by the Lead Biologist. No paint or permanent discoloring agents shall be applied to rocks or vegetation (to indicate surveyor construction activity limits or for any other purpose). Fencing/staking will remain in place for the duration of construction. Spoils will be stockpiled in disturbed areas. All disturbances, vehicles, and equipment will be confined to the fenced/flagged areas.</p> <p>When feasible, construction activities will minimize soil and vegetation disturbance to minimize impacts to soil and root systems. Upon completion of construction activities in any given area, all unused materials, equipment, staking and flagging, and refuse shall be removed and properly disposed of, including wrapping material, cables, cords, wire, boxes, rope, broken equipment parts, twine, strapping, buckets, and metal or plastic containers. Any unused or leftover hazardous products shall be properly disposed of offsite.</p> <p>Hazardous materials will be handled and spills or leaks will be promptly corrected and cleaned up according to applicable requirements. Vehicles will be properly maintained to prevent spills or leaks. Hazardous materials, including motor oil, fuel, antifreeze, hydraulic fluid, grease, will not be allowed to enter drainage channels.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to ground disturbance and during construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-4: Integrated Weed Management Plan. The Applicant will prepare and implement an Integrated Weed Management Plan (IWMP) to minimize or prevent invasive weeds from infesting the site or spreading into surrounding habitat. Riverside County and the BLM (for gen-tie segments on BLM lands) must approve the plan. If the County does not respond to submittal of the draft IWMP within 60 days, the Project owner may consider this a waiver of the County's authority to comment and the Plan may be considered approved. The IWMP will identify weed species occurring or potentially occurring in the Project area, means to prevent their introduction or spread (e.g., vehicle cleaning and inspections), monitoring methods to identify infestations, and timely implementation of manual or chemical (as appropriate) suppression and containment measures to control or eradicate invasive weeds. The IWMP will identify herbicides that may be used for control or eradication, and avoid herbicide use in or around any environmentally sensitive areas. The IWMP will also include a reporting schedule, to be implemented by the Lead Biologist.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to ground disturbance and during construction, operation, maintenance, and decommissioning
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	<p>MM BIO-5: Vegetation Resources Management Plan. The Applicant will prepare and implement a Vegetation Resources Management Plan, to be reviewed and approved by Riverside County. If the County does not respond to submittal of the draft Plan within 60 days, the Project owner may consider this a waiver of the County's authority to comment and the Plan may be considered approved. The goal will be to prevent further degradation of areas that may be temporarily disturbed by Project activities, but not to restore pre-disturbance habitat values (those impacts are mitigated through off-site compensation). The Vegetation Resources Management Plan will detail the methods to revegetate temporarily impacted sites; salvage cacti from the Project footprint; and long-term vegetation management within the solar facility during its operations.</p> <ul style="list-style-type: none"> ▪ <i>Revegetation of temporarily impacted sites.</i> The Plan will specify methods to prevent or minimize further site degradation; stabilize soils; maximize the likelihood of vegetation recovery over time (for areas supporting native vegetation); and minimize soil erosion, dust generation, and weed invasions. The nature of revegetation will differ according to each site, its pre-disturbance condition, and the nature of the construction disturbance (e.g., drive and crush, vs. blading). The Plan will include: (a) soil preparation measures, including locations of recontouring, decompacting, imprinting, or other treatments; (b) details for topsoil storage, as applicable; (c) plant material collection and acquisition guidelines, including guidelines for salvaging, storing, and handling plants from the Project site, as well as obtaining replacement plants

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	<p>from outside the Project area (plant materials will be limited to locally occurring native species from local sources); (d) a plan drawing or schematic depicting the temporary disturbance areas (drawing of “typical” gen-tie structure sites will be appropriate); (e) time of year that the planting or seeding will occur and the methodology of the planting; (f) a description of the irrigation, if used; (g) success criteria; and (h) a monitoring program to measure the success criteria, commensurate with the Plan’s goals, (i) contingency measures for failed revegetation efforts not meeting success criteria. For temporary disturbance on BLM lands, any specific BLM requirements would supersede this measure.</p> <ul style="list-style-type: none"> ▪ <i>Cactus Salvage</i>. In conformance with BLM policy, the Applicant will include salvaged or nursery stock yuccas (all species), and cacti (excluding cholla species, genus <i>Cylindropuntia</i>), in revegetation plans and implementation affecting BLM lands. The Plan will include methods to salvage and replant cacti and yucca, species found on the site; season for salvaging the plants; methods for salvage, storage, and re-planting them; locations for re-planting; and appropriate monitoring and success criteria for the salvage work. ▪ <i>Operations Phase On-Site Vegetation Management</i>: The Plan will include methods and scheduling for on-site vegetation management throughout the operations phase, describing mowing or other vegetation treatments to be implemented, disposal of mown material, and incorporating all applicable components of the Integrated Weed Management Plan, including any proposed herbicide usage.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to ground disturbance and during construction and operation
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-6: Compensation for Natural Habitat Impacts on County-administered Land. The Applicant will acquire and protect, in perpetuity, compensation habitat to offset loss of natural habitat on County-administered lands on the Project site. No compensation would be required for impacts to anthropogenic land use or recovering areas. The acreages and ratios will be based upon final calculation of impacted acreage and thus would be less for the Reduced Project Alternative than the proposed Project. Acreages will be adjusted as appropriate for other alternatives or future modifications during implementation. To the extent that Sonoran creosote bush scrub may substantially recover from drive and crush site preparation, total impact acreage will be reduced.</p> <p>Compensation will be provided for impacts to the following resources, at the specified ratios (acres acquired and preserved to acres impacted):</p> <ul style="list-style-type: none"> ▪ Desert dry wash woodland: 3:1 ▪ Sonoran creosote bush scrub: 0.5:1 <p>Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands will include all the following: Provide habitat value that is comparable to the habitat impacted, taking into consideration soils, vegetation, topography, human-related disturbance, invasive species, wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values. The primary focus area for acquiring parcels to maintain/improve connectivity will be along the I-10 corridor between Desert Center and Cactus City with a priority on parcels that connect conserved lands on either side of the I-10 through large culverts or bridges. Mitigation may be “nested” or “layered,” to the extent that it meets habitat requirements for multiple species that will or may be impacted by the Project.</p> <p>The Applicant shall provide funding or bonding for the acquisition in fee title or in easement, initial habitat improvements and long-term maintenance and management of the compensation lands prior to construction activities on native habitat. Within 18 months of completing construction, the Applicant or an approved third party will prepare a Compensation Plan, identifying the proposed compensation lands, and specifying the land ownership, conservation easement terms, long-term management, and responsibility for funding or endowment. The Compensation Plan will be submitted for review and approval to Riverside County. The County will consult with CDFW or another land manager in its review of the Compensation Plan to ensure that the mitigation will support any permits and authorizations to be issued by CDFW.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to ground disturbance

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Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-7: Emory’s Crucifixion Thorn Mitigation. The Applicant will mitigate impacts to Emory’s crucifixion thorn (CRPR 2) through one or a combination of the following strategies.</p> <ul style="list-style-type: none"> ▪ <i>Avoidance.</i> Project design will avoid at minimum 75 percent of the Emory’s crucifixion thorn occurrences within the Project boundaries or other work areas, including the gen-tie line, as identified in the BRTR and recorded in accompanying GPS data and will provide a minimum 100-foot buffer area surrounding each avoided occurrence, where no Project activities will take place. ▪ <i>Off-site compensation.</i> The Applicant will provide compensation lands consisting of occupied Emory’s crucifixion thorn habitat at a 1:1 ratio for any occupied habitat affected by the Project, according to the terms described in MM BIO-6 (Compensation for Natural Habitat Impacts). Occupied habitat will be calculated on the Project site and on the compensation lands as including each special status plant occurrence and a surrounding 100-foot buffer area. Off-site compensation will be incorporated into the Project’s Habitat Compensation Plan, for review and approval by Riverside County. Mitigation may be “nested” or “layered,” to the extent that it meets habitat requirements for multiple species that will or may be impacted by the Project. ▪ <i>Salvage.</i> The Applicant will consult with Rancho Santa Ana Botanic Garden (RSABG) regarding the success of salvage efforts for this species at the Desert Sunlight Solar Farm Project site. If the strategy has been shown to be feasible, then the Applicant will prepare and implement an Emory’s Crucifixion Thorn Salvage and Relocation Plan, to be reviewed and approved by Riverside County prior to disturbance of any occupied Emory’s crucifixion thorn habitat. Emory’s crucifixion thorn on private lands may also be subject to the provisions of the California Desert Native Plants Act. The Applicant will contract with RSABG or another entity with comparable experience and qualifications, to salvage at minimum 75 percent of Emory’s crucifixion thorn individuals from the proposed Project site and transfer them to a suitable off-site location. ▪ <i>Horticultural propagation and off-site introduction.</i> If salvage and relocation is not believed to be feasible for Emory’s crucifixion thorn, then the Applicant will consult with RSABG or another qualified entity, to develop and implement an appropriate experimental propagation and relocation strategy.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to ground disturbance
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-8: Wildlife Protection. The Applicant shall undertake the following measures during construction and O&M to avoid or minimize impacts to wildlife. Implementation of all measures shall be subject to review and approval by Riverside County.</p> <ul style="list-style-type: none"> ▪ <i>Wildlife avoidance.</i> Wherever feasible, Project activities will avoid interference with wildlife (include ground-dwelling species, birds, bats) by allowing animals to escape from a work site prior to disturbance; conducting pre-construction surveys and exclusion measures for certain species as specified in other measures; checking existing structures (homes, trailers, etc.) for animals such as bats, barn owls, skunks, or snakes that may be present, and safely excluding them prior to removing the structures. ▪ <i>Minimize traffic impacts.</i> The Applicant will specify and enforce maximum vehicle speed limits as specified in the Traffic Control Plan, to minimize risk of wildlife collisions and fugitive dust. ▪ <i>Minimize lighting impacts.</i> Night lighting, when in use, shall be designed, installed, and maintained to prevent side casting of light towards surrounding fish or wildlife habitat. ▪ <i>Avoid use of toxic substances.</i> Soil bonding and weighting agents used for dust suppression on unpaved surfaces shall be non-toxic to wildlife and plants. ▪ <i>Minimize noise and vibration impacts.</i> The Applicant will conform to noise requirements specified in the noise analysis of this EIR to minimize noise to offsite habitat. ▪ <i>Water.</i> Potable and non-potable water sources such as tanks, ponds, and pipes shall be covered or otherwise secured to prevent animals (including birds) from entering. Prevention methods may include storing water within closed tanks or covering open tanks with 2-centimeter netting. Dust abatement will use the minimum amount of water on dirt roads and construction areas to meet safety and air quality standards. Water sources (e.g., hydrants, tanks, etc.) shall be checked periodically by biological monitors to ensure they do not create puddles.

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- *Trash.* All trash and food-related waste shall be contained in vehicles or covered trash containers inaccessible to ravens, coyotes, or other wildlife and removed from the site regularly.
- *Workers.* Workers shall not feed wildlife or bring pets to the Project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.
- *Wildlife netting or exclusion fencing.* The Applicant may install temporary or permanent netting or fencing around equipment, work areas, or Project facilities to prevent wildlife exposure to hazards such as toxic materials or vehicle strikes, or prevent birds from nesting on equipment or facilities. Bird deterrent netting will be maintained free of holes and will be deployed and secured on the equipment in a manner that, insofar as possible, prevents wildlife from becoming trapped inside the netted area or within the excess netting. The biological monitor will inspect netting (if installed) twice daily, at the beginning and close of each work day. The biological monitor will inspect exclusion fence (if installed) weekly.
- *Wildlife entrapment.* Project-related excavations shall be secured to prevent wildlife entry and entrapment. Holes and trenches shall be backfilled, securely covered, or fenced. Excavations that cannot be fully secured shall incorporate wildlife ramp or other means to allow trapped animals to escape. At the end of each work day, a biological monitor shall ensure that excavations have been secured or provided with appropriate means for wildlife escape.
- *All pipes or other construction materials or supplies* will be covered or capped in storage or laydown areas. No pipes or tubing will be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials will be inspected for wildlife before it is moved, buried, or capped.
- *Dead or injured wildlife* will be reported to CDFW or the local animal control agency, as appropriate (special-status species must be reported to CDFW). A biological monitor shall safely move the carcass out of the road or work area if needed and dispose of the animal as directed by the agency. If an animal is entrapped, a biological monitor shall free the animal if feasible, or work with construction crews to free it, in compliance with safety requirements, or work with animal control or CDFW to resolve the situation.
- *Pest control.* No anticoagulant rodenticides, such as Warfarin and related compounds (indandiones and hydroxycoumarins), may be used within the project site, on off-site project facilities and activities, or in support of any other project activities.

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and CDFW
Monitoring Phase/Timing	During construction, operation, and maintenance
Verification Approval Party	Riverside County

MITIGATION MEASURE **MM BIO-9: Desert Tortoise Protection.** No desert tortoise may be handled or relocated without authorization from USFWS and CDFW. The Applicant may seek incidental take authorization from both agencies to handle or translocate desert tortoise. If incidental take authorization is obtained, then desert tortoises would be handled or translocated according to a Wildlife Relocation Plan, to be prepared as specified in APM B-1 (Wildlife Relocation), pending approval by both agencies. If incidental take authorization is not obtained, desert tortoises would not be handled or translocated.

The Applicant will employ a biologist who is qualified to conduct desert tortoise clearance surveys (qualified biologist), who will be on-site during all construction. Additionally, the Applicant will designate a Lead Biologist as the Field Contact Representative (FCR) for purposes of the desert tortoise protection measures identified below.

The qualified biologists may be the Project’s Lead Biologist, a biological monitor, or another individual. The qualified biologist’s qualifications will be subject to review and approval by Riverside County. Qualifications may include work as a compliance monitor on a project in desert tortoise habitat, work on desert tortoise trend plot or transect surveys, conducting surveys for desert tortoise, or other research or field work on desert tortoise. Attendance at a training course endorsed by the agencies (e.g., Desert Tortoise Council tortoise training workshop) is a supporting qualification.

The qualified biologist shall conduct pre-construction clearance surveys for each work area, watch for tortoises wandering into the construction areas, check under vehicles, and examine excavations and other potential pitfalls for entrapped animals. The qualified biologist will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with the Project’s Lead Biologist/FCR (described below). The qualified biologist shall have the authority to halt all Project activities that are in violation of these measures or that may result in take of a desert tortoise. The qualified biologist will not handle

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or relocate desert tortoises unless specifically authorized by the USFWS and CDFW. Any incident that is considered by the qualified biologist to be in noncompliance with these measures will be documented immediately by the qualified biologist.

The FCR will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with resource agencies. The FCR will have the authority to halt any Project activities that may risk take of a desert tortoise or that may be inconsistent with adopted mitigation measures or permit conditions. Neither the FCR nor any other Project employee may bar or limit any communications between any Natural Resource Agency or The County of Riverside Environmental Programs Division and any Project biologist, biological monitor or contracted biologist. Upon notification by the qualified biologist or another biological monitor of any noncompliance the FCR will ensure that appropriate corrective action is taken. Corrective actions will be documented by the qualified biologist. The following incidents will require immediate cessation of any Project activities that could harm a desert tortoise: (1) location of a desert tortoise within a work area; (2) imminent threat of injury or death to a desert tortoise; (3) unauthorized handling of a desert tortoise, regardless of intent; (4) operation of construction equipment or vehicles outside a Project area cleared of desert tortoise, except on designated roads; and (5) conducting any construction activity without a biological monitor where one is required.

The Applicant will be responsible for implementing the following requirements, under direction by the qualified biologist and FCR where appropriate.

- *Preconstruction Clearance Survey.* Transects will be spaced 15 feet apart. Clearance will be considered complete after two successive 100-percent coverage surveys have been conducted without finding any desert tortoises. Clearance surveys must be conducted during the active season for desert tortoises (April through May or September through October). If a tortoise or an occupied tortoise burrow is located during clearance surveys, work activities will only proceed at the site and within a suitable buffer area after the tortoise has either moved away of its own accord, or if it has been translocated off the site under authorization by the USFWS and CDFW.
- *Worker Training:* The following specifications will be incorporated into the WEAP training, identified in Mitigation Measure BIO-2. Prior to the onset of construction activities, a desert tortoise education program will be presented by the FCR or qualified biologist to all personnel who will be present on Project work areas. Following the onset of construction, any new employee will be required to formally complete the tortoise education program prior to working on-site. At a minimum, the tortoise education program will cover the following topics:
 - A detailed description of the desert tortoise, including color photographs;
 - The distribution and general behavior of the desert tortoise;
 - Sensitivity of the species to human activities;
 - The protection the desert tortoise receives under the state and federal Endangered Species Acts, including prohibitions and penalties incurred for violation;
 - The protective measures being implemented to conserve the desert tortoise during construction activities; and
 - Procedures and a point of contact if a desert tortoise is observed on-site.
- *Construction phase tortoise exclusion fencing.* Prior to construction of solar facilities, temporary or permanent desert tortoise exclusion fencing will be installed around the work areas. The fence will adhere to USFWS design guidelines, where applicable. The qualified biologist will conduct a clearance survey before the tortoise fence is enclosed to ensure no tortoises are in the work area. Any potentially occupied burrows will be avoided until monitoring or field observations (e.g., with a motion-activated camera or fiber-optic mounted video camera) determines absence. If live tortoises or an occupied tortoise burrow are identified in the work area, tortoises shall be relocated under authorization by USFWS and CDFW or allowed to leave on their own accord before enclosing the fence. The fence shall be either continuously monitored prior to closure, or clearance surveys shall be repeated prior to closure after tortoises are removed. Once installed, exclusion fencing will be inspected at least monthly and following all rain events, and corrective action taken if needed to maintain it. Fencing around each work area will include a "cattle guard" or desert tortoise exclusion gate at each entry point. This gate will remain closed at all times, except when vehicles are entering or leaving the Project area. If it is deemed necessary to leave the gate open for extended periods of time (e.g., during high traffic periods), the gate may be left open as long as a qualified biologist is present to monitor for tortoise activity in the vicinity.
- *Unfenced work areas.* As an alternative to exclusion fencing, any work conducted in an area that is not fenced to exclude desert tortoises must be monitored by a qualified biologist who will stop work if a

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	<p>tortoise enters the work area. Work activities will only proceed at the site and within a suitable buffer area after the tortoise has either moved away of its own accord, or if it has been translocated off the site under authorization by the USFWS and CDFW. Work sites with potential hazards to desert tortoise (e.g., auger holes, steep-sided depressions) that are outside of the desert tortoise exclusion fencing will be fenced by installing exclusionary fencing, or not left unfilled overnight.</p> <ul style="list-style-type: none"> ▪ <i>Operation phase tortoise monitoring or exclusion.</i> At the Applicant’s discretion, and in consultation with resource agencies, permanent desert tortoise exclusion fencing may be installed around each solar facility site, or the Applicant may prepare and implement a monitoring and avoidance program to ensure no take of desert tortoise during O&M, while allowing wildlife (possibly including desert tortoise) to move through the facilities uninjured. ▪ <i>Tortoises under vehicles.</i> The ground beneath vehicles parked outside of desert tortoise exclusion fencing will be inspected immediately prior to the vehicle being moved. If a tortoise is found beneath a vehicle, the vehicle will not be moved until the desert tortoise leaves of its own accord. ▪ <i>Tortoises on roads.</i> If a tortoise is observed on or near the road accessing a work area, vehicles will stop to allow the tortoise to move off the road on its own. ▪ <i>Tortoise Observations.</i> Any time a tortoise is observed within or near a work site, Project work activities will only proceed at the site and within a suitable buffer area after the tortoise has either moved away of its own accord, or if it has been translocated off the site under authorization by the USFWS and CDFW. If a tortoise is observed outside of exclusion fencing, construction will stop and the tortoise shall be allowed to move out of the area on its own. If a tortoise or tortoise burrow is observed within the exclusion fencing, construction in the vicinity will stop, pending translocation of the tortoise or other action as authorized by USFWS and CDFW. ▪ <i>Dead or Injured Specimens.</i> Upon locating a dead or injured tortoise, the Applicant or its agent will immediately notify the Palm Springs Fish and Wildlife Office by telephone within three days of the finding. Written notification must be made within five days of the finding, both to the appropriate USFWS field office and to the USFWS’s Division of Law Enforcement. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death, if known, and other pertinent information.
Responsible Party	Project Owner
Responsible Monitoring Party	USFWS, CDFW, and Riverside County
Monitoring Phase/Timing	Prior to construction and during construction, operation, and maintenance
Verification Approval Party	USFWS, CDFW, and Riverside County
MITIGATION MEASURE	<p>MM BIO-10: Desert Kit Fox and American Badger Relocation. This measure supplements APM B-1 (Wildlife Relocation) by specifying further detail regarding desert kit fox and American badger avoidance and passive relocation. Under direction of the Lead Biologist, biological monitors shall conduct pre-construction surveys for desert kit fox and American badger no more than 30 days prior to initiation of construction activities. Surveys shall also consider the potential presence of dens within 100 feet of the Project boundary (including utility corridors and access roads) and shall be performed for each phase of construction. If dens are detected each den shall then be further classified as inactive, potentially active, or definitely active. Inactive dens directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse. Potentially active dens directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium such as diatomaceous medium or fire clay and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, dens shall be fitted with the one-way trap doors to encourage animals to move off-site. After 48 hours post installation, the den shall be excavated by hand and collapsed. Dens shall be collapsed prior to construction of the perimeter fence, to allow animals the opportunity to move off-site without impediment. If an active natal den is detected on the site, the CDFW shall be contacted within 24 hours. The course of action would depend on the age of the pups, location of the den site, status of the perimeter fence, and the pending construction activities proposed near the den. A 500-foot no disturbance buffer shall be maintained around all active dens. Alternatively, a designated biologist authorized by CDFW shall trap and remove animals from occupied dens and move them off-site into appropriate habitat. Additionally, the following measures are required to minimize the likelihood of distemper transmission:</p>

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	<ul style="list-style-type: none"> ▪ Any kit fox hazing activities that include the use of animal repellents such as coyote urine must be cleared through the CDFW prior to use; and ▪ Any documented kit fox mortality shall be reported to the CDFW within 24 hours of identification. If a dead kit fox is observed, it shall be retained and protected from scavengers until the CDFW determines if the collection of necropsy samples is justified.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and CDFW
Monitoring Phase/Timing	No more than 30 days prior to initiation of construction activities and during construction
Verification Approval Party	Riverside County and CDFW
MITIGATION MEASURE	<p>MM BIO-11: Wildlife Water Source. The Applicant will coordinate with the County, BLM, CDFW, and USFWS to offset potential Project impacts to burro deer and other wildlife resulting from loss of existing irrigation water supplies at Parcel Group G. In coordination with the agencies, the Applicant will support replacement, repairs, maintenance, or monitoring of existing wildlife water sources in the Project vicinity; support access improvements to existing sources; support removal of invasive tamarisk (or saltcedar) from natural water sources (to improve surface flow); or provide an alternative water source as a replacement or supplement to existing sources.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County, BLM, CDFW, and USFWS
Monitoring Phase/Timing	Prior to ground disturbance and during construction, operation, maintenance, and decommissioning
Verification Approval Party	Riverside County, BLM, CDFW, and USFWS
MITIGATION MEASURE	<p>MM BIO-12: Bird and Bat Conservation Strategy (BBCS). The Applicant will prepare and implement a Bird and Bat Conservation Strategy to avoid or minimize take of migratory birds that may nest on the site or may be vulnerable to collision with Project components. The BBCS will identify potential hazards to birds during construction and O&M phases of the Project and specify measures to recognize, minimize, or avoid those hazards. The BBCS will articulate the Applicant’s commitment to reduce risk to birds and bats. Over the course of construction and O&M, progress and challenges that are encountered may necessitate review or revision of the BBCS, on mutual agreement among the Applicant and County. The initial goals of the BBCS are to:</p> <ul style="list-style-type: none"> ▪ Provide an organized and cost-effective framework for compliance with State and federal laws protecting birds ▪ Specify record keeping, reporting, and communication procedures to document compliance with the terms of the BBCS ▪ Foster a sense of stewardship with the Applicant and on-site staff <p>Construction. Pre-construction surveys for active nests will be conducted by one or more qualified biologists at the direction of the Project Lead Biologist. The biologists’ qualifications will be subject to review and approval by Riverside County. Nest surveys will be conducted for all Project activities throughout the nesting season, identified here as beginning January 1 for raptors and hummingbirds and February 1 for other species, and continuing through August 15. Nest surveys will be completed at each work site no more than 7 days prior to initiation of site preparation or construction activities. Nest surveys will cover all work sites, including the solar facility and gen-tie, and adjacent off-site habitat areas of 1,200 feet for raptors and 250 feet for other species. If adjacent properties are not accessible to the field biologists, the off-site nest surveys may be conducted with binoculars.</p> <p>At each active nest, the qualified biologist will establish and mark a buffer area surrounding the nest where construction activities that could disrupt nesting behavior will be excluded. The BBCS may identify species-specific buffer distances or variable distances, depending on activity levels (e.g., driving past the nest to access work sites may be less disruptive than foundation construction). Alternately, buffer distances will be 1,200 feet for raptor nests and 250 feet for other species. The extent of nest protection will be based on proposed construction activities, species, human activities already underway when the nest is initiated (e.g., a house finch nest built in the eaves of an occupied structure would warrant less avoidance or protection than a loggerhead shrike nest build in native shrubland), topography, vegetation cover, and other factors. The avoidance and protection measures will remain in effect until the nest is no longer active.</p>

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	<p>If for any reason a bird nest must be removed during the nesting season, the Applicant or its agent will notify the CDFW and USFWS and retain written documentation of the correspondence. Nests would be removed only if they are inactive, or if an active nest presents a hazard.</p> <p>Operation and Maintenance. The BBCS will specify monitoring and conservation measures to be implemented by the Applicant to document bird mortality that may result from bird injury or mortality caused by collision with Project components, including gen-tie line collisions. The BBCS will include:</p> <ul style="list-style-type: none"> ▪ A statement of the Applicant's understanding of the importance of bird and bat safety and management's commitment to remain in compliance with relevant laws ▪ Documentation of conservation measures to be implemented through design and operations to minimize bird and bat fatalities at the solar facilities and gen-tie line ▪ Consistent, practical and up-to-date direction to O&M staff on how to avoid, reduce, and monitor bird and bat fatalities ▪ A 3-year O&M monitoring and reporting program for potential bird and bat fatalities ▪ Identification of fatality thresholds that, if surpassed, would trigger adaptive management measures such as changes to Project O&M ▪ An adaptive management framework to be applied if thresholds are surpassed
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County, CDFW, and USFWS
Monitoring Phase/Timing	Prior to construction and during construction, operation, and maintenance
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-13: Burrowing Owl Avoidance and Relocation: This measure supplements APM B-1 (Wildlife Relocation) by specifying further detail regarding burrowing owl. Burrowing owl protection and relocation will incorporate the following requirements:</p> <ul style="list-style-type: none"> ▪ Pre-construction surveys for burrowing owls, possible burrows, and sign of owls (e.g., pellets, feathers, white wash) will be conducted throughout each work area no more than 14 days prior to construction. ▪ Should any of the pre-construction surveys identify burrowing owl or active burrows within the solar facility, the Lead Biologist will coordinate with the Construction Contractor to implement avoidance and set-back distances. Disturbance of owls or occupied burrows during the breeding season (February 1 through August 31) will not be permitted. ▪ Any unoccupied suitable burrows within the solar facility footprint will be excavated and filled in under the supervision of the Lead Biologist prior to site preparation. ▪ The Plan will specify detailed methods for passive relocation of burrowing owls if needed and monitoring and management of the passive relocation including a three-year monitoring program.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM BIO-14: Gen-tie lines. Gen-tie line support structures and other facility structures shall be designed in compliance with current standards and practices to discourage their use by raptors for perching or nesting (e.g., by use of anti-perching devices). This design would also reduce the potential for increased predation of special-status species, such as the desert tortoise. Mechanisms to visually warn birds (permanent markers or bird flight diverters) shall be placed on gen-tie lines at regular intervals to prevent birds from colliding with the lines (APLIC, 2006). To the extent practicable, the use of guy wires shall be avoided because they pose a collision hazard for birds and bats. Necessary guy wires shall be clearly marked with bird flight diverters to reduce the probability of collision. Shield wires shall be marked with devices that have been scientifically tested and found to significantly reduce the potential for bird collisions. Gen-tie lines shall maintain sufficient distance between all conductors and grounded components to prevent potential for electrocution of the largest birds that may occur in the area (e.g., golden eagle and turkey vulture). They shall utilize non-specular conductors and non-reflective coatings on insulators.</p>

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Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Riverside County and BLM

MITIGATION MEASURE **MM BIO-15: Streambed and Watershed Protection.** Prior to ground-disturbing activities in jurisdictional waters of the state, the Applicant will obtain a Streambed Alteration Agreement from the CDFW and applicable authorization (if any) from the Regional Water Quality Control Board. The Applicant will implement Best Management Practices (BMPs) identified below to minimize adverse impacts to streambeds and watersheds.

- Vehicles and equipment will not be operated in ponded or flowing water except as specified by resource agencies.
- The Applicant will minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible.
- The Applicant will prevent water containing mud, silt, or other pollutants from grading or other activities from entering ephemeral drainages or being placed in locations that may be subjected to high storm flows.
- Spoil sites will not be located within 30 feet from the boundaries of drainages or in locations that may be subjected to high storm flows, where spoils might be washed back into drainages.
- Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from Project-related activities, will be prevented from contaminating the soil and/or entering ephemeral drainages. The Applicant shall ensure that safety precautions specified by this measure, as well as all other safety requirements of other measures and permit conditions are followed during all phases of the Project.
- When operations are completed, any excess materials or debris will be removed from the work area. No rubbish will be deposited within 150 feet of the high-water mark of any drainage during construction, operation, and decommissioning the Project.
- No equipment maintenance will occur within 150 feet of any category 3, 4, or 5 streambed or any streambed greater than 10 feet wide and no petroleum products or other pollutants from the equipment will be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.
- With the exception of the drainage control system installed for the Project, the installation of bridges, culverts, or other structures will be such that water flow (velocity and low flow channel width) is not impaired. Bottoms of temporary culverts will be placed at or below stream channel grade.
- No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or other organic or earthen material from any construction or associated activity of whatever nature will be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, off-site state-jurisdictional waters.
- Stationary equipment such as motors, pumps, generators, and welders located within or adjacent to a drainage will be positioned over drip pans. Stationary heavy equipment will have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as brooms, absorbent pads, and skimmers will be on site prior to the start of construction.
- The cleanup of all spills will begin immediately. Riverside County will be notified immediately by the Applicant of any spills and will be consulted regarding clean-up procedures.

Responsible Party	Project Owner
Responsible Monitoring Party	CDFW, RWQCB, Riverside County
Monitoring Phase/Timing	Prior to ground disturbance in jurisdictional waters of the state
Verification Approval Party	CDFW and RWQCB

Cultural Resources and Tribal Cultural Resources

MITIGATION MEASURE **MM CUL-1: Project Archaeologist.** Prior to issuance of grading permits: The applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program.

Table O-1. Mitigation Monitoring and Reporting Program

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to issuance of grading permits and during construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM CUL-2: Cultural Resource Monitoring Plan. Prior to issuance of grading permits: The applicant/ developer shall provide evidence to the County of Riverside Planning Department that a Cultural Resource Monitoring Plan has been developed with input from the consulting tribes that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant (except for the Project’s contribution to a significant cumulative impact to the PTNCL, which would remain significant after mitigation) as well as address potential impacts to undiscovered buried archaeological resources associated with this project. A fully executed copy of the contract and a wet-signed or DocuSigned (e-signature) copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval.</p> <p>Working directly under the Project Archaeologist, an adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections shall vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections shall be determined by the Project Archaeologist.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to issuance of grading permits and during construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM CUL-3: Archaeological Monitor. Prior to issuance of grading permits: The applicant/developer shall provide evidence to the County of Riverside Planning Department that an adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading and trenching onsite and for all offsite improvements. Inspections shall vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections shall be determined and directed by the Project Archaeologist.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to issuance of grading permits and during construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM CUL-4: Native American Monitor. Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for at least one Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition. This agreement shall not modify any condition of approval or mitigation measure.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Native American Monitor(s)
Monitoring Phase/Timing	Prior to issuance of grading permits
Verification Approval Party	Riverside County

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	MM CUL-5: Tribal Cultural Sensitivity Training. Prior to ground disturbance, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) to provide Cultural Sensitivity Training. A representative designated by the consulting Tribe(s) shall provide Cultural Sensitivity Training for all construction personnel. Training shall include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the project site. A copy of the agreement and a copy of the sign in sheet shall be submitted to the County Archaeologist to ensure compliance with this condition of approval. A record of attendance shall be available to the consulting tribes upon request.
Responsible Party	Project Owner
Responsible Monitoring Party	Consulting Tribe(s) Representative
Monitoring Phase/Timing	Prior to issuance of grading permits
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-6: Discovery of Unanticipated Resources. In the event that previously unidentified potentially significant cultural resources are discovered, the Archaeological and/or Tribal Monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist, in consultation with the Tribal monitor, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities shall be allowed to resume in the affected area. Further, before construction activities are allowed to resume in the affected area, the artifacts shall be recovered or if feasible, preserved in place if requested by the tribe(s), and features recorded using professional archaeological methods. The Project Archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed.
Responsible Party	Project Owner
Responsible Monitoring Party	Archaeological and/or Tribal Monitor(s), Riverside County
Monitoring Phase/Timing	During construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-7: Artifact Disposition. Prior to Grading Permit Final Inspection, the landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery. The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. <i>Historic Resources</i> – all historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), shall be curated at the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines <i>Prehistoric Resources</i> – One of the following treatments shall be applied: a. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures to protect the reburial area from any future impacts. Reburial shall not occur until all required cataloguing, analysis and studies have been completed on the cultural resources, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial processes shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County under a confidential cover and not subject to a Public Records Request. b. Curate the resources on the Project property. If reburial is not agreed upon by the Consulting Tribes then the resources shall be curated at a culturally appropriate manner at the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the

Table O-1. Mitigation Monitoring and Reporting Program

	Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the County. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains.
Responsible Party	Landowner(s)
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to Grading Permit Final Inspection
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-8: Monitoring Report. Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan. Consulting tribes shall have 30 days to review and comment on the draft Monitoring Report, upon request.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to Grading Permit Final Inspection
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-9: Temporary Fencing. Temporary fencing shall be required for the protection of cultural site(s) AE-3752-066H, P-33-018393/ CA-RIV-9481H and P-33-025150/ CA-RIV-12372H during any construction activities along the Gen-Tie lines. Prior to commencement of construction activities, the project archaeologist shall confirm the site boundaries and determine an adequate buffer for protection of the site(s). The applicant shall direct the installation of fencing under the supervision of the project archaeologist and Native American Monitor. The fencing shall be regularly checked to ensure that it remains in place and intact. The fencing can be removed only after construction activities have been completed.
Responsible Party	Project Owner
Responsible Monitoring Party	Archaeological and/or Tribal Monitor(s)
Monitoring Phase/Timing	Prior to and during construction activities along Gen-Tie lines
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-10: Journal Article. Prior to Grading Permit Final Inspection, the Project owner shall retain a cultural resources specialist to prepare and submit for publication a journal article summarizing the results of research on AE-3752-066H (historic refuse dump), AE-3752-106H (historic road segment), and P-33-025150/CA-RIV-12372H (SR-177/Rice Road segment). The County Archaeologist shall review and approve the article prior to submission. The article shall be submitted to a local historical journal such as the Journal of the Riverside Historical Society.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County Archaeologist
Monitoring Phase/Timing	After research on AE-3752-066H (historic refuse dump), AE-3752-106H (historic road segment), and P-33-025150/CA-RIV-12372H (SR 177/Rice Road segment)
Verification Approval Party	Riverside County

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	MM CUL-11: Desert Center DTC/C-AMA Summary Report and District DPR Form. In order to address direct impacts to all DTC/C-AMA resources eligible for the CRHR as well as cumulative impacts to the DTCCCL and any contributor to the district, prior to ground disturbance, the Project owner shall retain cultural resources specialists with previous knowledge of the DTC/C-AMA. These specialists shall review and synthesize the information contained in DPR forms for DTC/C-AMA-associated resources in the Chuckwalla Valley. The results shall be summarized in a report and district DPR form, if appropriate, for the Desert Center vicinity. Some of the key resources shall include the Chuckwalla Valley Maneuver Area, the Desert Center Army Airfield, Desert Center Observer's Camp, 18th Ordnance Battalion Campsite, the Desert Center Small Arms Range, the Desert Center Supply Depot, and the Desert Center Evacuation Hospital. The report and DPR forms shall be submitted to the County for review prior to Grading Permit Final Inspection. After review and approval, the report and DPR forms shall be submitted to the California Historical Resources Information System Eastern Information Center within 30 days.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to Grading Permit Final Inspection
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-12: Prehistoric Trails Summary Report. In order to address cumulative and indirect impacts to the Prehistoric Trails Network Cultural Landscape/Historic District (PTNCL) prior to ground disturbance the Project owner shall retain cultural resources specialists with prior experience working with prehistoric resources in the Blythe and/or Desert Center vicinity. These specialists shall review and synthesize the information contained in DPR forms and previously prepared reports regarding prehistoric trails and associated artifacts and features in the Chuckwalla Valley. Ethnographic documentation and reports describing local landscapes will also be reviewed to provide interpretive context. The results shall be summarized in a report and district DPR form, if appropriate, for the Desert Center vicinity. The report and DPR forms shall be submitted to the County for review prior to Grading Permit Final Inspection. Within 30 days after County review and approval, the report and DPR forms shall be submitted to the California Historical Resources Information System Eastern Information Center.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to Grading Permit Final Inspection
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM CUL-13: Archival and Field Studies for Historic-Era Resources. Prior to grading, the consultant shall conduct archival research to determine context and association with major historical themes for AE-3752-064H, which has been identified as a historical resource for purposes of CEQA, and for CA-RIV-9854H, -9857H, and -20572, which will be avoided by the Project but are still of interest to the County.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to Grading Permit Final Inspection
Verification Approval Party	Riverside County
Hazards and Hazardous Materials	
MITIGATION MEASURE	MM HAZ-1: Soil Investigation. Prior to issuance of a grading permit, a Phase II soil investigation shall be prepared by a qualified environmental consultant to evaluate the potential presence of residual contaminants as recommended in the Phase I report (see Appendix K). Any soils found to contain residual contaminants in exceedance of regulatory action levels that are determined by the consultant to represent a potential hazard to construction workers or future workers and visitors shall be removed from the site in accordance with Riverside County Department of Environmental Health oversight.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County Department of Environmental Health

Table O-1. Mitigation Monitoring and Reporting Program

Monitoring Phase/Timing	Prior to issuance of a grading permit
Verification Approval Party	Riverside County Department of Environmental Health
MITIGATION MEASURE	<p>MM HAZ-2: Worker Environmental Awareness Program. The Worker Environmental Awareness Program (WEAP) shall include a personal protective equipment (PPE) program, an Emergency Action Plan (EAP), and an Injury and Illness Prevention Program (IIPP) to address health and safety issues associated with normal and unusual (emergency) conditions. It will be reviewed by the County and BLM for their respective jurisdictions. Construction-related safety programs and procedures shall include a respiratory protection program, among other things. Construction would be undertaken sequentially in accordance with a Construction Plan that shall include the final design documents, work plan, health and safety plans, permits, Project schedule, and operation and maintenance manuals. Construction Plan documents shall relate at least to the following:</p> <ul style="list-style-type: none"> ▪ Environmental health and safety training (including, but not limited, to training on the hazards of Valley Fever, including the symptoms, proper work procedures, how to use PPE, and informing supervisor of suspected symptoms of work-related Valley Fever) ▪ Site security measures ▪ Site first aid training ▪ Construction testing (non-destructive examination, hydro, etc.) requirements ▪ Site fire protection and extinguisher maintenance, guidance, and documentation ▪ Furnishing and servicing of sanitary facilities records ▪ Trash collection and disposal schedule/records ▪ Disposal of hazardous materials and waste guidance in accordance with local, state, and federal regulations
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	During construction, operation, maintenance, and decommissioning
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	<p>MM HAZ-3: UXO Identification, Training and Reporting Plan. Where ground disturbance work is involved, contractor(s) should be OSHA HAZWOPER-trained in accordance with standard 29CFR1910.120 and hold a current certification. The Applicant shall prepare a UXO Identification, Training and Reporting Plan to properly train all site workers in the recognition, avoidance and reporting of military waste debris and ordnance. The Applicant shall submit the plan to the County and BLM for review and approval for their respective jurisdictions prior to the start of construction. The plan shall contain, at a minimum, the following:</p> <ul style="list-style-type: none"> ▪ A description of the training program outline and materials, and the qualifications of the trainers; and ▪ Identification of available trained experts that will respond to notification of discovery of any ordnance (unexploded or not); and ▪ Work plan to recover and remove discovered ordnance, and complete additional field screening, possibly including geophysical surveys to investigate adjacent areas for surface, near surface or buried ordnance in all proposed land disturbance areas.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and BLM
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County and BLM
MITIGATION MEASURE	<p>MM HAZ-4: Pre-demolition surveys and appropriate hazardous materials removal. Prior to the removal of any structures, perform a survey for lead based paint and asbestos containing materials. If found, all lead based paint must be removed from the property prior to construction/demolition activities with the potential to disturb painted surfaces and disposed of in accordance with all applicable laws. If the activities would not disturb painted surfaces, the entire structure with lead base paint must be disposed of in accordance with all applicable laws. If found, all asbestos containing materials must be disposed of in accordance with all applicable laws.</p>

Table O-1. Mitigation Monitoring and Reporting Program

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to removal of any structures
Verification Approval Party	Riverside County

Hydrology and Water Quality

MITIGATION MEASURE **MM HWQ-1: Drainage Erosion and Sedimentation Control Plan (DESCP).** Prior to site mobilization, the Applicant shall submit to the County of Riverside a Drainage Erosion and Sedimentation Control Plan (DESCP) for managing storm water during Project construction and operations. The DESCSP must ensure proper protection of water quality and soil resources, address exposed soil treatments in the solar fields for both road and non-road surfaces, and identify all monitoring and maintenance activities. The plan must also cover all linear Project features such as the proposed gen-tie line for which the plan must also be reviewed by the BLM. The DESCSP shall contain, at minimum, the elements presented below that outline site management activities and erosion and sediment-control Best Management Practices (BMPs) to be implemented during site mobilization, excavation, construction, and post construction (operating) activities.

A. *Vicinity Map* – A map(s), at a minimum scale 1 inch to 500 feet, shall be provided indicating the location of all Project elements with depictions of all significant geographic features including swales, storm drains, drainage concentration points and sensitive areas.

B. *Site Delineation* – All areas subject to soil disturbance for the proposed Project shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures and drainage facilities.

C. *Clearing and Grading Plans* – The DESCSP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and pro-posed topography shall be illustrated by tying in proposed contours with existing topography.

D. *Clearing and Grading Narrative* – The DESCSP shall include a table with the estimated quantities of material excavated or filled for the site and all Project elements, whether such excavation or fill is temporary or permanent, and the amount of such material to be imported or exported.

E. *Erosion Control* – The plan shall address exposed soil treatments to be used during construction and operation including specifically identifying all chemical-based dust palliatives, soil bonding, and weighting agents appropriate for use that would not cause adverse effects to vegetation. BMPs shall include measures designed to prevent wind and water erosion including application of chemical dust palliatives after rough grading to limit water use.

F. *Best Management Practices Plan* – The DESCSP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading, Project element excavation and construction, and final grading/stabilization). BMPs shall include measures designed to control dust, stabilize construction access roads and entrances, and control storm water runoff and sediment transport.

G. *Best Management Practices Narrative* – The DESCSP shall show the location, timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during excavations and construction, final grading/stabilization, and operation. Separate BMP implementation schedules shall be provided for each Project element for each phase of construction. The maintenance schedule shall include post-construction maintenance of structural-control BMPs, or a statement provided about when such information would be available.

The DESCSP shall be prepared, stamped and sealed by a professional engineer or erosion control specialist. The DESCSP shall include copies of recommendations, conditions, and provisions from the County of Riverside and/or BLM.

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and the BLM
Monitoring Phase/Timing	Prior to site mobilization
Verification Approval Party	Riverside County and the BLM

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	MM HWQ-2: Septic System Rehabilitation. Before the start of construction, the Applicant shall submit to the County an evaluation of the existing septic system to ensure that the proposed use of the system is consistent with the existing use, and if necessary shall make modifications to the system to ensure that it would have capacity for any increased use without creating additional impacts to groundwater.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM HWQ-3: Mitigation of Impacts to the Palo Verde Mesa (PVMGB) Groundwater Basin. If water for the Project is to be obtained from onsite wells, the Applicant shall develop a Colorado River Water Supply Plan (Plan) to monitor groundwater extractions and prevent, replace or mitigate Project impacts that deplete the PVMGB groundwater budget. The amount of PVMGB depletion requiring mitigation shall be equal to the amount of withdrawals from below the Colorado River Accounting Surface. The Plan shall identify measures that will be taken to replace water on an acre-foot to acre-foot basis, if the Project results in consumption of any water from within or below the Colorado River Accounting Surface, towards the purpose of ensuring that no allocated water from the Colorado River is consumed without entitlement to that water. The Plan shall be submitted to the United States Bureau of Reclamation for review and approval prior to the initiation of construction and is required to be implemented at any time during the life of the Project that groundwater withdrawals reach the Accounting Surface. No pumping of groundwater below the accounting surface shall occur without compensatory mitigation according to the approved plan. A copy of the Plan shall also be submitted to the Metropolitan Water District for review and comment.
Responsible Party	Project Owner
Responsible Monitoring Party	United States Bureau of Reclamation and Riverside County
Monitoring Phase/Timing	Any time groundwater withdrawals will likely reach Accounting Surface during life of Project
Verification Approval Party	United States Bureau of Reclamation
MITIGATION MEASURE	MM HWQ-4: Project Drainage Plan. The Project owner shall provide Riverside County with a drainage plan, for review and approval prior to construction, which includes the following information: A. Hydrologic assessment of flood discharges affecting each parcel. B. A detailed onsite hydraulic analysis utilizing FLO-2D or similar two-dimensional hydraulic model acceptable to the Riverside County which models pre- and post-development flood conditions for the 10- and 100-year storm events. The post-development model must include all proposed Project features, contours, and drainage improvements. Graphical output must include depth and velocity mapping as well as mapping which graphically shows the changes in both parameters between the pre- and post-development conditions. C. The Drainage Plan shall show the location of all watercourses, drainage concentration points and drainage ditches as they enter, cross and exit the site. It shall include pre-development and post-development peak flow estimates. It shall include hydraulic calculations to determine flood conditions, floodplain limits, flood depths and velocities. It shall show the relationship of drainage and flood features to the features of the proposed Project, including buildings, fences, substations, access roads, culverts, linear features and panel supports, demonstrating adequate design to protect from flooding, erosion and scour, and to do so without adversely affecting adjacent property, inducing erosion or concentrating or diverting flows. D. The Plan shall show how drainage will be conveyed through the site without adversely affecting other property, either through increased flood hazard or increased potential for scour and erosion. No flow obstructing fences (chain link, block wall, etc.) shall be constructed perpendicular to existing drainage patterns. Proposed fencing shall allow runoff to traverse the project site unencumbered. E. The Plan shall include an assessment of existing diversion berms and channels around parcel perimeters and the magnitude and frequency of flood that would be diverted by these existing features, and the probable integrity of these features to withstand flows. It shall show how those that are on the Project site will be affected by Project grading. It shall include an assessment of flows approaching proposed perimeter fences, whether or not adjacent to existing berms, and make design recommendations to avoid diversion of flows by these fences. Design recommendations may include creating fence

Table O-1. Mitigation Monitoring and Reporting Program

	<p>openings large enough to allow the passage of debris-laden flows without the potential for diversions to other property.</p> <p>F. The Plan shall have detailed design of flood retention features necessary to avoid any increase in downstream flood peak flow rates.</p> <p>G. Drainage of Project Site Narrative – The Plan shall include a narrative of the measures necessary to protect the site and Project features from flooding, erosion and sedimentation, and measures taken to prevent Project-induced erosion and flooding of adjacent property.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM HWQ-5: Flood Protection. Substations, the O&M Building, energy storage system, and all other Project buildings shall either be situated outside of the 100-year floodplain or sufficiently protected against dislodgement by flooding where placement outside the floodplain is not practical. Flood protection shall consist of elevating the structures on fill to at least the highest anticipated adjacent flood level per County requirements. Solar panels shall be situated at least one foot above the highest anticipated local flood level per County requirements. All structures using posts or poles for foundations, including transmission poles or towers, shall be designed to protect against substantial scour from the 100-year flood event. The Project must comply with Riverside County Ordinance No. 458 for projects within a Special Flood Hazard Area or floodplain: electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities must be designed or located to prevent water from entering or accumulating within the components during flooding.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to final engineering
Verification Approval Party	Riverside County
Noise	
MITIGATION MEASURE	<p>MM N-1: Construction Restrictions. Heavy equipment operation and noisy construction work relating to any Project features shall be restricted to the times delineated below, unless a special permit has been issued by the County of Riverside:</p> <ul style="list-style-type: none"> ▪ June through September: 6 a.m. to 6 p.m. ▪ October through May: 7 a.m. to 6 p.m. <p>Haul truck engines and other engines powering fixed or mobile construction equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.</p> <p>The construction contractor shall locate equipment staging in areas to create the greatest distance between construction-related noise sources and noise sensitive receivers nearest the Project site during Project construction. Where feasible, the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site. No music or electronically reinforced speech from construction workers shall be audible at noise-sensitive properties.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During construction
Verification Approval Party	Riverside County

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	<p>MM N-2: Public Notification Process. At least 15 days prior to the start of ground disturbance, the Project owner shall notify all residents within one mile of the Project site and the linear facilities, by mail or by other effective means, of the commencement of Project construction. At the same time, the Project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the Project. If the telephone is not staffed 24 hours a day, the Project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the Project site during construction where it is visible to passersby. This telephone number shall be maintained until the Project has been operational for at least one year.</p>
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	At least 15 days prior to ground disturbance
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM N-3: Noise Complaint Process. Throughout the construction and operation of the Project, the Project owner shall document, investigate, evaluate, and attempt to resolve all Project-related noise complaints. The Project owner or authorized agent shall:</p> <ol style="list-style-type: none"> 1. Use a Noise Complaint Resolution Form, or other documentation procedure acceptable to the County, to record and report the Project owner's response to resolving each noise complaint; 2. Attempt to contact the person(s) making the noise complaint within 24 hours; 3. Conduct an investigation to determine the source of noise in the complaint; 4. If the noise is Project-related, take all feasible measures to reduce the source of the noise; and 5. Submit a report to the County documenting the complaint and actions taken. The report shall include: a complaint summary, including the final results of noise reduction efforts and, if obtainable, a signed statement by the complainant stating that the noise problem has been resolved to the complainant's satisfaction.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During construction and operation
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM N-4: Noise Restrictions. The Project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the operation of the Project will not cause the noise levels due to plant operation alone to exceed an average of 43 dBA Leq measured at or near an inhabited dwelling. No new pure-tone components shall be caused by the power inverters or transformers associated with the Project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.</p> <p>The Project design in site plans shall avoid placing stationary sources of noise within 800 feet of an inhabited dwelling. If the final design of the Project includes any battery or flywheel, air conditioner, inverter, transformer, substation or switchyard within 800 feet of an inhabited dwelling, then the following adaptive management measures shall be required:</p> <ol style="list-style-type: none"> A. When the Project first achieves a sustained output of 85% or greater of rated capacity, the Project owner shall conduct a 25-hour community noise survey by monitoring levels at locations of any affected inhabited dwelling, or at a closer location acceptable to the County. <p style="margin-left: 40px;">The measurement of power plant noise for the purposes of demonstrating compliance with this mitigation measure may alternatively be made at a location, acceptable to the County, closer to the plant (e.g., 100 feet from power inverters or transformers) and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected dwelling.</p> B. If the results from the noise survey indicate that the power plant noise at the affected receptor site exceeds the above value during the above time period, mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.
Responsible Party	Project Owner

Table O-1. Mitigation Monitoring and Reporting Program

Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During project design and during operation
Verification Approval Party	Riverside County

Paleontological Resources

MITIGATION MEASURE **MM PAL-1: Project Paleontologist.** Prior to issuance of grading permits the applicant shall retain a qualified paleontologist (“Project Paleontologist”) approved by the County of Riverside to create and implement a Project-specific plan for monitoring site grading/earthmoving activities.

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to issuance of grading permits
Verification Approval Party	Riverside County

MITIGATION MEASURE **MM PAL-2: Paleontological Resource Impact Mitigation Program.** Prior to issuance of grading permits the Project Paleontologist retained shall prepare a Paleontological Resource Impact Mitigation Program (PRIMP). The PRIMP shall be submitted to the Riverside County Geologist for review and approval prior to issuance of a grading permit by the county. The project Owner may consider the PRIMP approved if the County’s Geologist does not respond within 60 days of submittal of the draft PRIMP. Information to be contained in the PRIMP, at a minimum and in addition to other industry standard and Society of Vertebrate Paleontology standards, are as follows:

- Description of the proposed site and planned grading operations.
- Description of the level of monitoring required for all earthmoving activities in the Project area.
- Identification (name) and qualifications of the qualified paleontological monitor to be employed for grading operations monitoring.
- Identification of personnel with authority and responsibility to temporarily halt or divert grading equipment to allow for recovery of large specimens.
- Direction for any fossil discoveries to be immediately reported to the property owner who in turn will immediately notify the Riverside County Geologist of the discovery.
- Means and methods to be employed by the paleontological monitor to quickly salvage fossils as they are unearthed to avoid construction delays.
- Sampling of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates.
- Procedures and protocol for collecting and processing of samples and specimens.
- Fossil identification and curation procedures to be employed.
- Identification of the permanent repository to receive any recovered fossil material. The County of Riverside must be consulted on the repository or museum to receive the fossil material and a written agreement between the property owner/developer and the repository must be in place prior to site grading.
- All pertinent exhibits, maps and references.
- Procedures for reporting of findings.
- Identification and acknowledgement of the developer for the content of the PRIMP as well as acceptance of financial responsibility for monitoring, reporting and curation fees.

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to issuance of grading permits
Verification Approval Party	Riverside County

MITIGATION MEASURE **MM PAL-3: Paleontological Monitoring.** Full-time monitoring by a qualified paleontological monitor will take place during all ground disturbing activities in sediments classified as High or Undetermined sensitivity. The supervising paleontologist will have the authority to reduce monitoring once he/she determines the probability of encountering any additional fossils has dropped below an acceptable level.

Table O-1. Mitigation Monitoring and Reporting Program

Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During ground disturbing activities in sediments classified as High or Undetermined sensitivity
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM PAL-4: Paleontological Awareness Training. Prior to ground disturbance, the developer/permit applicant shall enter into an agreement with the Project Paleontologist to provide Paleontological Awareness Training. A qualified paleontologist designated by the Project Paleontologist shall provide Paleontological Awareness Training for all construction personnel as a part of the Project's Worker Environmental Awareness Training. Training will include a brief review of the paleontological sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the protocols that apply in the event unanticipated paleontological resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the Project site. A copy of the agreement and a copy of the sign-in sheet shall be submitted to the County Paleontologist to ensure compliance with this condition of approval.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	Prior to ground disturbance and during construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	MM PAL-5: Paleontological Monitoring Report Requirement. The Applicant shall submit to the Riverside County Geologist one wet-signed copy of the Paleontological Monitoring Report prepared for site grading operations at the site. The report shall be certified by the professionally qualified Project Paleontologist responsible for the content of the report. The Project Paleontologist must be on Riverside County's Paleontology Consultant List. The report shall contain a discussion of findings made during all site grading activities and an appended itemized list of fossil specimens recovered during grading (if any) and proof of accession of fossil materials into the pre-approved museum or other repository. In addition, all appropriate fossil location information shall be submitted to the Western Information Center, the San Bernardino County Museum and the Los Angeles County Museum of Natural History, at a minimum, for incorporation into their Regional Locality Inventories.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	After site grading operations
Verification Approval Party	Riverside County
Traffic and Transportation	
MITIGATION MEASURE	APM T-1: Public Easement Access. All designated public roadway easements directly impacted by the solar facility will remain open to the public during construction and operation as not to preclude access to nearby properties.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During construction and operations
Verification Approval Party	Riverside County
MITIGATION MEASURE	APM T-2: Alternative Routes. If any designated vehicle routes are temporarily impacted by Project activities, the Applicant will develop alternative routes to allow for continued vehicular access. Traffic Safety Coordinator(s) will oversee the installation of proper signage to ensure safe public use of open routes and other recreation opportunities on public lands in the Project area.
Responsible Party	Project Owner

Table O-1. Mitigation Monitoring and Reporting Program

Responsible Monitoring Party	Riverside County
Monitoring Phase/Timing	During construction
Verification Approval Party	Riverside County
MITIGATION MEASURE	<p>MM TRA-1: Construction Traffic Control Plan. Prior to the start of construction, the Project owner shall submit a Construction Traffic Control Plan for review and approval by Caltrans and Riverside County for affected roads and intersections that would be directly affected by the construction activities and/or would require permits and approvals. The Construction Traffic Control Plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> ▪ If multiple construction projects occur at the same time and conditions at the intersection warrant, plans for installation of a temporary signal or use of manual intersection control during the construction period at the I-10 westbound ramp at SR-177. Additionally, if conditions warrant, geometry changes shall be considered in coordination with Caltrans and Riverside County, and implemented, if necessary, in addition to signalization at the I-10 westbound ramp and SR-177. These geometry changes should include a 50-foot westbound right turn pocket, as well as a southbound 50-foot right turn pocket. If manual intersection control is used in the morning peak hour, no manual intersection control is needed in the afternoon peak hour, and the southbound right turn pocket would likely not be needed. ▪ The locations and use of flaggers, warning signs, barricades, delineators, cones, arrow boards, etc., according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual. ▪ The locations of all road or traffic lane segments that would need to be temporarily closed or disrupted due to construction activities. ▪ The locations where guard poles, netting, or similar means to protect transportation facilities for any construction or conductor installation work requiring the crossing of a local street, highway, or rail line are proposed. ▪ The use of continuous traffic breaks operated by the California Highway Patrol on state highways (if necessary). ▪ Additional methods to reduce temporary traffic delays to the maximum extent feasible during morning (7:00 a.m. to 9:00 a.m.) and afternoon (4:00 p.m. to 6:00 p.m.) peak traffic periods, or as directed in writing by the affected public agency in encroachment or other permits). This should also include feasible ways to avoid construction-related trips on I-10 and SR-177 during peak traffic periods. ▪ Plans to encourage or provide ridesharing opportunities for construction and operational workers. ▪ Plans to provide written notification to property owners and tenants at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access if necessary. The coordination shall occur at least one week prior to any blockages. ▪ Plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Police departments and fire departments shall be notified in advance by the Project owner of the proposed locations, nature, timing, and duration of any roadway disruptions, and shall be advised of any access restrictions that could impact their effectiveness. At locations where roads will be blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies. ▪ Provisions for ensuring detours or safe movement of local resident vehicles, pedestrians, and bicycles through all affected facilities. ▪ Define the method to maintaining close coordination, prior to and during construction, with Caltrans and Riverside County to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system. Coordination with adjacent development projects to spread work shifts into multiple hours (instead of peak hour) or the installation of additional temporary traffic signals or manual traffic control officers during peak hours to mitigate the temporary impacts.
Responsible Party	Project Owner
Responsible Monitoring Party	Caltrans and Riverside County
Monitoring Phase/Timing	Prior to and during construction
Verification Approval Party	Caltrans and Riverside County

Table O-1. Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	MM TRA-2: Comply with FAA 7460-1 Determination Recommendations. Pursuant to FAA guidelines, the Project owner shall submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager of the FAA Air Traffic Division for review and comment. These filings shall specify the heights and locations of all applicable gen-tie transmission structures and conductor wire spans, pursuant to final engineering, per the requirements of FAA Form 7460-1. The Project owner shall implement all recommended safety features or Project design changes recommended by the FAA through the FAA 7460-1 process.
Responsible Party	Project Owner
Responsible Monitoring Party	Manager of the FAA Air Traffic Division
Monitoring Phase/Timing	Prior to construction
Verification Approval Party	Manager of the FAA Air Traffic Division
MITIGATION MEASURE	MM TRA-3: Repair Roadways and Transportation Facilities Damaged by Construction Activities. If roadways, sidewalks, medians, curbs, shoulders, or other such transportation features are damaged by Project construction activities, as determined by the affected public agency, such damage shall be repaired and restored to their pre-Project condition by the Project owner. Prior to construction, the Project owner shall confer with Riverside County regarding the roads within 500 feet in each direction of Project access points (where heavy vehicles will leave public roads to reach Project sites); and Riverside County and Caltrans regarding the roads to be crossed by the proposed gen-tie line. At least 30 days prior to construction, or as requested by Riverside County or Caltrans, the Project owner shall photograph or video record all affected roadway segments and shall provide Riverside County and Caltrans with a copy of these images, if requested. At the end of major construction, the Project owner shall coordinate with each affected jurisdiction to confirm what repairs are required. Any damage demonstrable to the Project is to be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by the Project owner and the affected jurisdiction. If multiple projects are using the transportation features, Athos will pay its fair share of the required repairs. The Project owner shall provide Riverside County and Caltrans (as applicable) proof when any necessary repairs have been completed.
Responsible Party	Project Owner
Responsible Monitoring Party	Riverside County and Caltrans
Monitoring Phase/Timing	Prior to construction and at end of major construction
Verification Approval Party	Riverside County and Caltrans