

Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This Mitigation Monitoring and Reporting Program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Initial Study-Mitigated Negative Declaration (IS-MND), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Carmel Area Wastewater District
Rancho Cañada Sewer Replacement Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Biological Resources							
BIO-1 Worker Environmental Awareness Program (WEAP)							
<p>Prior to initiation of construction activities (including staging and mobilization) all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special status resources that may occur in the construction area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction. All employees shall sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to CAWD by the contractor to document compliance.</p>	<p>Retain a qualified biologist to conduct WEAP training for recognizing special-status resources in the project area. Require the construction contractor to submit a form signed by construction employees certifying WEAP attendance and understanding.</p>	<p>Prior to construction</p>	<p>Once</p>	<p>Carmel Area Wastewater District (CAWD)</p>			
BIO-2 Western Bumble Bee Preconstruction Survey							
<p>A qualified biologist(s) shall conduct a pre-construction survey prior to the onset of work. The pre-construction survey effort shall be conducted for a minimum of one hour. If bumble bees of any species are observed, they shall be photographed for identification following the USFWS guidance in Appendix A <i>Standardized Bee Photography in the Survey</i></p>	<p>Retain a qualified biologist to conduct pre-construction surveys for western bumble bees. Include language in the construction contract requiring the avoidance of bee colonies between March 1 and November 1.</p>	<p>Prior to construction</p> <p>During construction contract negotiations</p>	<p>Once</p> <p>Once</p>	<p>CAWD</p> <p>CAWD</p>			

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<p><i>Protocols for the Rusty Patched Bumble Bee (Bombus affinis)</i> (USFWS 2019d). If construction begins between March 1 and November 1, the ground shall also be searched during the survey for active bumble bee colonies. No capture or handling of bumble bees is allowed without formal State take authorization. If individual western bumble bees are observed during preconstruction surveys, they shall be avoided to ensure no “take” occurs. This may require biological monitoring or avoidance buffers until the bees have left the work area. If western bumble bee colonies are identified, these colonies shall be demarcated with a flagged avoidance buffer, as determined by a qualified biologist and shall be avoided during the active season from March 1 through November 1, or until the qualified biologist has determined that the colony is no longer active. All sightings of western bumble bee shall be reported to the California Natural Diversity Database.</p>							
<p>BIO-3 California Red-legged Frog Avoidance and Minimization</p>							
<p>A qualified biologist shall conduct a survey of the project site for CRLF within 48 hours of initial ground disturbing activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a 100-foot survey buffer. If any life stage CRLF is found within the survey area, the individual shall be avoided and allowed to leave the site of its own volition. The biologist shall revisit the site on subsequent days to confirm the CRLF has left the site. If the CRLF has not left the site after three days, USFWS and CDFW shall be consulted to determine the appropriate course of action. During construction, avoidance measures shall include:</p>	<p>Retain a qualified biologist to conduct pre-construction survey for CRLF.</p>	<p>Prior to construction</p>	<p>Once</p>	<p>CAWD</p>			
	<p>Include language in the construction contract to require construction activities occurring within/adjacent to aquatic habitats be completed between April 1 and October 31.</p>	<p>During construction contract negotiations</p>	<p>Once</p>	<p>CAWD</p>			
	<p>Include language in the construction contract requiring measures to avoid impacts to CRLF for work occurring between November 1 and March 31.</p>	<p>During construction contract negotiations During construction</p>	<p>Once</p>	<p>CAWD</p>			

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<ul style="list-style-type: none"> ▪ A qualified biologist shall be present on-site until all construction activities are complete within the former golf course. If any life stage of CRLF is found, work shall cease within 100 feet of the CRLF and the USFWS and CDFW contacted immediately to determine the appropriate course of action. ▪ All development activities occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31 to avoid impacts to CRLF. ▪ If construction must occur between November 1 and March 31, the qualified biologist shall conduct a pre-activity clearance sweep within 48 hours prior to start of project activities after any rain events of 0.1 inch or greater or if wet conditions are present on-site. ▪ The number of access routes, size of staging areas, excavation areas, and the total area of activity shall be limited to the minimum necessary. ▪ During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas. ▪ If any life stage of the CRLF is found and these individuals are likely to be killed or injured by work activities, all work activities that could pose a risk of take to the individual shall stop until the individual has left the site. No individuals shall be relocated without USFWS authorization. 	Implement appropriate avoidance measures.						

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<ul style="list-style-type: none"> All sightings of California red-legged frog shall be reported to the California Natural Diversity Database. 							
BIO-4 Spill/Debris Prevention							
<p>All refueling and maintenance of equipment and vehicles shall occur a minimum of 250 feet from the Carmel River, wetlands, willow thicket habitat, and the concrete drainage, and in a location from which a spill would not drain directly toward these habitats (e.g., on a slope that drains away from the water), or in a containment structure. Prior to the onset of work, a plan shall be developed for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take in the event of a spill. Should any debris or equipment from the work area fall into the wetland, riparian habitat, and the concrete drainage, it shall be removed immediately.</p>	<p>Include, in the construction contract, a requirement that refueling, maintenance, and staging of equipment occur a minimum of 250 feet from the Carmel River, wetlands, willow thicket habitat.</p>	<p>During construction contract negotiations</p>	<p>Once</p>	<p>CAWD</p>			
	<p>Approve a plan, prepared by the construction contractor, for the effective response to accidental spills.</p>	<p>Prior to the onset of construction</p>	<p>Once</p>	<p>CAWD</p>			
BIO-5 Wildlife Entrapment Prevention							
<p>To prevent the inadvertent entrapment of individuals, all excavated, steep-walled holes or trenches shall be covered at the end of each workday with plywood or similar materials. If this is not possible, one or more escape ramps constructed of earth fill or wooden planks (no greater 45 degrees) shall be established in the hole. Before such holes or trenches are filled, they shall be thoroughly inspected for any animals. Any wildlife observed shall be allowed to leave the excavation of its own accord. If listed species are observed in excavations, all work shall stop and USFWS and/or CDFW shall</p>	<p>Include a requirement in the construction contract that trenches be covered at the end of each workday and inspected prior to filling.</p>	<p>During construction contract negotiations</p>	<p>Once</p>	<p>CAWD</p>			
	<p>Cover trenches at the end of each workday or provide escape ramps and inspect trenches prior to filling. Stop work if listed species are observed in excavation and notify CAWD.</p>	<p>During construction</p>	<p>As needed</p>	<p>Construction contractor</p>			

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<p>be contacted immediately. Take of listed species, including disturbance, handling or relocating, is illegal without state and/or federal take authorization.</p>							
<p>BIO-6 Nesting Bird Survey</p>							
<p>Ground disturbance and vegetation removal activities shall be restricted to the non-breeding season (September 1 to January 31) as feasible. For ground disturbance and vegetation removal activities occurring in all project areas during the bird nesting season (February 1 to September 1), general pre-construction nesting bird surveys shall be conducted by a qualified biologist for all migratory birds, raptors, and tricolored blackbird not more than 14 days prior to construction activities involving ground clearing, vegetation removal/trimming. The surveys shall include the disturbance area plus a 200-foot buffer around the site if feasible, and a 500-foot buffer for tricolored blackbird and raptors. If active nests are located, an appropriate avoidance buffer shall be established within which no work activity will be allowed which would impact these nests. The avoidance buffer shall be established by the qualified biologist on a case-by-case basis based on the species and site conditions. In no cases shall the buffer be smaller than 50 feet for non-raptor bird species, 200 feet for raptor species, and a 500-foot buffer for tricolored blackbird. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until juveniles have fledged and the nest is inactive. The approved biologist shall confirm that breeding/nesting is</p>	<p>Include, in the construction contract, a requirement that ground disturbance and vegetation removal only occurs from September 1 to January 31, as feasible.</p>	<p>During construction contract negotiations</p>	<p>Once</p>	<p>CAWD</p>			
	<p>For construction occurring between February 1 and September 1, retain a qualified biologist to conduct pre-construction nesting bird surveys and establish buffers.</p>	<p>Prior to construction</p>	<p>Once, and as needed</p>	<p>Qualified biologist</p>			
	<p>Establish an appropriate buffer for any discovered nests. Mark the buffer with high visibility material and remove when the young have fledged, and the nest is abandoned.</p>	<p>Within 14 days prior to construction; repeated if construction lapses for more than two weeks</p>	<p>As needed</p>	<p>Qualified biologist</p>			

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complete and young have fledged the nest prior to removal of the buffer.							
BIO-7 Monterey Shrew Clearance Surveys							
Immediately prior to ground disturbing activity in or adjacent to Monterey shrew habitat, a qualified biologist shall conduct a pre-activity clearance sweep to identify and relocate any individuals within proposed work areas. Any individuals located during the survey shall be allowed to leave the work area on their own. All sightings of Monterey Shrew shall be reported to the California Natural Diversity Database.	Retain a qualified biologist to conduct pre-construction sweeps for Monterey shrew.	Prior to construction	Once, as needed	CAWD			
	Conduct pre-activity clearance sweeps for Monterey shrew and relocate any individuals in work areas.	Immediately prior to construction	Once, as needed	Qualified biologist			
BIO-8 Western Pond Turtle Clearance Surveys							
Within 10 days prior to ground disturbing activity at the former golf course, a qualified biologist shall conduct a pre-activity clearance sweep to identify western pond turtle individuals or nests within proposed work areas. Any individuals located during the survey shall be allowed to leave the work area on their own or moved by a qualified biologist with appropriate take authorization. Any nests identified shall be avoided. All sightings of western pond turtle shall be reported to the California Natural Diversity Database.	Retain a qualified biologist to conduct a pre-construction survey for western pond turtle.	Prior to construction	Once	CAWD			
	All individuals located to be allowed to leave work areas on their own or moved by a qualified biologist. Avoid any nests.	During construction	As needed	Qualified biologist			
BIO-9 Sensitive Natural Community Avoidance							
Prior to initiation of construction adjacent to willow thicket or wetland habitats, environmentally sensitive area (ESA) fencing shall be installed around the outer limits of these areas under the direction of a qualified biologist, to prevent encroachment. No equipment, construction personnel, staging or	Retain a qualified biologist to identify environmentally sensitive areas to be fenced.	Prior to construction	Once	CAWD			
	Include, in the construction contract, a requirement that ESA fencing be	During construction contract negotiations	Once	CAWD			

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other project activities shall be allowed within ESA areas. ESA fencing materials shall be high visibility and tall enough to create an effective barrier.	installed around areas identified by the qualified biologist						
BIO-10 Conduct Jurisdictional Delineation for Impacts to Waters and Wetlands							
A qualified biologist shall complete a jurisdictional delineation (JD) of all features along the concrete drainage and in wetland areas. The jurisdictional delineation shall determine the extent of the jurisdiction for CDFW and RWQCB and shall be conducted in accordance with the requirement set forth by each agency. The purpose of the JD is to identify temporary impacts to the concrete drainage and establish work area limits to ensure no direct impacts to wetland jurisdictional features. Impacts to waters shall be mitigated as required based on direct impacts from project development under the mitigation ratio below. Mitigation for temporary impacts to waters can be achieved through rehabilitation of the site to pre-project conditions at a 1:1 ratio for impacted lands. All construction within the concrete drainage, including trenching and restoration shall occur during the dry season when there is no active flow in the channel. Upon completion of backfill the concrete drainage shall be restored to its previous condition.	Retain a qualified biologist to complete a JD in accordance with each agency's requirements.	Prior to construction	Once	CAWD			
	Include, in the construction contract, a requirement that work within the concrete drainage occur during the dry season, no direct impacts to the concrete drainage, and the concrete drainage is restored following construction.	During construction contract negotiations			CAWD		
Cultural Resources							
CULT-1 Archaeological and Native American Monitoring							
All project-related ground disturbing activities shall be monitored by a qualified archaeologist and Native American consultant. Archaeological	Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for	Prior to construction	Once	CAWD			

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<p>monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology (National Park Service 1983). The archaeologist shall also perform cultural awareness sensitivity training for any construction personnel working on the site prior to any ground disturbing activities. Native American monitoring shall be provided by a locally affiliated tribal member. Monitors shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for listing in the CRHR and NRHP. Archaeological or Native American monitoring or both may be reduced to spot-checking or eliminated at the discretion of the monitors, in consultation with the lead agency, as warranted by conditions such as encountering bedrock, sediments being excavated are fill, or negative findings during the first 60 percent of rough grading. If monitoring is reduced to spot-checking, spot-checking shall occur when ground-disturbance moves to a new location within the APE and when ground disturbance extends to depths not previously reached (unless those depths are within bedrock). If a find is made during construction, Mitigation Measure CULT-2 shall be implemented.</p>	archaeology and locally-affiliated Native American monitor to observe construction activities that would disturb native soils.	During construction	As needed	Native American monitor			
	Perform cultural awareness sensitivity training for construction personnel.	Prior to start of construction	Once	Qualified archaeologist			
	Observe construction activities and recommend monitoring be reduced or eliminated if appropriate.	During construction monitoring	As needed	Qualified archaeologist			
CULT-2 Unanticipated Discovery of Archaeological Resources							
If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the	Halt work, notify qualified archaeologist, and establish a 50-foot buffer for identified archaeological resources.	During construction	As needed	CAWD			

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<p>Interior’s Professional Qualification Standards for archaeology (National Park Service 1983), shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.</p> <p>In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with CAWD to begin Native American consultation procedures.</p>	<p>Include a requirement in the construction contract to suspend all work if cultural resources or any artifact or an unusual amount of bone, or shell is encountered during construction until the find can be evaluated by a qualified archaeologist or the appropriate Native American tribe for resources of Native American origins.</p>	<p>During construction contract negotiations, and as needed during construction</p>	<p>Once, as needed</p>	<p>CAWD</p>			
Geology and Soils							
GEO-1 Paleontological Resources Monitoring							
<p>Paleontological monitoring is required for ground disturbance that exceeds 5-feet in depth, and which impact previously undisturbed sediments. Prior to the commencement of project construction, CAWD shall retain a qualified paleontological monitor (i.e., a paleontologist who meets the SVP [2010] standards as a Paleontological Resource Monitor) to conduct full-time paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) exceeding five feet below ground surface within intact (i.e., previously undisturbed) middle to late Holocene alluvial deposits (Qa). Ground-disturbing activities that impact previously disturbed sediments only, or do not exceed 5-feet in depth do not require paleontological monitoring.</p>	<p>Retain qualified paleontologist to observe construction activities that would disturb intact soils exceeding 5-feet in depth.</p>	<p>Prior to initiation of construction</p>	<p>Once</p>	<p>CAWD</p>			
	<p>Monitor (full time) all ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of previously undisturbed ground exceeding five feet below ground surface within intact middle to late Holocene alluvial deposits.</p>	<p>During construction</p>	<p>Daily, as needed</p>	<p>Qualified paleontologist</p>			
	<p>Recommend reduced monitoring, if appropriate, and reinstate monitoring as needed.</p>	<p>During construction</p>	<p>Daily, as needed</p>	<p>Qualified paleontologist</p>			

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<p>The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.</p> <p>If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment within 50 feet of the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the UCMP). Curation fees are the responsibility of CAWD.</p> <p>A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.</p>	<p>Divert construction equipment around any found paleontological resources until the resource is assessed and collected. Notify CAWD of any found resources. Prepare significant fossils for transfer and curation.</p>	During construction	As needed	Qualified paleontologist			
	<p>Prepare a final report describing the results of monitoring, including a summary of laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. Submit the report to CAWD. If the monitoring efforts produced fossils, submit the report to the designated museum repository.</p>	Upon completion of monitoring activities	Once	CAWD, qualified paleontologist			

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Noise							
N-1 Construction Noise Reduction Measures							
The following construction noise reduction measures shall be implemented during project construction activities:	Include a requirement in the construction contract to implement noise reduction measures.	During construction contract negotiations	Once	CAWD			
<ul style="list-style-type: none"> ▪ Whenever possible, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels. 	Implement all noise reduction measures including altering schedule and equipment locations.	During construction	Daily, as needed	Construction contractor			
<ul style="list-style-type: none"> ▪ All heavy-duty stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers. 	Maintain a log of noise complaints and address complaints from neighbors.	During construction	As needed	CAWD			
<ul style="list-style-type: none"> ▪ During construction, all equipment shall be operated with closed engine doors and shall be equipped with properly operating and maintained critical grade mufflers consistent with manufacturers' standards. 							
<ul style="list-style-type: none"> ▪ CAWD shall provide a non-automated telephone number for local residents to call to submit complaints associated with construction noise during all phases of construction. CAWD shall maintain a log of complaints and shall address complaints to minimize noise issues for neighbors. 							