

CHAPTER 4

Mitigation Monitoring and Reporting Program

4.1 CEQA Requirements

Table 18, Mitigation Monitoring and Reporting Program for the City of Carson Avocet Energy Storage Project is a Mitigation Monitoring and Reporting Program (MMRP) for the Project, which has been prepared pursuant to CEQA Guidelines Section 15097 and Public Resources Code Section 21081.6. This MMRP lists all applicable mitigation measures from the IS/MND. The appropriate timing of implementation and responsible party are identified to ensure proper enforcement of the mitigation measures from the IS/MND to reduce Project impacts to less than significant levels. Mitigation measures are presented in the same order as they occur in the IS/MND.

The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less than significant level.
- **Implementation Action:** The action(s) listed out, according to the identified mitigation measure that would be implemented by the responsible agency.
- **Responsible Implementation Agency:** The agency or private entity responsible for ensuring implementation of the mitigation measure. For the Project, the City of Carson, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines Section 15097(a)).
- **Timing of Verification:** The general timing for implementing each mitigation measure.
- **Verification Date:** The date in which the mitigation measure has been completed.

The MMRP will be kept on file at the following address:

City of Carson, Community Development Department – Planning Division
701 East Carson Street
Carson, CA 90745

EXHIBIT NO. 4

TABLE 18
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE CITY OF CARSON AVOCET ENERGY STORAGE PROJECT

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Biological Resources			
Mitigation Measure BIO-1: Nesting Birds/Raptors. If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.	<p>If work activities occur within the avian nesting season, nesting bird surveys should be completed 3 days before ground disturbance activities.</p> <p>If nests are found, buffers should be delineated, and nests shall be avoided.</p>	Project Applicant Qualified Biologist Project Contractor	Prior to the start of construction
Mitigation Measure BIO-2: Aquatic Resources. The following are recommended to reduce aquatic resource impacts as a result of project activities: <ul style="list-style-type: none"> • Prior to installation of the overhead transmission line over Navigable Waters (Dominguez Channel), consultation with USACE is recommended to determine whether a Section 10 permit will be necessary. • Erosion control measures (i.e. silt fencing, straw wattles, etc.) should be implemented adjacent to the Dominguez Channel when work is occurring adjacent to the Dominguez Channel to prevent sediment/contaminants from continuing offsite into the channel. • Re-fueling of equipment should be conducted at least 50 feet from the Dominguez Channel. • Drip pans should be placed underneath all mechanical machinery that will be staged adjacent to the Dominguez Channel 	<p>Prior to installation of the overhead transmission line, consultation with USACE regarding a Section 10 permit should occur.</p> <p>Erosion control measures shall be implemented.</p>	Project Applicant USACE Staff Project Contractor	Prior to installation of the overhead transmission line

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Cultural Resources			
<p>Mitigation Measure CUL-1: Prior to the issuance of a demolition permit, the Applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during initial project construction work such as demolition, clearing/grubbing, grading, trenching, or related moving of soils (collectively, ground disturbing activities) within the project site and project-related offsite improvements ; provided, however, that ground disturbing activities shall not include any moving of soils after they have been initially disturbed or displaced by project-related construction. The Qualified Archaeologist shall determine the frequency of monitoring based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. The frequency of monitoring can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist.</p> <p>Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.</p>	<p>Prior to the issuance of a demolition permit, the Applicant shall retain an archaeologist.</p> <p>Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel.</p>	Project Applicant Qualified Archaeologist	<p>Prior to the issuance of a demolition permit.</p> <p>Prior to the start of excavation activities.</p>
<p>Mitigation Measure CUL-2: In the event that historic or prehistoric archaeological resources (e.g., bottles, foundations, refuse dumps, shell midden, lithic/stone tool materials, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. After consulting with the Applicant, the Qualified Archeologist shall establish an appropriate buffer in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the ground where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.</p>	<p>In the event of the unanticipated discovery of historic or prehistoric archaeological resources archaeological materials, the Project Contractor(s) shall immediately cease all work activities in the area of the discovery until it can be evaluated by a qualified archaeologist.</p> <p>If a historic or unique archaeological is unearthed, the Qualified Archaeologist shall coordinate with the Applicant and the City of Carson</p>	Project Contractor(s) Qualified Archaeologist	During demolition, grading and/or construction.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines the find to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Applicant and the City of Carson (City) to develop a reasonable and feasible treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the resources, they may be donated to a local school or historical society in the area (such as a local historical society or school) for educational purposes.	(City) to develop a reasonable and feasible treatment plan.		
Mitigation Measure CUL-3: The Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and project-related offsite improvements and required mitigation measures.	The Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring.	Qualified Archaeologist	At the conclusion of archaeological monitoring
Mitigation Measure CUL-4: If human remains are encountered unexpectedly during implementation of the proposed project and project-related offsite improvements, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most	If human remains are encountered, the contractor should halt work in the vicinity of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the California	Qualified Archaeologist Project Contractor	Prior to and during grading and/or construction.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
<p>Likely Descendent (MLD). The MLD may, with the permission of the landowner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.</p> <p>If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.</p>	<p>Native American Heritage Commission (NAHC) will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by Assembly Bill 2641). The NAHC will designate a Most Likely Descendent (MLD) for the remains per PRC Section 5097.98.</p>		

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Geology and Soils			
Mitigation Measure PALEO-1: The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources. Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be specifically encountered in Pleistocene to early Holocene alluvial deposits, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The City of Carson shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.	<p>Prior to the start of ground disturbing activities, the Project Applicant shall retain a qualified paleontologist.</p> <p>Prior to the start of ground-disturbing activities, construction personnel shall be trained in the identification of paleontological resources.</p>	<p>Project Applicant</p> <p>Qualified Paleontologist</p> <p>Project Contractor</p>	<p>Prior to the start of ground disturbing activities</p>
Mitigation Measure PALEO-2: Paleontological monitoring shall be conducted during ground-disturbing activities below 20 feet in Quaternary alluvium (Qyf and Qya2) and at all depths within the older alluvium (Qoa) at the surface along the southern portion of the gen-tie line as depicted in Figure 5, Geologic Map, of the Paleontological Resources Assessment (Appendix F of the IS/MND). Monitoring shall be conducted by a qualified paleontological monitor (SVP, 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.	<p>Paleontological monitoring shall be conducted during ground-disturbing activities below 20 feet in Quaternary alluvium (Qyf and Qya2) and at all depths within the older alluvium (Qoa) at the surface along the southern portion of the gen-tie line, until the Paleontologist determines full-time monitoring is no longer warranted.</p>	<p>Qualified Paleontologist</p> <p>Project Contractor</p>	<p>During grading and/or construction.</p>

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
<p>Mitigation Measure PALEO-3: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.</p> <p>If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.</p>	<p>In the event of the unanticipated discovery of fossils, the Project Contractor(s) shall immediately cease all work activities in the area (within approximately 50 feet) of the discovery until it can be evaluated by a qualified paleontologist.</p> <p>If fossils are determined to be significant, the qualified paleontologist will implement a paleontological salvage program to remove the resources from their location.</p>	Qualified Paleontologist Project Contractor	During grading and/or construction.
<p>Mitigation Measure PALEO-4: At the conclusion of paleontological monitoring and prior to the release of the grading bond, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Qualified Paleontologist to the City of Carson and the Natural History Museum of Los Angeles County to signify the satisfactory completion of the project and required mitigation measures.</p>	The Qualified Paleontologist shall prepare a final report at the conclusion of monitoring.	Qualified Paleontologist	At the conclusion of paleontological monitoring

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Tribal Cultural Resources			
<p>Mitigation Measure TCR-1: Prior to the issuance of a demolition permit for the proposed project, the Applicant shall retain a Native American Monitor from the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation or Tribe). The Native American Monitor shall be present during the following construction activities at the project site and project-related offsite improvements that have the potential for encountering tribal cultural resources: demolition, pavement removal, clearing/grubbing, drilling/augering, potholing, grading, trenching, excavation, tree removal or other ground disturbing activity associated with the proposed project, whether on the project site or in connection with the project-related offsite improvements (collectively “ground disturbing activities”). Notwithstanding the foregoing, Native American monitoring shall not be required for any moving of soils after they have been initially disturbed or displaced by project-related construction. The Applicant shall prepare a monitoring agreement with the Kizh Nation that outlines the roles and responsibilities of the Native American Monitor and shall submit this agreement to the City of Carson (City) prior to the issuance of demolition permit for the proposed project.</p> <p>Prior to commencement ground disturbing activities, a Tribal Cultural Resources Sensitivity Training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities. The training session shall be carried out by the Native American Monitor and shall focus on how to identify tribal cultural resources that may be encountered during ground disturbing activities and the procedures to be followed in such an event. If the Native American Monitor is not present at the project site or project-related offsite improvements on any given workday, the ground disturbing activities may continue if the workers involved in such activities attended the training session.</p> <p>Full-time monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate by the Native American Monitor in the event there appears to be little to no potential for impacting tribal cultural resources. Native American monitoring shall conclude no later than conclusion of ground disturbing activities.</p>	<p>Prior to the issuance of a demolition permit for the proposed project, the Applicant shall retain a Native American Monitor from the Gabrieleño Band of Mission Indians – Kizh Nation. The Tribal Monitor will only be present on-site during the construction phases that involve ground-disturbing activity.</p> <p>Prior to commencement ground disturbing activities, a Tribal Cultural Resources Sensitivity Training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities.</p>	<p>Project Applicant Tribal Monitor approved by the Consulting Tribe and the qualified archaeologist</p>	<p>Prior to the issuance of a demolition permit.</p>

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
<p>Mitigation Measure TCR-2: The Native American Monitor shall complete daily monitoring logs that provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant and the City upon written request to the Tribe. The Applicant shall not be deemed to be out of compliance with this measure if the Native American Monitor fails to complete or submit any such monitoring logs.</p>	<p>The Native American Monitor shall complete daily monitoring logs that provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe.</p>	<p>Native American Monitor</p>	<p>During ground-disturbing activities</p>
<p>Mitigation Measure TCR-3: In the event of a discovery of potential tribal cultural resources at the project site or project-related offsite improvements, the Qualified Archaeologist identified in Mitigation Measure CUL-2 (after consultation with the Native American Monitor) shall have the authority to temporarily divert, redirect, or halt ground-disturbance activities to allow identification, evaluation, and potential recovery of such potential resources. After consulting with the Native American Monitor and the Applicant, the Qualified Archaeologist shall establish an appropriate buffer area in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the find where ground-disturbing activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.</p> <p>Within three (3) business days of such discovery, a meeting shall take place between the Applicant, the Qualified Archaeologist, the Tribe, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a). If, as a result of the meeting and after consultation with the Tribe, the Applicant, and the Qualified Archaeologist, the City determines, based on substantial evidence, that the resource is in fact a tribal cultural resource, the Qualified Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the City's Planning Director. The treatment measures in the treatment plan shall be in compliance with any applicable</p>	<p>Upon discovery of any tribal cultural resources, construction activities shall cease or be diverted to allow identification, evaluation, and potential recovery of such potential resources.</p> <p>Within three (3) business days of such discovery, a meeting shall take place between the Applicant, the Qualified Archaeologist, the Tribe, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource.</p> <p>If, based on substantial evidence, it is determined that the resource is in fact a tribal cultural resource, the Qualified Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the City's Planning Director.</p>	<p>City of Carson Project Applicant Tribal Monitor approved by the Consulting Tribe and the qualified archaeologist</p>	<p>During construction activities</p>

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
<p>federal, State, or local laws, rules or regulations. The treatment plan shall also include measures regarding the curation of the recovered resources.</p> <p>The Applicant may recommence ground disturbance activities inside of the specified radius of the discovery site only after it has complied with all of the recommendations developed and approved pursuant to the process set forth above.</p> <p>The recovered Native American resources may be placed in the custody of the Tribe, who may choose to use them for their educational purposes or they may be curated at a public, non-profit institution with a research interest in the materials. If neither the Tribe nor an institution accepts the resources, they may be donated to a local school or historical society in the area for educational purposes.</p> <p>Notwithstanding the above paragraph, any information determined to be confidential in nature by the City Attorney's office, shall be excluded from submission to the SCCIC or the general public under the applicable provisions of the California Public Records Act, California Public Resources Code Section 6254®.</p>			