

Initial Study/ Mitigated Negative Declaration



Los Osos Creek Wetland Restoration

Prepared by the Coastal San Luis Resource Conservation District

Lead Agency Pursuant to Section 21082.1
of the California Environmental Quality Act

November 2020

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I. Mitigated Negative Declaration

A. Project Summary

Document Purpose + Organization

The purpose of this Initial Study is to provide a preliminary analysis of the proposed Los Osos Creek Wetland Restoration Project (the Project) to determine what type of environmental review will be required, and to allow for modification of the project to mitigate adverse impacts. This Initial Study has been prepared by the Coastal San Luis Resource Conservation District (District).

The Initial Study for this proposed Mitigated Negative Declaration is available for review online at coastalrcd.org and at the District office at 1203 Main Street, Suite B, in Morro Bay Ca. Questions or comments regarding this proposed Mitigated Negative Declaration may be addressed to the Lead Agency point of contact listed below.

Lead Agency

The CEQA Guidelines (14 CCR §15000 et seq.) establish the District as the lead agency. The lead agency is defined in CEQA Guidelines Section 15367 as “the public agency which has the principal responsibility for carrying out or approving a project.” The lead agency decides whether an Environmental Impact Report (EIR) or Negative Declaration is required for the project and is responsible for preparing the appropriate environmental review document.

The contact person for the lead agency is:

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B. Project Description

Location and Environmental Setting

The Project is located on lower Los Osos Creek at the confluence with Warden Creek, in the Morro Bay watershed, San Luis Obispo County, California. The project area sits in a broad, low-gradient valley at the outlet of the mountain front, producing a discontinuity in valley confinement, channel gradient, and the capacity of flow to move sediment. Consequently, an alluvial fan occurs where Los Osos Creek enters Los Osos Valley. The presence of the fan and associated sediment deposition results in higher elevations at the west end of Los Osos Valley, where the project is located, and lower elevation at the east end of the valley. The site is positioned in a location where sediment delivered from the Los Osos Creek watershed would naturally deposit prior to entering the Morro

Bay estuary, however land use changes and channel modification have disconnected the creek from its natural floodplain and hydrology.

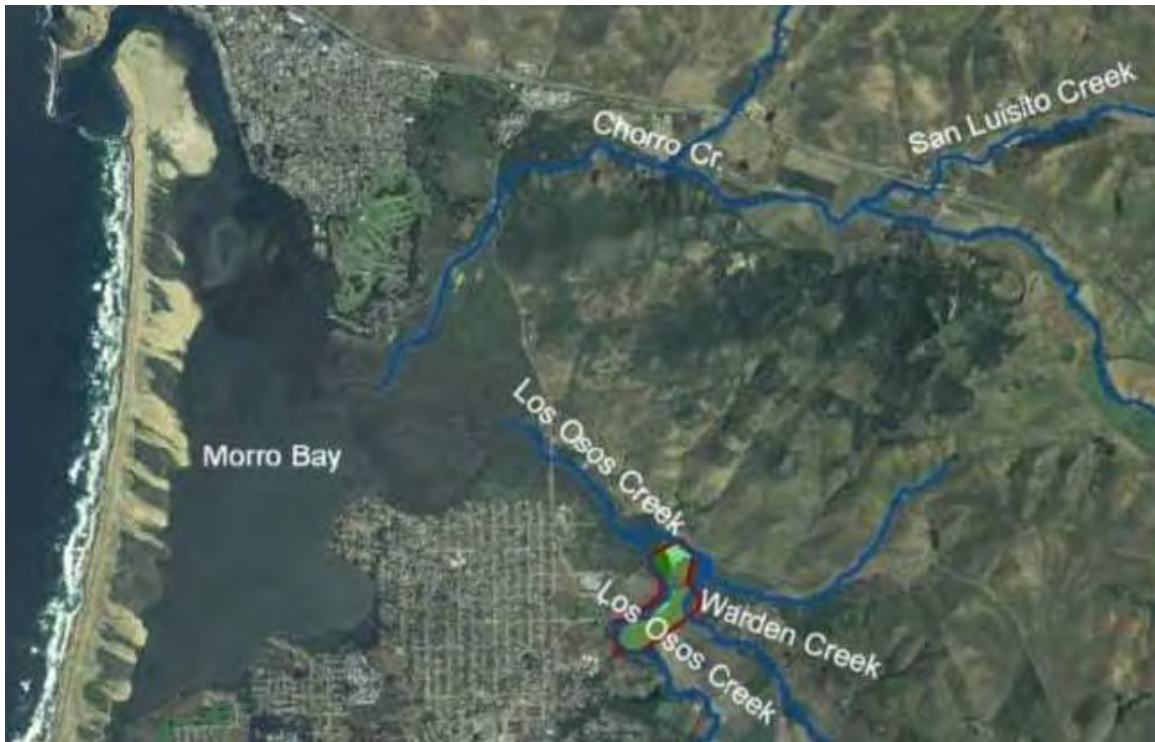


Figure 1. Los Osos Creek Watershed

The historic channel and floodplain most likely consisted of a series of active channels, flood channels, and abandoned channels with backwater wetlands that spread across the entire site. The active channel was likely an ephemeral feature, shifting from one location to another based on sediment deposition, debris jams, or other obstructions. The channel system was likely braided, hydraulically very rough, and sandy. This type of channel and floodplain form was historically not unique throughout the region, although much of this habitat type was impacted by development of agriculture. Remnants of these habitat types still occur along some of the coastal drainages where they were once widespread. Despite these conditions, aquatic species such as steelhead persisted, although the lower gradient lowland valley was likely a migration reach between upstream spawning and rearing habitat and the productive estuarine habitat that existed in tidally-influenced areas.

Los Osos Creek enters at the western end of the property confined by a levee that provides protection to active farmland to the south (Figure 2). The levee extends northward onto the property for some distance before disappearing into the adjacent grades due to high amounts of sedimentation that has occurred along the former flow path. Warden Creek enters on the eastern side of the property where sedimentation has caused backwatering and ponding until the confluence of the two creeks. Flow is conveyed through the access road via three 36-inch CMP culverts. Under high flow conditions, excess water is conveyed over the road, and Los Osos and Warden Creeks both share the unconfined floodplain area. Downstream of the culverts, Warden Creek and a portion of Los Osos Creek flow eastward and are confined by the dirt access road to the

south and an unmaintained levee to the north. At the eastern margin of the site, Warden Creek turns northward and heads toward the tidal estuary and Morro Bay. The Project footprint includes 56 acres of wetland and upland habitat within the larger 82-acre parcel owned by the District. The 56-acre footprint is comprised of 40 acres of declining palustrine wetlands (including 0.5 miles of designated critical habitat for the federally threatened south central California coast steelhead trout and 9 acres of critical habitat for the federally endangered tidewater goby) and 16 acres of upland dunes scrub. Other sensitive species, such as Morro shoulderband snail, California red-legged frog (CRLF), and various plant species also persist at the site.

During the planning phase of this project, a cultural resources study was completed by Applied Earthworks (AE) that included both archaeological resources and historic built-environment elements. The resulting findings report (appendix F) found that the man-made structures on the property were not considered eligible for listing under the National Register of Historic Places or the California Register of Historical Resources. The report also indicates that a previously identified prehistoric archaeological site, CA-SLO-31, extends into the western boundary of the project area. The report identified each of the proposed project components and an assessment of potential effects of those activities on the archaeology site. This is discussed in more detail in the Cultural resources section of this document.

The property is located in Supervisorial District 2, within the Estero Planning Area and the Coastal Zone. The parcel is designated as a Flood Hazard Area (FHA) and a Sensitive Resource Area (SRA). Its Coastal Designations include Wetland and Archeologically Sensitive Areas. The Land Use Category (LU) and Primary zoning is Agriculture (AG). Adjacent land uses are primarily agricultural, with some commercial / residential to the southwest including Los Osos middle school

Project Background and Purpose

The property where the project is located was acquired by the District in 2015 using State Coastal Conservancy (SCC) and the US Fish and Wildlife Service (USFWS) National Coastal Wetlands Program funding, and is considered a strategic and highly prioritized location for sediment capture, protecting the estuary from sedimentation and resulting habitat and water quality degradation.

Three primary studies of the Morro Bay watershed (1989 Soil Conservation Service (SCS) sediment assessment, 1998 Tetra Tech assessment, 2003 Swanson assessment) indicate that approximately 14% of the sediment loads entering the Morro Bay estuary originate from Los Osos creek and its tributaries. The studies go on to determine that those sediment loads negatively impact the steelhead populations in the watershed and have resulted in the listing of Morro Bay and its tributaries as impaired water bodies. As a result, the Central Coast Regional Water Quality Control Board (CCRWQCB) adopted a Total Maximum Daily Load (TMDL) for the watershed for sediment in 2002.

In 2000, the Morro Bay National Estuary Programs (MBNEP) Comprehensive Conservation Management Plan indicated that sediment deposition should be encouraged and facilitated along Los Osos Creek to ensure the health and function of the estuary, identifying specifically the Project area as high priority for this activity.

Acquisition of the property and subsequent development of a restoration plan is considered phase I of the Los Osos Creek Wetland Restoration project, while design and permitting, and implementation round out phases II and III, respectively.

Land use impacts over the past century have caused severe incision along much of Los Osos Creek, resulting in high rates of sediment transport from eroding bed and bank material. Portions of the project footprint were actively farmed until at least 1995, resulting in legacy impacts associated with past landscape manipulation, including grading activities, addition of levees, creation/maintenance of access roads, utilities (overhead power lines), irrigation infrastructure, shared well easements, homestead buildings (house and barn), vehicles embedded in the banks of the creek channel, transient/ homeless encampments, and extensive presence of non-native vegetation. A road providing well access to adjacent landowners and access to the homestead, includes creek crossings considered in-channel barriers to fish passage, and constrains the creek, impairing the hydrologic and ecosystem function throughout the site.

The Los Osos groundwater basin is a high priority basin subject to critical conditions of overdraft; In this basin the groundwater is found in alluvium, dune sand and the Paso Robles Formation. Both the alluvium and dune sands are primarily recharged via stream channels, particularly Los Osos Creek (Swanson, 2003). Both surface water and underflow in Los Osos Creek contribute to this recharge.

The project area is home to a wide variety of sensitive plant and animal species, including the federally threatened South-Central Steelhead Trout (*Oncorhynchus mykiss iridous*), the federally endangered Tidewater Goby (*Eucyclogobius newberryi*), the federally endangered Morro shoulderband snail (*Helminthoglypta walkeriana*), the federally endangered Morro Manzanita (*Arctostaphylos morroensis*), and the federally threatened California Red-legged frog (CRLF) (*Rana aurora draytonii*).

The project will restore 40 acres of declining palustrine coastal wetlands and 16 acres of upland coastal dune scrub habitat in order to enhance and increase habitat for sensitive species and reduce sediment loading in the Morro Bay Estuary. Project outcomes include restoration of hydrologic creek function, by reestablishing historic floodplains, reduced volume of sediment entering Morro Bay, improved water quality through wetland filtration, and restored habitat for Steelhead, Tidewater goby, CRLF, and Morro shoulderband snail.

Project Components and Tasks

The proposed project includes the following components, as seen in figure 2:

1. Restore native coastal dune habitat by decommissioning the upland homestead access road and demolishing existing upland infrastructure.
2. Improving fish passage by removing three perched culverts and managing invasive vegetation.
3. Reconnect and protect historic floodplain and wetland habitat by breaching portions of levee, decommissioning homestead well, and realigning power lines.



Figure 2. Project Footprint

- 1. Restore native coastal dune habitat by decommissioning the upland homestead access road and demolishing existing upland infrastructure.**

Decommission Access Road

The dirt access road leading from the homestead to the rock ford crossing will be removed once the homestead restoration actions are completed. Historically, soil from the homestead was brought down the hill and used to fill in the floodplain for road access. This road fill will be graded and relocated in the upland homestead area. The removed road would then be seeded with native vegetation.

Asbestos Removal and Demolition of Single Family Residence

An inspection of the single-family residence and barn for materials containing asbestos was conducted by West Coast Safety Consultants on October 3, 2015. The consultants collected samples of suspect “asbestos containing building material” (ACBM) using sampling protocols specified by the Environmental Protection Agency (EPA). Laboratory results indicated that the texture on the front entryway walls and the roof shingles of the house both contained asbestos. These materials must be removed before the rest of the structure can be removed safely. No asbestos was detected in the barn. A licensed asbestos abatement contractor will be contracted to properly remove and dispose of the materials containing asbestos prior to demolition of the residence. Approval from the Air Pollution Control District will not be required because the building is a single-family residence and a City permit will not be required because the project is small and is in the County.

The single-family residence will be demolished and materials hauled off site and disposed of according to local regulations. Underground pipes and any subsurface footings or piers will be left in place and demolition activities will minimize ground disturbance in an effort to protect potentially significant native american cultural resources.

Remove Wooden Barn and Outbuilding

A large wooden barn and outbuilding located on the upland partition of the property are in disrepair and are considered an attractive nuisance . The structures have both dirt flooring and a concrete pad. A Phase 1 Environmental Site Assessment (ESA) was completed by Stantec Consulting Services, Inc. on November 3, 2014 that made the following finding:

Several small areas of darkened stained soil were observed on the dirt floor of the abandoned barn and may represent motor oil or hydraulic fluid. The small areas of stained soil within the barn are considered de minimis conditions in that they are not considered to present a material risk to human health and would not likely be subject to enforcement action if brought to the attention of governmental agencies.

The barn and outbuilding structures will be removed and disposed of appropriately. In order to minimize ground disturbance of potentially significant Native American cultural resources, the concrete pad, any subsurface footings, and darkened soil identified in the EAS will remain in place.

Decommission Septic System

The residence is still connected to an abandoned septic tank which must be properly decommissioned for safety reasons and to avoid contamination of soil, groundwater and surface water. A licensed septic hauler will pump out any residual wastewater and sludge. The tank will then be filled in with sand or soil to prevent injuries to people or animals from falling into the tank. Pipes leading from the residence to the abandoned septic will be left in place and all demolition activities will minimize ground disturbance in an effort to protect potentially significant Native American cultural resources.

Vehicle Removal:

A Phase 1 Environmental Site Assessment (ESA), completed by Stantec Consulting Services, Inc. on November 3, 2014, identified three abandoned vehicles embedded in the slope above the creek channel.

The abandoned vehicles represent improper disposal of solid waste and could also impact surface water quality due to leakage or leaching or automotive chemicals. Due to their location adjacent to a creek channel or tributary, they may seasonally come into contact with surface water runoff. The dense riparian vegetation and limited viewpoints makes it difficult to determine their exact location in relation to the Property boundary.

Vehicles will be removed from their current location using a winch or pulley system. Activities will be undertaken in such a way that minimizes ground disturbance and is protective of potentially significant Native American cultural resources. If the removal of the vehicles is determined to be too damaging to Native American cultural resources or the stability of the hillside, the District will leave the vehicles in place and remove all hazardous substances (i.e. batteries).

Placement of Fill Material and Revegetation with Native Species

Approximately 2,570 cubic yards of fill material from the breached levee and decommissioned access road will be placed in a 1.5' layer across the upland area once demolition activities are complete. The fill will protect Native American cultural resources. Native coastal dunes species such as Morro Manzanita, coyote brush, California sagebrush, buckwheat and yarrow, will be planted. Temporary irrigation infrastructure will be installed until plants are established.

2. Improve fish passage by removing three perched culverts and managing invasive vegetation.

Three old corrugated metal pipe culverts will be removed along primary access road and replaced with a seasonal, rocked ford crossing to improve fish passage while allowing for access to the irrigation pump. Flows will be diverted and the channel de-watered during construction activities. All in-channel work will follow CDFW guidelines for in-channel work and will be monitored by a certified biologist. Invasive vegetative species including Himalayan Blackberry and Cape Ivy will be removed. The area will be revegetated using native riparian and wetland species.

3. Reconnect and protect historic floodplain and wetland habitat by breaching portions of levee, decommissioning homestead well, and realigning power lines.

The levee that constricts Warden creek through the property along the access from Turri Road will be breached in four locations allowing the creek to reconnect to its historic floodplain. Removal of vegetation and use of heavy equipment in the channel will be minimized to the extent possible. All impacts will be mitigated on site.

An abandoned residential well located within the floodplain will be properly decommissioned in order to eliminate safety hazards and threats to groundwater quality. A licensed well driller will be retained to remove all associated pumping equipment, disinfect, backfill and seal the well. A temporary access road will be cleared to get vehicles and equipment to the site.

Pacific Gas and Electric (PG&E) utility lines connect the homestead and agricultural and domestic wells to the adjacent properties. The lines connecting the homestead and domestic well are now redundant. Additionally, the lines are located in the wetland and floodplain habitat, making the maintenance of the infrastructure increasingly challenging for PG&E. The District will coordinate with PG&E to remove and realign the utility infrastructure. Poles located on the upland portion of the property will be removed in such a way that is protective of Native American cultural resources and minimizes ground disturbance.

Related Projects

Two similar restoration projects have been completed in the Morro Bay watershed, both on Chorro Creek. A number of sediment studies and watershed assessments, referenced above, indicated that the majority of sediment entering Morro Bay comes from Chorro Creek, and that floodplain reestablishment is the most effective way to prevent sediment loading. These studies

were the basis and justification for the projects described below.

CSLRCD acquired the 120-acre Chorro Flats property in 1991 with coastal conservancy funds and the objective of reducing sediment loads to Morro Bay by reconnecting Chorro Creek to its original floodplain. Restoration included breaching portions of a levee and allowing Chorro Creek to reestablish its historic flood plan, in addition to planting riparian vegetation to reduce velocities of storm flows. Restoration activities on the property were completed in 1997, and in the first 3 years the project captured approximately 198,000 cubic yards of sediment. Chorro Flats, now nearing 25 years, continues to effectively and passively capture sediment loads from the upper Chorro Creek watershed, and also provides exceptional habitat for CRLF, steelhead and a number of other species, as well as water quality benefits as a result of wetland filtration.

The Morro Bay National Estuary Program (MBNEP) completed the Chorro Creek Ecological Reserve (CCER) Floodplain Restoration Project in 2020. Located approximately 1 mile upstream from Chorro Flats, the CCER project reestablished floodplain along 1,000 linear feet of Chorro Creek and created side channels for additional stream function and flood protection.

Required Permits and Approvals

Table 1 lists the requisite permits and approvals for the Project:

Regulatory Agency	Permit/Approval
Central Coast Regional Water Quality Control Board (CCRWQCB)	410 Water Quality Certification or Small Habitat Restoration Program permit
US Army Corps of Engineers (USACE)	Nationwide Permit 27: Aquatic Habitat Restoration, Establishment, and Enhancement Activities
US Fish and Wildlife Service (USFWS)	Section 7 Endangered Species Act Consultation
Ca Dept of Fish and Wildlife (CDFW)	Lake and Streambed Alteration Agreement
County of San Luis Obispo Planning + Building Dept	Major grading Permit
	Coastal Development permit
SLO Co Air Pollution Control Board	Air Quality Review and Emission Permit
Native American Tribes	Consultation

Table 1. Required Permits and Approvals

Summary of Findings

The proposed activities involved in the project would result in less than significant environmental effects to the resources listed in Table 1, however compliance with regulatory requirements and

implementation of avoidance and mitigation measures will reduce all significant adverse impacts to less than significant levels. Pursuant to Section 15070, the District has determined a Mitigated Negative Declaration is the appropriate environmental review document for the project. This conclusion is supported by the following findings:

1. The proposed project would have no effect related to Aesthetics, Agricultural Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation or Utilities.
2. The proposed project would have a less than significant impact on Air Quality, Hydrology and water Quality, and Noise.
3. Mitigation is required to be implemented in order to reduce potentially significant impacts related to Biological Resources, Cultural Resources, Geology and Soils, and Hazardous Materials.
4. The upland portion of the project was found to contain cultural resources that might be disturbed by project work. Mitigation has been developed that addresses the potential for discovering and protecting archaeological resources, paleontological resources as well as human remains during the execution of this project.
5. It is anticipated that this project will enhance habitat for sensitive species, including California red-legged frog, South Central Steelhead, Morro shoulderband snail, tidewater goby, Morro Manzanita, and Mash sandwort.
6. It is anticipated that this project will help to attain the TMDL for the Morro Bay Estuary by capturing sediment loads before entering the estuary.
7. The project would not achieve short-term environmental improvement to the disadvantage of long-term environmental improvement.
8. The project would not have environmental effects that are individually limited but cumulatively considerable.
9. The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.
10. The project incorporates all applicable mitigation measures, as listed below and described in the initial study.
11. The mitigated negative declaration reflects the independent judgment of the lead agency.

Summary Document Preparation

Pursuant to Section 21082.1 of CEQA, the District has independently reviewed and analyzed the Initial Study for the Project and finds that these documents reflect the independent judgment of the

detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration.



Neil Havlik
District Board President



Hallie Richard
Conservation Programs Manager

Avoidance and Mitigation Measures

The following mitigation measures will be implemented by the District to avoid or minimize environmental impacts. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to a less-than-significant level.

A. Biological Resources

California red-legged frog:

A-1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

A-2. Ground disturbance would not begin until written approval is received from the Service that project biologist(s) are qualified to conduct the work.

A-3. A Service-approved biologist would survey the project site no more than 48 hours before the onset of work activities.

A-4. Before any activities begin on a project, a Service-approved biologist would conduct a training session for all construction personnel.

A-5. A Service-approved biologist would be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed.

A-6. If work must occur during the breeding season, the project proponent would implement the following measures as well:

- a. No work would occur during or 24 hours after any rain event to minimize impacts to dispersing and breeding California red-legged frogs. A rain event is considered any precipitation resulting

A-6. If work must occur during the breeding season, the project proponent would implement the following measures as well:

- a. No work would occur during or 24 hours after any rain event to minimize impacts to dispersing and breeding California red-legged frogs. A rain event is considered any precipitation resulting in 0.2" or greater of precipitation. A Service-approved biologist would survey the project site immediately before resuming project activities.
- b. The project proponent would conduct project activities no earlier than 30 minutes after sunrise and no later than 30 minutes before sunset each day.
- c. The project proponent would survey the project area daily before activities begin and monitor all project activities using a Service-approved biologist

A-7. Unless approved by the Service, the project proponent would not impound water in the course of project activities in a manner that may attract California red-legged frogs.

A-8. A Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs (*Rana catesbeiana*), signal and red swamp crayfish (*Pacifastacus leniusculus*; *Procambarus clarkii*), and centrarchid fishes from the project area, to the maximum extent possible. The Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

A-9. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the biologists would follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force at all times.

B. South Central Steelhead:

B-1. Work shall not begin until a) the NOAA RC and/or Corps has notified the permittee that the requirements of the ESA and Clean Water Act have been satisfied and that the activity is authorized and b) all other necessary permits and authorizations are finalized.

B-2. The general construction season shall be from June 1 to November 30. Restoration, construction, fish relocation and dewatering activities within any wetted or flowing stream channel shall occur only within this period. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.

B-3. Prior to construction, the land manager and each contractor shall be provided with the specific protective measures to be followed during implementation of the project.

B-4. If the thalweg of the stream has been altered due to construction activities, efforts shall be undertaken to reestablish it to its original configuration.

B-5. In those specific cases where it is deemed necessary to work in a flowing stream/creek, the work area shall be isolated and all the flowing water shall be temporarily diverted around the work site to maintain downstream flows during construction.

B-6. Exclude fish from reentering the work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8-inch diameter.

B-7. Prior to dewatering, determine the best means to bypass flow through the work area to minimize disturbance to the channel and avoid direct mortality of fish and other aquatic vertebrates (as described more fully below under General Conditions for Fish Capture and Relocation). Bypass stream flow around the work area, but maintain the stream flow to channel below the construction site.

B-8. Coordinate project site dewatering with a qualified biologist to perform fish and amphibian relocation activities.

B-9. Prior to dewatering a construction site, qualified individuals will capture and relocate fish and amphibians to avoid direct mortality and minimize take. This is especially important if listed species are present within the project site.

B-10. When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that will allow flow to resume with the least disturbance to the substrate. Cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than one inch per hour. This will minimize the risk of beaching and stranding of fish as the area upstream becomes dewatered.

B-11. Fish relocation and dewatering activities shall only occur between June 1 and November 30 of each year. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.

B-12. A qualified fisheries biologist shall perform all seining, electrofishing, and fish relocation activities.

B-13. All electrofishing will be conducted according to NMFS' Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS 2000), including modifications for South Central and Southern California streams

B-14. A minimum of three passes with the seine shall be utilized to ensure maximum capture probability of steelhead within the area.

B-15. All captured fish shall be processed and released prior to each subsequent pass with the seine.

B-16. The seine mesh shall be adequately sized to ensure fish are not gilled during capture and relocation activities.

B-17. Fish shall not be overcrowded into buckets, allowing no more than 150 0+ fish (approximately six cubic inches per 0+ individuals) per 5-gallon bucket and fewer individuals per bucket for larger/older fish.

B-18. Every effort shall be made not to mix 0+ steelhead with larger steelhead, or other potential predators, that may consume the smaller steelhead. Have at least two containers and segregate young-of-year (0+) fish from larger age-classes. Place larger amphibians in the container with larger fish.

B-19. Salmonid predators, including other fishes and amphibians, collected and relocated during electrofishing or seining activities shall not be relocated so as to concentrate them in one area.

B-20. All captured steelhead shall be relocated, preferably upstream, of the proposed construction project and placed in suitable habitat. Captured fish shall be placed into a pool, preferably with a depth of greater than two feet with available instream cover.

B-21. Minimize handling of steelhead. However, when handling is necessary, always wet hands or nets prior to touching fish. Handlers will not wear insect repellants containing the chemical N,N-Diethyl-meta-toluamide (DEET).

B-22. If more than 3 percent of the steelhead captured are killed or injured, the project permittee shall contact NMFS (Anthony Spina, (562) 980-4045 or via email, anthony.spina@noaa.gov and CDFW (Mary Larson, (562) 342-7186 or via email, mary.Larson@wildlife.ca.gov).

C. Marsh sandwort:

C-1. A qualified botanist will conduct a pre-construction survey to confirm absence of marsh sandwort and Gambel's watercress prior to commencing ground disturbance activities in the project area. If the plants are found during pre-construction surveys, including any Gambel's watercress hybrids, the botanist will flag the area and inform all workers of the need to stay out of the flagged area.

C-2. Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will conduct a training session for all personnel. At a minimum, the training will include a description of relevant plants and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel.

D. General Protection of Riparian, Aquatic and Wetland Habitats

D-1. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable.

D-2. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project

D-3. Construction will occur between June 1 and November 30. Revegetation activities, including soil preparation, may extend beyond November 30, if necessary, to better ensure successful plant establishment during the onset of winter precipitation.

D-4. Debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/ concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State.

D-5. Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric. No mechanized equipment (e.g. internal combustion hand tools) will enter wetted channels.

D-6. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires crossing a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle

D-7. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).

D-9. Prior to use, clean all equipment to remove external oil, grease, dirt, or mud. Wash sites must be located in upland locations so wash water does not flow into the stream channel or adjacent wetlands.

D-10. All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings.

D-11. To minimize further disturbance to the work area, crew size will be limited, and number of vehicles and equipment to the maximum extent feasible.

D-12. Removal of any vegetation will be minimized to the extent feasible.

D-13. Depending on determinations made by the ACOE, compensatory mitigation will be completed at the requisite ratio to impacts.

D-14. No fill or dredge material will be placed within a designated wetland.

E. Morro Shoulderband Snail

E-1. Only biologists approved by the Ventura Fish and Wildlife Office may conduct *any* activities related to Morro shoulderband snails. The possession of a section 10(a)(1)(A) permit does not take the place of the required approval.

E-2. Prior to any site disturbance (e.g. vegetation removal, grading), an approved biologist will develop and deliver training to all project-related personnel.

E-3. Construction areas will be clearly marked with high-visibility flagging or barrier fencing. Construction equipment and personnel will be restricted to areas within the marked areas.

E-4. Prior to the start of any site disturbance activities an approved biologist will conduct surveys for Morro shoulderband snail.

E-5. An approved permitted biologist will be present daily during the site preparation (e.g. vegetation removal, ground-disturbance, grading) to monitor for the presence of Morro shoulderband snail. Any live individuals of any life stage detected during these monitoring events will be captured and moved out of harm's way or relocated to a Service-approved site by the biologist.

E-6. The Federal Action Agency should encourage the Permittee to collect information on the survival of Morro shoulderband snails captured and relocated as part of this project in order to provide an understanding of the efficacy of this practice as a minimization measure.

E-7. The Federal Action Agency should encourage the Permittee to prepare and seek publication of an article describing all of those habitat types or conditions in which Morro shoulderband snails are found during the course of the project to provide a greater understanding of the species.

Cultural Resources:

CR-1. Avoidance. If feasible, avoidance of direct impacts is the preferred measure for mitigating effects on NRHP/CRHR-eligible archaeological sites.

CR-2. Fill. If direct disturbance of the resources cannot be avoided, placement of chemically neutral, nonreactive fill on top of CA-SLO-31 on the knoll, rather than cutting into the cultural deposits, is another treatment option to avoid direct impacts.

CR-3. For all ground disturbing construction activities, the applicant shall retain a county-approved archaeologist to monitor these activities. The applicant shall install any necessary protective field measures, as directed by the archaeologist, and shall keep them in good working order during construction. Upon discovery, the applicant shall take immediate remedial actions should corrective actions be needed. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity of the resource until such time as the resources can be evaluated by an archaeologist and any other appropriate individuals.

CR-4. If buried cultural materials are discovered by archaeologists or construction personnel, work in the immediate area of the find would be diverted until the discovery is evaluated and any necessary plans are developed for treatment of the find(s) or mitigation of adverse effects.

CR-5 If it becomes impossible to implement the project at a worksite without disturbing cultural or paleontological resources, then activity at that worksite shall be discontinued.

Sediment and Erosion Control Measures:

Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.

Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.

Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.

Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.

Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.

Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.

Sed-7. All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.

Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.

Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.

Hazardous Materials

Asbestos removal and disposal protocol: See Appendix D

II. Initial Study

A. Environmental Checklist + Responses

Summary

Project Title	Los Osos Creek Wetland Restoration
Lead Agency	Coastal San Luis Resource Conservation District
Address	1203 Main Street, Ste B, Morro Bay CA 93433
Contact	Hallie Richard, (805)772-4391
Project Location	Los Osos Creek, Morro Bay Watershed
Responsible Agency	State Coastal Conservancy
Address	1515 Clay St, 10th Floor, Oakland Ca, 94612
Contact	Tim Duff, SCC Project Manager
Existing Land Use	Conservation Easement
Project Description	The project will restore 40 acres of wetland habitat and 16 acres of upland habitat for the purpose of reducing sediment loading in Morro Bay estuary, improved fish passage, and enhanced habitat for Morro Shoulderband snail, Steelhead, California red-legged frog, Tidewater goby, Marsh sandwort, and Morro manzanita
Project Location	35.325484, -120.812369. Property is accessed via Turri Rd, in Los Osos Ca.
Native American Tribes Affiliated with the Project Area?	The Northern Chumash Tribe. Consultation has not yet been initiated.
Public Agencies Whose Approval is Required	Permits and agreements are required from the US Army Corps of Engineers (USACE), the California Department of fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), the US Fish and Wildlife Service (USFWS), and the County of San Luis Obispo (SLO Co.)

Table 2. Project Information

Environmental Factors Potentially Affected

The environmental factors listed below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist below. A significant effect on the environment is defined in regulation as

“a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (14 CCR section 15382).”

Additionally, CEQA Section 15064 states that

“The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

	Aesthetics		Mineral Resources
	Agriculture		Noise
	Air Quality		Population and Housing
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
X	Geology and Soils		Transportation/Traffic
X	Hazards and Hazardous Materials		Utilities
X	Hydrology + Water Quality		Mandatory Findings of Significance
	Land Use and Planning		

Table 3. Initial Study Checklist

Determination

On the basis of this initial evaluation, the Lead Agency finds that:

- The proposed project COULD NOT have a significant effect on the environment and the project qualifies for a categorical exemption.
- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



November 24, 2020

Signature

Date

Hallie Richard

Coastal San Luis Resource Conservation District

Printed Name

For

B. Analysis of Potential Environmental Impacts

1. Aesthetics

The project is situated within the Morro Area Scenic Resource Area (SRA); however, project components are not visible outside of the property and either occur below grade, or remove existing dilapidated infrastructure. Minimal vegetation removal is required, and revegetation will increase the number of native species in the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Have a substantial adverse effect on a scenic vista?				X
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
Substantially degrade the existing visual character or quality of the site and its surroundings?				X
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Conclusion

This project will have no significant impact on aesthetics. Implementation of this project will not substantially damage scenic resources within a state scenic highway. This project will not substantially degrade the existing visual character or quality of the site or its surroundings, nor will it create a new source of light or glare. Implementation of this project will increase native vegetation, thereby enhancing the visual character of the site. No mitigation measures will be required.

Reference

- Estero Area Plan, 2009
- California Department of Transportation (Caltrans). 2017. California Scenic Highway Mapping System. Officially Designated Scenic Highway Routes.

<https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>

2. Agriculture

The project area, historically cultivated for annual crops, was recorded under 2 conservation easements in 1995, after which time agricultural use was phased out. No farmland will be converted to non-agricultural use.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
Result in the loss of forest land or conversion of forest land to non-forest use?				X
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Conclusion

The Project will not impact Agriculture. Based on the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) and the San Luis Obispo County Important Farmland Map (FMMP 2018), the project area contains Farmlands of potential (Lands having the potential for farmland, which have Prime or Statewide characteristics and are not cultivated), however the property has been recorded under a conservation easement for conservation in perpetuity, and will therefore not convert prime farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. Therefore, no potential impacts would occur.

The Project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. The property is recorded under 2 conservation easements, and the project components are not in conflict with Williamson Act. The property is zoned as open space. Therefore, no potential impacts would occur.

The project area does not include any forested areas and therefore will have no impacts on forestry resources nor conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impacts would occur.

The project restores fallow farmland, which has been retired under a Williamson Act contract, to historic wetland hydrology and function. No project activities will take place outside to the conservation easement footprint. The project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use, therefore no impacts would occur.

References

- San Luis Obispo County. 2009. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. Revised January 2009.
- California Department of Conservation: important farmland finder: <https://maps.conservation.ca.gov/DLRP/CIFF/>

3. Air Quality

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality. The U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) are the federal and state agencies charged with maintaining air quality in the nation and state, respectively. The USEPA delegates much of its authority over air quality to CARB. CARB has geographically divided the state into 15 air basins for the purposes of managing air quality on a regional basis. The Project area lies within San Luis Obispo County in the South-Central Coast Air Basin (SCCAB). The SCCAB covers all of San Luis Obispo County, Santa Barbara County, and Ventura County. The San Luis Obispo County Air Pollution

Control District (SLOAPCD) is the local agency charged with preserving air quality. In 2001, the SLOAPCD adopted its 2001 Clean Air Plan, which addresses ozone and particulate matter emissions, and identifies the control measures necessary to attain air quality standards.

San Luis Obispo County is in non-attainment status for ozone (O3) and respirable particulate matter (PM10) under the California Air Resource Board (CARB) standards. The County is in attainment status for all other applicable CARB standards. Most recent exceedances of the state ozone standard in the last decade in the county have been measured at monitoring stations in Paso Robles or Atascadero.

The APCD’s CEQA Handbook establishes thresholds of significance for construction activities. According to the handbook, a project with grading in excess of 4.0 acres and/or a project that will move 1,200 cubic yards of earth per day can exceed the construction threshold for respirable particulate matter (PM10). In addition, a project with the potential to generate 137 lbs per day of ozone precursors (ROG + NOx) or diesel particulates in excess of 7 lbs per day can result in a significant impact.

The APCD’s CEQA Handbook provides screening criteria based on the size of different types of projects that would normally exceed the operational thresholds of significance for greenhouse gases and ozone precursors. However, operational impacts are focused primarily on the indirect emissions associated with motor vehicle trips associated with development. For example, a project consisting of 99 single family residences generating 970 average daily vehicle trips would be expected to exceed the 25 lbs./day operational threshold for ozone precursors. The APCD has also estimated the number of vehicular round trips on an unpaved roadway necessary to exceed the 25 lbs./day threshold of significance for the emission of particulate matter (PM10). According to the APCD estimates, an unpaved roadway of one mile in length carrying 6.0 round trips would likely exceed the 25 lbs./day PM10 threshold.

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants, such as the elderly, children, asthmatics, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. Some land uses are considered more sensitive to changes in air quality than others, due to the population that occupies the uses and the activities involved. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residences. The significance criteria established by the San Luis Obispo Air Pollution Control District (APCD) may be relied upon to make the following determinations. Specific mitigation measures will be implemented as applicable during project implementation.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Conflict with or obstruct implementation				X

of the applicable air quality plan?				
Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
Expose sensitive receptors to substantial pollutant concentrations?				X
Create objectionable odors affecting a substantial number of people?				X

Conclusion

The Project will have a less than significant impact on Air Quality. The project is located within the Coastal Zone portion of the Estero Planning area and zoned Open Space. Within San Luis Obispo County, the applicable air quality plan is the SLOAPCD’s 2001 Clean Air Plan (Plan) (SLOAPCD 2001). The Plan addresses attainment and maintenance of state and federal ambient air quality standards (SLOAPCD 2001, page 1-1); however, the Plan “primarily addresses the [County’s] ozone nonattainment problem” (SLOAPCD 2001, page 1-2). The proposed Project does not involve changes in land use or stationary sources that would emit substantial amounts of pollutants and would therefore not conflict with or obstruct implementation of the Plan.

The project is consistent with the general level of development anticipated and projected in the 2001 Clean Air Plan. The project will not conflict with, or obstruct implementation of SCCAB air quality plans, therefore no impact is anticipated.

The project will impact approximately 5 acres for no longer than 50 days which is less than the SLOAPCD threshold. The project would result in Construction equipment including an excavator, backhoe, dump trucks and would not cause or substantially contribute to a violation of an ozone or other air quality standard grader. Project emissions from vehicle trips and the use of heavy equipment are higher than those of the current land use. The intermittent and short-term temporary nature of these combustion emission sources, construction dust associated with demolition, grading, and excavation would be minimal. Given that construction related emissions would be below applicable thresholds and long-term operational emissions would be negligible, the project would have a less than cumulatively considerable effect on air quality.

The project would not be within close proximity to any serpentine rock outcrops and/or soil formations which may have the potential to contain naturally occurring asbestos. Equipment will be staged in upland areas and travel between .25 and .5 miles on private access roads. Two residential homes are approximately .35 miles from the project, and Los Osos Middle school is approximately .45 miles from the project site. Standard erosion and dust control methods will be used as necessary. Therefore, CZLUO 23.05.050 (Construction Procedures) shall be implemented to ensure impacts to sensitive receptors will be less than significant.

Equipment operation, land moving, grading, and vegetation removal inherent to the project has the potential to cause objectionable odors in the immediate project area. The generation of odors during the construction period would be temporary, would be consistent with odors commonly associated with typical construction equipment and activities, and would dissipate within a short distance from the active work area. The project site is almost entirely surrounded by annual cropland and rangeland and no significant long-term operational emissions or odors would be generated by the project. Therefore, impacts related to other emissions adversely affecting a substantial number of people would be less than significant

References

- San Luis Obispo County Air Pollution Control District (SLOAPCD). 2001. Clean Air Plan San Luis Obispo County. San Luis Obispo County, CA. December 2001.
- 2012a. Strategic Action Plan 2013 - 2017. San Luis Obispo, CA. November 2012.
- 2012b. CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review. San Luis Obispo, CA. April 2012.

4. Biological Resources

Regulatory Setting

In addition to CEQA, other federal and state laws apply to the biological resources identified in this report. Each of these laws is identified and discussed below.

Federal Endangered Species Act (FESA) FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and the National Marine Fisheries Service (NMFS) are charged with implementing and enforcing FESA. USFWS has authority over terrestrial and continental aquatic species, and NMFS has authority over species that spend all or part of their life cycle at sea, such as salmonids

Section 9 of FESA prohibits the unlawful “take” of any listed fish or wildlife species. Take, as defined by FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action.” The USFWS’s regulations define harm to mean “an act which actually kills or injures wildlife.” Such an act “may include “significant

habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR § 17.3). Take can be permitted under FESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

The Clean Water Act of 1972 (Section 404)

The United States does not have a federal, comprehensive law protecting wetlands. However, through the regulation of activities in “waters of the United States,” the Clean Water Act of 1972 is the main federal law used to protect wetlands. Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into “waters of the United States,” which includes traditional navigable waters, interstate waters, certain tributaries of any of these waters, and wetlands that meet these criteria or that are adjacent to any of these waters. In 1987, the USACE published a manual for the delineation wetlands, those that are regulated by Section 404, and generally defined wetlands as requiring the following three characteristics: hydrology, hydric soils, and hydrophytes (plants adapted to living in saturated soils).

The USACE also regulates activities in waters of the United States under the federal Rivers and Harbors Act. Section 10 of the Rivers and Harbors Act requires permits for any work or structures in navigable waters of the United States, including wetlands within or adjacent to these waters. Both dredging and filling are regulated activities under the Act. Navigable waters are defined as those waters that are subject to the ebb and flow of the tide, or that presently have been, or may be used for transport of interstate or foreign commerce.

The Migratory Bird Treaty Act of 1918 (MBTA)

Under the MBTA, it is unlawful to “pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.” In short, under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird or destroying an egg. The USFWS oversees implementation of the MBTA.

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The Fish and Game Commission is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code, but CDFW has interpreted “take” to include the killing of a member of a species which is the proximate result of habitat modification.

California Fish and Game Code Section 1602

Section 1602 of the California Fish and Game Code requires an entity to notify CDFG of any proposed activity that may substantially divert or obstruct the natural flow of, or substantially

change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing pavement where it may pass into any stream, river, or lake. CDFG uses the USFWS definition of wetlands when regulating these activities. The project would require Section 1602 authorization from CDFG.

Fish and Game Code Section 3503, 3503.5, and 3505

Pursuant to Fish and Game Code section 3503, it is unlawful to “take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Sections 3503.5 and 3505 provide similar protection specifically to raptors and their nests and to egrets, respectively. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW.

Species of Special Concern and Fish and Game Code Fully Protected Species

CDFW maintains lists of animal Species of Special Concern (CSSC) that serve as "watch lists." A CSSC is not subject to the take prohibitions of CESA. The CSSC are species that are declining at a rate that could result in listing under FESA or CESA and/or have historically occurred in low numbers, and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals and is intended to focus attention on the species to help avert the need for costly listing under federal and state endangered species laws. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them.

Four sections of the Fish and Game Code list 37 fully protected species (Fish and Game Code §§ 3511, 4700, 5050, and 5515). Fully protected species may generally not be taken or possessed except for scientific research. Incidental take of species that are designated as fully protected may be authorized via development of a natural community conservation plan (NCCP; Fish and Game Code § 2800 et seq.).

Environmental Setting

The project footprint encompasses the confluences and adjacent wetland and historic floodplains of Los Osos and Warden Creeks, approximately .5 miles upstream of the mouth of the Morro Bay Estuary. Los Osos Creek emanates from Clark Valley, within the San Luis Range, where the native sedimentary rock material is severely incised along much of its reach, resulting in high rates of sediment transport from eroding bed and bank material. The site is positioned in a location where sediment delivered from the Los Osos Creek watershed would naturally deposit prior to entering the Morro Bay estuary.

The historic channel and floodplain most likely consisted of a series of active channels, flood channels, and abandoned channels with backwater wetlands that spread across the entire site. The active channel was likely an ephemeral feature, shifting from one location to another based on sediment deposition, debris jams, or other obstructions. The channel system was likely braided, hydraulically very rough, and sandy. This type of channel and floodplain form was historically not unique throughout the region, although much of this habitat type was impacted by development of

agriculture. Despite these conditions, aquatic species such as steelhead persist, although the lower gradient lowland valley was likely a migration reach between upstream spawning and rearing habitat and the productive estuarine habitat that existed in tidally-influenced areas.

The project will enhance and restore palustrine emergent, forested, and forested/scrub-shrub wetland types, identified in the table below. The palustrine wetland occupying the bulk of the parcel is maturing into a gallery riparian forest with a tall overhead canopy (50-70 feet) of cottonwoods, red willow, Sitka willow, and arroyo willow. Very little undergrowth is present under the high overhead canopy with occasional patches of emergent marsh plants. The shaded sandy banks of the central channel provide attractive habitat for the re-introduction of federally and state endangered marsh sandwort (*Arenaria palucicola*). Marsh sandwort has been successfully reintroduced in moist sand banks at Morro Coast Audubon Society’s Sweet Springs Preserve in Los Osos, where the habitat of high overhead canopy and moist sandy substrate is similar to the project area.

Summary of Wetlands Enhanced or Restored		
Habitat type	No. of acres	Percentage of total
Total declining coastal wetlands to be enhanced	39.29	69%
Total declining coastal wetlands to be restored	.76	.01%
Total declining coastal wetlands enhanced / restored	40.05	70%
Sub-categories of Declining Wetlands Enhanced or Restored		
Total Palustrine wetlands	40.05	
Emergent wetlands		5.8
Forested wetlands		9.4
Scrub-shrub wetlands		0
Forested/Scrub-shrub wetlands		2.3
Scrub-shrub/Forested wetlands		23.95
Summary of Upland Dune Habitat		
Total Area	16.4	
Total upland dune habitat restored	16.4	
Total acreage Enhanced/Restored (wetland and upland)		56.9

Special-Status Species

Special-status species are those plants and animals that are legally protected or otherwise recognized as vulnerable to habitat loss or population decline by federal, state, or local resource conservation agencies and organizations. In this analysis, special-status species include:

- Species that are state and/or federally listed or proposed for listing as threatened or endangered
- Species considered as candidates for listing as threatened or endangered
- CDFW Species of Special Concern
- Fully protected species per California Fish and Game Code
- Plants considered by the California Native Plant Society (CNPS) and CDFW to be rare, threatened, or endangered [California rare plant ranked, (CRPR); e.g. CRPR 1B]

A list of those special-status species that have potential to occur in the project area is presented below. A comprehensive list of special status species is included in Appendix D.

- South-Central Steelhead (*Oncorhynchus mykiss irideus*), federally threatened
- California red-legged frog (*Rana draytonii*), federally threatened
- Tidewater goby (*Eucyclogobius newberryi*), federally endangered
- Marsh sandwort (*Arenaria paludicola*), federally threatened
- Morro Manzanita (*Arctostaphylos morroensis*), federally endangered
- Morro Shoulderband snail (*Helminthoglypta walkeriana*), federally endangered

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native			X	

resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Conclusions

The project will have less than significant impacts on Biological Resources with mitigation. The project is designed to be protective of sensitive species and to restore and enhance habitat essential to those species. Avoidance and mitigation measures are discussed above in section I of this MND and listed below.

The project will have less than significant impacts with mitigation, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service including the interference of any native resident or migratory fish or wildlife species. The project mitigates and avoids impacts on all listed species identified as a candidate, sensitive, or special status in the following ways:

Steelhead

The Project contains over 0.5 miles of stream, which is immediately adjacent to the Morro Bay Estuary - a critical migratory corridor for steelhead trout. Multiple life stages of steelhead have been observed within the project reach. Replacing 3 perched culverts with a rocked ford crossing will remove a barrier to fish passage on Warden creek, improving fish passage and habitat. The following mitigation and avoidance measures will be in place:

- B-1. Work shall not begin until a) the NOAA RC and/or Corps has notified the permittee that the requirements of the ESA and Clean Water Act have been satisfied and that the activity is authorized and b) all other necessary permits and authorizations are finalized.

- B-2. The general construction season shall be from June 1 to November 30. Restoration, construction, fish relocation and dewatering activities within any wetted or flowing stream channel shall occur only within this period. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.

B-3. Prior to construction, the land manager and each contractor shall be provided with the specific protective measures to be followed during implementation of the project.

B-4. If the thalweg of the stream has been altered due to construction activities, efforts shall be undertaken to reestablish it to its original configuration.

B-5. In those specific cases where it is deemed necessary to work in a flowing stream/creek, the work area shall be isolated and all the flowing water shall be temporarily diverted around the work site to maintain downstream flows during construction.

B-6. Exclude fish from reentering the work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8-inch diameter.

B-7. Prior to dewatering, determine the best means to bypass flow through the work area to minimize disturbance to the channel and avoid direct mortality of fish and other aquatic vertebrates (as described more fully below under General Conditions for Fish Capture and Relocation). Bypass stream flow around the work area, but maintain the stream flow to channel below the construction site.

B-8. Coordinate project site dewatering with a qualified biologist to perform fish and amphibian relocation activities.

B-9. Prior to dewatering a construction site, qualified individuals will capture and relocate fish and amphibians to avoid direct mortality and minimize take. This is especially important if listed species are present within the project site.

B-10. When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that will allow flow to resume with the least disturbance to the substrate. Cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than one inch per hour. This will minimize the risk of beaching and stranding of fish as the area upstream becomes dewatered.

B-11. Fish relocation and dewatering activities shall only occur between June 1 and November 30 of each year. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.

B-12. A qualified fisheries biologist shall perform all seining, electrofishing, and fish relocation activities.

B-13. All electrofishing will be conducted according to NMFS' Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS 2000), including modifications for South Central and Southern California streams

- B-14. A minimum of three passes with the seine shall be utilized to ensure maximum capture probability of steelhead within the area.
- B-15. All captured fish shall be processed and released prior to each subsequent pass with the seine.
- B-16. The seine mesh shall be adequately sized to ensure fish are not gilled during capture and relocation activities.
- B-17. Fish shall not be overcrowded into buckets, allowing no more than 150 0+ fish (approximately six cubic inches per 0+ individuals) per 5-gallon bucket and fewer individuals per bucket for larger/older fish.
- B-18. Every effort shall be made not to mix 0+ steelhead with larger steelhead, or other potential predators, that may consume the smaller steelhead. Have at least two containers and segregate young-of-year (0+) fish from larger age-classes. Place larger amphibians in the container with larger fish.
- B-19. Salmonid predators, including other fishes and amphibians, collected and relocated during electrofishing or seining activities shall not be relocated so as to concentrate them in one area.
- B-20. All captured steelhead shall be relocated, preferably upstream, of the proposed construction project and placed in suitable habitat. Captured fish shall be placed into a pool, preferably with a depth of greater than two feet with available instream cover.
- B-21. Minimize handling of steelhead. However, when handling is necessary, always wet hands or nets prior to touching fish. Handlers will not wear insect repellants containing the chemical N,N-Diethyl-meta-toluamide (DEET).
- B-22. If more than 3 percent of the steelhead captured are killed or injured, the project permittee shall contact NMFS and CDFW.

California Red-legged Frog

Surveys conducted in the Project area found presence of California red-legged frogs (CRLF). The USFWS programmatic biological opinion (BO) for CRLF will be applied to this project. The mitigation and avoidance measures included in the BO are listed below:

- A-1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.
- A-2. Ground disturbance would not begin until written approval is received from the Service that project biologist(s) are qualified to conduct the work.

A-3. A Service-approved biologist would survey the project site no more than 48 hours before the onset of work activities.

A-4. Before any activities begin on a project, a Service-approved biologist would conduct a training session for all construction personnel.

A-5. A Service-approved biologist will be present at the work site until all ground-disturbing activities are completed. After this time, the Service-approved biologist will monitor the project area for compliance with all avoidance and minimization measures, or the Service-approved biologist will designate a person to monitor the project area for compliance with all avoidance and minimization measures if the Service-approved biologist will not be present. The Service-approved biologist will ensure that this monitor receives sufficient training in the identification of California red-legged frogs. The designated monitor must have experience and a background in natural resources. The Service-approved biologist or designated monitor will be given full authority to stop work if the avoidance and minimization measures are not being followed. If work is stopped, the Service will be notified immediately.

A-6. If work must occur during the breeding season, the project proponent would implement the following measures as well:

a. No work would occur during or 24 hours after any rain event to minimize impacts to dispersing and breeding California red-legged frogs. A rain event is considered any precipitation resulting in 0.2" or greater of precipitation. A Service-approved biologist would survey the project site immediately before resuming project activities.

b. The project proponent would conduct project activities no earlier than 30 minutes after sunrise and no later than 30 minutes before sunset each day.

c. The project proponent would survey the project area daily before activities begin and monitor all project activities using a Service-approved biologist

A-7. Unless approved by the Service, the project proponent would not impound water in the course of project activities in a manner that may attract California red-legged frogs.

A-8. A Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs (*Rana catesbeiana*), signal and red swamp crayfish (*Pacifastacus leniusculus*; *Procambarus clarkii*), and centrarchid fishes from the project area, to the maximum extent possible. The Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

A-9. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the biologists would follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force at all times.

Previous surveys for Marsh Sandwort identified individuals in the project area. Surveys will be conducted prior to construction and individual sandwort plants will be flagged and avoided. The USFWS has identified the project area as a priority location for a pilot out planting location. Field staff will develop planting plots and monitor out planting success once the project is complete. The Project includes avoidance and minimization measures, discussed above and listed below, that would ensure that listed plant species would not be harmed by project activities.

C-1. A qualified botanist will conduct a pre-construction survey to confirm absence of marsh sandwort and Gambel's watercress prior to commencing ground disturbance activities in the project area. If the plants are found during pre-construction surveys, including any Gambel's watercress hybrids, the botanist will flag the area and inform all workers of the need to stay out of the flagged area.

C-2. Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will conduct a training session for all personnel. At a minimum, the training will include a description of relevant plants and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel.

Morro shoulderband snail

The project will restore fragmented coastal scrub habitat, a primary cause of species decline, in order to extend a habitat corridor for Morro Shoulderband snail habitat identified in the Morro shoulderband recovery plan. The following mitigation and avoidance measures, also listed above in section I of this MND will be in place:

E-1. Only biologists approved by the Ventura Fish and Wildlife Office may conduct *any* activities related to Morro shoulderband snails. The possession of a section 10(a)(1)(A) permit does not take the place of the required approval.

E-2. Prior to any site disturbance (e.g. vegetation removal, grading), an approved biologist will develop and deliver training to all project-related personnel.

E-3. Construction areas will be clearly marked with high-visibility flagging or barrier fencing. Construction equipment and personnel will be restricted to areas within the marked areas.

E-4. Prior to the start of any site disturbance activities an approved biologist will conduct surveys for Morro shoulderband snail.

E-5. An approved permitted biologist will be present daily during the site preparation (e.g. vegetation removal, ground-disturbance, grading) to monitor for the presence of Morro shoulderband snail. Any live individuals of any life stage detected during these monitoring events will be captured and moved out of harm's way or relocated to a Service-approved site by the biologist.

E-6. The Federal Action Agency should encourage the Permittee to collect information on the survival of Morro shoulderband snails captured and relocated as part of this project in order to provide an understanding of the efficacy of this practice as a minimization measure.

E-7. The Federal Action Agency should encourage the Permittee to prepare and seek publication of an article describing all of those habitat types or conditions in which Morro shoulderband snails are found during the course of the project to provide a greater understanding of the species.

Morro Manzanita

Morro Manzanita specimens have historically occurred adjacent to the project area on property owned by State Parks. As part of the upland restoration component, RCD staff will collect seeds, propagate, and plant seedlings from the adjacent property to increase the density of this listed species.

Tidewater Goby

According to USFWS surveys, Tidewater Goby have been observed within the project reach. Levee breaching will create backwater habitat that benefits the species, protecting existing breeding, foraging, and refuge habitat and restoring the natural stream channel and floodplain. Removal of culverts on Warden creek will also benefit the species by improving fish passage. The project includes avoidance and minimization measures, discussed above, that would ensure that Tidewater Goby would not be harmed by project activities.

The project will have less than significant effects with mitigation on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Project activities will minimize impacts on wetlands and riparian areas by conducting the majority of work from the access road. No wetlands or other waters of the U.S. would be permanently lost; temporary impacts would occur during the removal of culverts and construction of the rocked ford crossing, as well as during the levee breaching. Activities and all impacts will be mitigated for in the AMM, listed below and discussed above in Section I.

The project will have less than significant impacts with mitigation to federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Project activities include breaching a levee adjacent to wetlands, allowing a channelized creek to reconnect to historic floodplain and wetland, thus enhancing the wetland function. Equipment will breach the levee from the opposite bank, avoiding impacts to the wetland from equipment. Levee material will be relocated to the upland portion of the property, so no 'fill' will be left in the wetland. No material will be directly removed from or shifted in the wetland as part of this project resulting in hydrological interruption. Activities and all impacts will be mitigated for in the AMM, listed below and discussed above in Section I.

D-1. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable.

D-2. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project

D-3. Construction will occur between June 1 and November 30. Revegetation activities, including soil preparation, may extend beyond November 30, if necessary, to better ensure successful plant establishment during the onset of winter precipitation.

D-4. Debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/ concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State.

D-5. Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric. No mechanized equipment (e.g. internal combustion hand tools) will enter wetted channels.

D-6. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires crossing a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle

D-7. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).

D-9. Prior to use, clean all equipment to remove external oil, grease, dirt, or mud. Wash sites must be located in upland locations so wash water does not flow into the stream channel or adjacent wetlands.

D-10. All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings.

D-11. To minimize further disturbance to the work area, crew size will be limited, and number of vehicles and equipment to the maximum extent feasible.

D-12. Removal of any vegetation will be minimized to the extent feasible.

D-13. Depending on determinations made by the ACOE, compensatory mitigation will be completed at the requisite ratio to impacts.

D-14. No fill or dredge material will be placed within a designated wetland

The project will have less than significant impacts with mitigation on the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Warden and Los Osos creeks will be temporarily de-watered during construction. Flows will be diverted in such a way that is protective of steelhead and other aquatic species. Biological surveys for steelhead and CRLF will be conducted prior to construction, and individuals will be relocated to pre identified locations by FWS-certified biologists. Monitors will be on-site daily during construction and will continue to relocate individuals as needed.

The project will not conflict with, and is aligned with local policies and ordinances protecting biological resources. There are no local tree preservation policies or ordinances in the area.

The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. A Habitat Conservation Plan (HCP) for Morro shoulderband snails was recently adopted for the community of Los Osos however the project area is not included in the HCP and therefore not subject to regulations included in the HCP. The project is aligned with the Estero Area Plan and Local Coastal Plan.

References

- California Natural Diversity Database. <https://map.dfg.ca.gov/bios/?tool=cnddbQuick>
- USFWS study, 2019
- Estero Area Plan, January 2009
- Coastal Zone Land Use Ordinance, Title 23

5. Cultural Resources

The Morro Bay watershed, and Los Osos valley are known for their rich cultural history. Many prehistoric archaeological sites and artifacts have been documented around the project area. Creeks are a focal area of concern for the purposes of cultural resource sensitivity due to the pre-history and historical activity that occurred along and extending from creeks. A study of the project area was conducted by Applied Earthworks in August 2020 that satisfied both CEQA and NEPA (Section 106) requirements. The study evaluated the man-made structures on the property, including the homestead, barn, shed and levees, and found that none of them are eligible for registration under the National Registry for Historic Places (NRHP) or the California Registry of Historic Resources (CRHR), based on extensive review criteria. The survey referenced the California Historical resources Information System (CHRIS) and Native American Heritage Commission (NAHC) for a Sacred Lands File Search and Native American Contact List. The CHRIS search indicated that 7 surveys had been conducted nearby, recording Native American cultural resources of significance. The surveys

indicate that one previously identified archaeological site in particular, CA-SLO-31, extends into the western boundary of the project area. The findings report associated with the AE survey considers each of the proposed project components and prescribed an Assessment of Effects of each of those activities. CSLRCD and AE have coordinated to reduce the ground disturbing impacts of project components in order to minimize effects to cultural resources. The remaining impacts will be mitigated for. Informal consultation with the local Native American tribes, identified by the Native American Contact List, was initiated, and one tribe responded. RCD staff will consult with that tribe.

A survey of the wetland portion of the project area was surveyed in August 2016 when the property was acquired by the RCD and recorded under the Wetland Reserve Program. The CHRIS search indicated that while 4 surveys had been conducted nearby, no surveys had been completed on the wetland portion of the property. Letters were sent to interested parties as identified by the NAHC, however no replies were received. The surveyor conducted a ground survey using 10m transects and determined that no new resources were identified and that planned activities in the wetland area would not impact resources previously identified by other surveys.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Disturb pre-historic resources?		X		
Disturb historic resources?			X	
Disturb paleontological resources?				X
Disturb any human remains, including those interred outside of formal cemeteries?		X		

Conclusion

The Project will have less than significant impacts on Cultural Resources with mitigation measures listed below will be in place:

CR-1. Avoidance. If feasible, avoidance of direct impacts is the preferred measure for mitigating effects on NRHP/CRHR-eligible archaeological sites.

CR-2. Fill. If direct disturbance of the resources cannot be avoided, placement of chemically neutral, nonreactive fill on top of CA-SLO-31 on the knoll, rather than cutting into the cultural deposits, is another treatment option to avoid direct impacts.

CR-3. For all ground disturbing construction activities, the applicant shall retain a county-approved archaeologist to monitor these activities. The applicant shall install any necessary protective field measures, as directed by the archaeologist, and shall keep them in good working order during construction. Upon discovery, the applicant shall take immediate remedial actions should corrective actions be needed. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity of the resource until such time as the resources can be evaluated by an archaeologist and any other appropriate individuals.

CR-4. If buried cultural materials are discovered by archaeologists or construction personnel, work in the immediate area of the find would be diverted until the discovery is evaluated and any necessary plans are developed for treatment of the find(s) or mitigation of adverse effects.

CR-5 If it becomes impossible to implement the project at a worksite without disturbing cultural or paleontological resources, then activity at that worksite shall be discontinued.

The project will have less than significant impacts on pre-historic resources with mitigation. Based on the finding detailed above, pre-historic resources exist in the project area. Avoidance and mitigation measures, listed above, will be in place. Informal consultation with local Native American tribes was initiated, and project staff will work with those representatives to ensure that avoidance and minimization measures are acceptable. Efforts will be made to avoid or minimize ground disturbance where possible, and a tribal cultural resource specialist may be monitoring during all phases of construction.

The project will have less than significant impact on historic resources. Based on the finding detailed above, all identified structures in the project area are considered non-historic. In the event that an historic resource is discovered during construction, appropriate measures will be taken, including halting work until an archaeologist can review the discovery.

The project will have less than significant impact on paleontological resources. Based on the finding detailed above, no paleontological resources are anticipated to be discovered in the project area. In the event that an historic resource is discovered during construction, appropriate measures will be taken, including halting work until an archaeologist can review the discovery.

The project will have less than significant impacts on human remains, including those interred outside of formal cemeteries with mitigation. Based on the finding detailed above, pre-historic resources exist in the project area, however no human remains were identified. In the event that human remains are unearthed or discovered during any construction activities, construction should immediately stop. Construction activities shall not commence until a qualified professional

archaeologist reviews the site. If required an approved archaeologist may be monitoring during all phases of construction.

References

- Applied Earthworks Cultural Resources Survey and Report.
- NRCS Cultural Resources Inventory Report

6. Geology and Soils

The project area is located in the Morro Bay watershed, at the mouth of the Los Osos valley. The watershed consists of a mix of igneous, metamorphic, and sedimentary rock that is part of the Franciscan mélange, a rock unit composed of a mix of rock types brought together by warping, pressure, and tectonism occurring at the plate boundary. Also prominent in the watershed are the “Morros”, a line of peaks composed of hard, igneous rocks, formed 25 million years ago as volcanic plugs intruded into softer overlying rocks. It is this line of peaks that separates the Chorro drainage from the Los Osos drainage. The highest elevation in the watershed is 2,763 feet on Tassajara Peak in the Santa Lucia Mountains. The landscape consists of flat alluvial valleys confined by steep, highly eroding mountains. Typically, shallow soils occur on the hillslopes in the mountainous areas of the watershed with very little capacity to hold water. Conversely, the flat alluvial valleys have deep, well-developed soils that hold significant quantities of groundwater. Land uses in the watershed are closely linked to these landscape characteristics. The flat alluvial valleys adjacent to the stream’s channels have been historically dominated by agricultural uses. Recently, and in the future, these areas may become the primary land used for expansion of the suburban communities.

According to the USDA soil survey data, the project area consists primarily of sandy clay loam located in the historic floodplain and wetland, characterized by 0-2% slopes, originating from alluvium. The natural drainage rating is considered somewhat poor, and ponding is infrequent. The soils do not meet hydric criteria; however, the USFWS wetland mapper considered this area a freshwater forested wetland. The farmland adjacent to the Lake and Creek consists of Camarillo Loam and Corralito’s Sandy Loam, characterized by alluvial fans and floodplains, and part of the R014XD025CA coarse loamy flat ecological site.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other				X

similar hazards?				
Be within a CA Dept. of Mines & Geology Earthquake Fault Zone (formerly Alquist Priolo)?				X
Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation or fill?			X	
Change rates of soil absorption, or amount or direction of surface runoff?			X	
Include structures located on expansive soils?				X
Change the drainage patterns where substantial on-or off-site sedimentation/ erosion or flooding may occur?		X		

Conclusion

The Project will have less than significant impacts on soil erosion and drainage with mitigation. Implementation of this project will not expose people or structures to potential substantial adverse effects due to landslides or earthquakes and is not located within a CA Dept. of Mines & Geology Earthquake Fault Zone. This project includes the implementation of erosion control structures and therefore will not result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation or fill, rates of soil absorption, or amount or direction of surface runoff. Breaching the levee, removing the breached culverts, and installing a rocked ford crossing will prevent future flooding on adjacent farmland. The project area is on stable soils that will not become unstable, slide laterally, subside, liquify, collapse or expand.

Avoidance and Mitigation measures, listed below and discussed in Section I of this MND, will be in place to mitigate on-or off-site sedimentation, erosion or flooding

<p>Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.</p> <p>Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input</p>
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exists.

Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.

Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.

Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.

Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.

Sed-7. All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.

Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.

Sed-9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.

References

- USDA Web Soil Survey, <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- SLO Watershed Project: <http://slowatershedproject.org/watersheds/morro-bay/>
- Earthquake assessment map: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

7. Hazards and Hazardous Materials

Restoration components included in the project include removal and demolition of a homestead site and associated infrastructure on the upland portion of the property. An Environmental Site Assessment was completed in 2014 that documented findings on the site related to hazardous materials.

- A remediated methamphetamine operation in the homestead had been remediated and certified by the CCRWQCB that no remnant hazardous materials remain from that operation.
- No pesticide or fertilizer containers, residues, or odors were identified on the property
- Several small areas of darkened stained soil on the dirt floor of the barn that may represent motor oil or hydraulic fluid'. The assessment recommends addressing the stained soil during demolition of the barn, and notes that it is not considered to present a material risk to human health.
- Three abandoned cars were located on the property, partially buried in the dense vegetation and roots along the creek bank. The ESA considers the vehicles to be improper disposal of solid waste and could also impact surface water quality due to leakage or leaching of automotive chemicals. Removal of the vehicles is a component of the restoration project.
- The Geotracker database identified the closed Los Osos Landfill located approximately 0.3 miles east of the Property. Although VOC-impacted groundwater is present beneath the closed landfill, ongoing landfill gas extraction and current sentry monitoring well locations indicate that the groundwater plume is stable and does not threaten the Property. The closed landfill is not considered to represent a hazardous concern.

Additionally, an asbestos assessment was completed on the homestead structures in 2015. Materials containing asbestos were found in 2 locations in the homestead structure, including in the entryway walls and top layer of roofing shingles. Removal and disposal of these materials is a component of this restoration project.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Be located on a site which is included on a				X

list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Conclusion

The project will not routinely transport, use, or dispose of hazardous materials and therefore will not create a significant hazard to the public or the environment. Proper safety precautions will be put in place to ensure that no hazardous materials are released into the environment creating significant hazard to the public or the environment. Safety protocol for asbestos removal and disposal and soil remediation are included in Appendix D. There are no proposed or existing schools within .25 miles of the project area (SLO Co, 2020). The project area is not located on a site which is included on a list of hazardous materials sites (Stantec, 2014). The project is not located within an airport land use plan, within 2miles of a public airport, or in the vicinity of a private airstrip (SLO Co, 2020). The project is entirely within private property and will not impair or interfere with an emergency response or evacuation plan. The project will increase wetland habitat and remove abandoned wood structures; therefore, the project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

References

- <https://www.sloairport.com/airport-land-use-commission-aluc/>
- Stantec, Phase I Environmental Site Assessment, 1951 Turri Rd. 2014

8. Hydrology + Water Quality

The project area encompasses reaches of Los Osos and Warden Creeks. Both creeks have been channelized in levees built in the early 1970s to protect farmland from flooding. Prior to channelization and agricultural cultivation, the project area was the historic floodplain for both creeks. Agricultural cultivation ceased on the property in the mid-1990s, and the objective of this restoration project is to reestablish those historic floodplains. Restoration activities include breaching portions of the levee and removing 2 perched culverts, which will allow Los Osos creek to regain its natural hydrology and braided channel through the floodplain.

Water quality in Morro Bay and its tributaries are listed as impaired for sediment and the CCRWQCB adopted a TMDL for sediment for the watershed in 2002. The restoration activities that will be undertaken during this project will improve water quality by encouraging sediment deposition in the floodplain rather than in the bay. Enhanced wetland function will also filter out other pollutants from upstream activities such as pesticides, nutrients, and nitrates.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Violate any water quality standards or waste discharge requirements?		X		
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
Otherwise substantially degrade water quality?				X
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
Inundation by seiche, tsunami, or mudflow?				X

Conclusion

The Project will have less than significant impacts on water quality with mitigation. By implementing protection measures, installing sediment control structures, and conducting regular water quality monitoring during and after construction the project will not violate water quality standards or waste discharge requirements, nor will it substantially degrade water quality. Water quality protection measures are discussed above in section I and will be documented in the 401 Water Quality Certification for this project. Avoidance and mitigation measures listed below will be in place.

<p>Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.</p> <p>Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.</p> <p>Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.</p> <p>Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the</p>

right-of-way or enters the stream network or an aquatic resource area.

Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.

Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.

Sed-7. All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.

Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.

Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.

The project addresses only surface flows directly. The Los Osos Groundwater Basin plan specifically identifies and supports the protection and restoration of wetland and open space areas such as the project area because they decrease the potential for development and further groundwater drawdown. The project will not impact groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The project will implement sediment control structures, reducing sedimentation and erosion both from short-term construction activities and long-term climate and agriculture impacts. Sediment control measures are listed above and discussed in section I.

The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. The project will breach levees and allow the creeks to reestablish historic floodplain, which will reduce erosion and siltation off-site.

No storm drain infrastructure exists in the project sites; therefore, the project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The nearest inhabited residential structures are approximately .25 miles from project area and project activities will not expose people or structures to a significant risk of loss, injury or death. The project will not implement levees or dams, or otherwise increase risk of Inundation by seiche, tsunami, or mudflow.

References

- <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Maps/Hazard-Maps/Dam-Failure-Inundation-Areas-Map.aspx>

- Updated Basin Plan for The Los Osos Groundwater Basin January 2015

9. Land Use and Planning

The project area is zoned agricultural although it has been under a wetland reserve and conservation easement and has not been cultivated since the mid 1990's. Project activities are aligned with the conservation easement agreement. The project is located in the Coastal Zone, and is consistent with the Local Coastal Plan, certified by the California Coastal Commission. The project site is under the jurisdiction of several land use agencies that require permits, authorizations or certifications including the USACE (Nationwide Permit), the RWQCB (404 Certification), San Luis Obispo County (Coastal Development Permit), and CDFW (Streambed Alteration Agreement).

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Physically divide an established community?				X
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Conclusion

The Project will have no impact on Land Use and Planning. The Project is not in or near a community, therefore it will not physically divide an established community. The project is aligned with the Local Coastal Plan and does not conflict with policies adopted for the purpose of avoiding or mitigating an environmental effect. Permits will be secured for the project to ensure compliance with the Local Coastal Plan.

References

- California Coastal Commission (CCC). Coastal Development Permit Amendment 4-82-300-A5, issued May 2001.

- San Luis Obispo County. 2009. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. Revised January 2009.

10. Mineral Resources

The project will maintain the intended zoned use of the land.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Conclusion

The Project will have no impact on Mineral resources. No locally important mineral resources are designated at this site in the San Luis Obispo County General Plan. The Project would not affect any known mineral resources of regional or local importance.

References

- San Luis Obispo County. 2009. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. Revised January 2009

11. Noise

The County’s Land Use Ordinance identifies maximum exterior noise standards as between 45 – 70 db. Noise sources associated with open space uses as listed in Section 22.06.030. Noise produced by the project will be temporary and related to equipment and are similar to other existing noise sources of the surrounding agricultural land use.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Would the Project Result in:				
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Conclusion

Noise generated by the project will have less than significant impacts. Noise levels and ground borne noise levels will not be generated in excess of standards established in the local general plan or noise ordinance. Temporary or periodic increase in ambient noise levels in the project vicinity will be limited to avoid impacts to nesting and mating bird seasons. All field crew will have appropriate ear protection. The Project is not located within the vicinity of an airport land use plan.

Resources

- Estero Area Plan, 2009

12. Population and Housing

The Project does not include a housing component. The Project site is located approximately 2 miles from the community of Los Osos and approximately 4.25 miles from the city of Morro Bay. The Morro Dunes Preserve State Park is adjacent to the project area to the South West and is open

to limited public day use access. Other surrounding properties are used for agricultural cultivation and livestock grazing.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project Result in:				
Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Conclusion

The Project will have no impact on Housing or Populations. This project will not significantly impact populations or housing. The project will not induce substantial population growth, displace substantial numbers of existing housing, or displace substantial numbers of people.

Resources

- Estero Area Plan, 2009

13. Public Services

Implementation of this project will not substantially impact any government facilities or require the expansion of government services.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project Result in:				

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Parks, or Other public facilities?				X
--	--	--	--	---

Conclusion

Implementation of this project will not substantially impact any government facilities or require the expansion of government services.

References

- Estero Area Plan, 2009

14. Recreation

The project is for habitat conservation and does not include a recreation component.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Conclusion

The Project has no impact on recreation. The Project is not associated with recreational facilities and will have no impact on other regional parks. The Project scope does not include construction or expansion of recreational facilities.

References

- Estero Area Plan, 2009

15. Transportation/Traffic

The project is for habitat conservation and will not increase traffic. It is accessed by a private dirt road off of Turri Road. Traffic in this area is related to agricultural and residential land uses of the adjacent properties.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
Result in inadequate emergency access?				X
Result in inadequate parking capacity?				X

Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
---	--	--	--	---

Conclusion

The Project will have no impact on transportation. All motor vehicle activity associated with the project will occur on an interior dirt road and staging areas, with the exception of the initial mobilization and demobilization of equipment. Therefore, the project will not increase traffic, exceed a level of service standard established by the county, change in air traffic patterns, impact emergency access or parking. No plans for alternative transportation are in place in the area.

References

- Estero Area Plan, 2009

16. Utilities and Service Systems

The Project will not constrict or expand public utilities or services.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X

Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
Comply with federal, state, and local statutes and regulations related to solid waste?				x

Conclusion

The Project will have no impact on utilities and service systems. The project does not involve use of or changes to water or wastewater utilities. No water uses are proposed that would exceed wastewater treatment requirements. The project would not require construction of new or expanded water or wastewater treatment facilities. This project would not affect storm water drainage or facilities. No new water supplies or entitlements would be needed; there would be no expansion of existing water use associated with this project. The project would not result in new housing or businesses that would require permanent year-round garbage collection. Waste associated with project construction would be collected and disposed of properly by contractors. All waste collection and disposal would occur compliance with all federal, state, and local laws and statutes.

References

- Estero Area Plan, 2009

Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of		X		

a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Conclusion

The project includes many avoidance and minimization measures that are discussed above in section I. These measures are in place to ensure that the project will minimize and avoid the substantial degradation of the quality of the environment, significantly impact fish or wildlife species or their habitat, adversely affect plant or animal communities, or affect historic or other cultural resources. Avoidance and mitigation measures are also in place to limit cumulatively considerable impacts associated with construction and post construction. Construction activities associated with the proposed project would be very short-term in duration. The project would not have environmental effects that would cause substantial adverse effects on humans, either directly or indirectly.

IV. References

- Applied Earthworks Cultural Resources Survey and Report. 2020.
- California Coastal Commission (CCC). Coastal Development Permit Amendment 4-82-300-A5. 2001.
- California Department of Conservation: Important Farmland Finder,
<https://maps.conservation.ca.gov/DLRP/CIFF/>
- California Department of Transportation (Caltrans). California Scenic Highway Mapping System. Officially Designated Scenic Highway Routes. 2017.
<https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>
- California Natural Diversity Database. <https://map.dfg.ca.gov/bios/?tool=cnddbQuick>
- CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review. 2012.
- Central Coast Regional Water Quality Control Board, Total Maximum Daily Load for Sediment in Morro Bay watershed, 2002.
- Earthquake assessment map: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>
- Estero Area Plan. 2009
- J Dvorsky. Steelhead Restoration Planning Project for the Morro Bay Watershed. 2003
- Morro Bay National Estuary Program. Turning the Tide for Morro Bay: Comprehensive and Conservation Management Plan for Morro Bay. 2000
- NRCS Cultural Resources Inventory Report for 1951 Turri Road Wetland Reserve Program Easement. 2015
- San Luis Obispo County Air Pollution Control District (SLOAPCD). Clean Air Plan San Luis Obispo County. 2001.
- San Luis Obispo County. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. 2009.
- San Luis Obispo County Flood control Map: <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Maps/Hazard-Maps/Dam-Failure-Inundation-Areas-Map.aspx>
- San Luis Obispo County. Habitat Conservation Plan for Morro shoulderband snail, 2020
- San Luis Obispo County. Title 23: Coastal Zone Land Use Ordinance, 2019
- SLO Watershed Project: <http://slowatershedproject.org/watersheds/morro-bay/>

Stantec, Phase I Environmental Site Assessment, 1951 Turri Rd. 2014

Strategic Action Plan 2013 - 2017. San Luis Obispo, CA. November 2012.

Tetra Tech, Inc. Morro Bay Estuary Program Sediment Loading Study. 199

Updated Basin Plan For The Los Osos Groundwater Basin, 2015.

U.S. Department of Agriculture, Soil Conservation Service, Erosion and Sediment Study of the Morro Bay Watershed, 1989.

U.S. Department of Agriculture Web Soil Survey,
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

U.S. Fish & Wildlife Service, Morro Shoulderband Snail: Study Of Mss Populations And Habitat Associations For Nine Conserved Parcels. 2019

Tetra Tech, Inc. Morro Bay Estuary Program Sediment Loading Study. 1998

V. Appendices

Appendix A: Project Maps + Photos

1. Vicinity Map



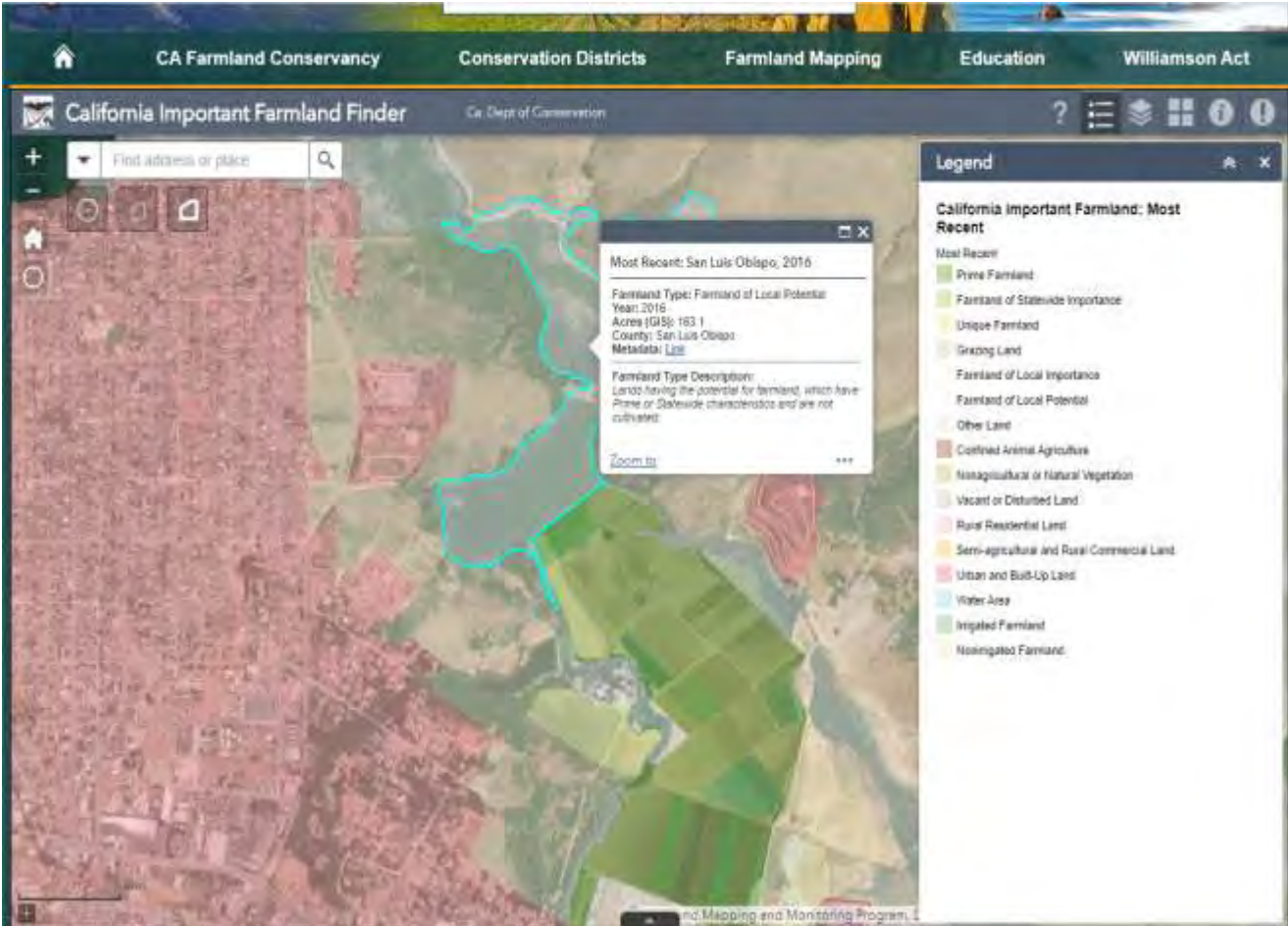
2. Location Map



3. USFWS Wetland Map



4. Prime Farmland



5. Soils Map



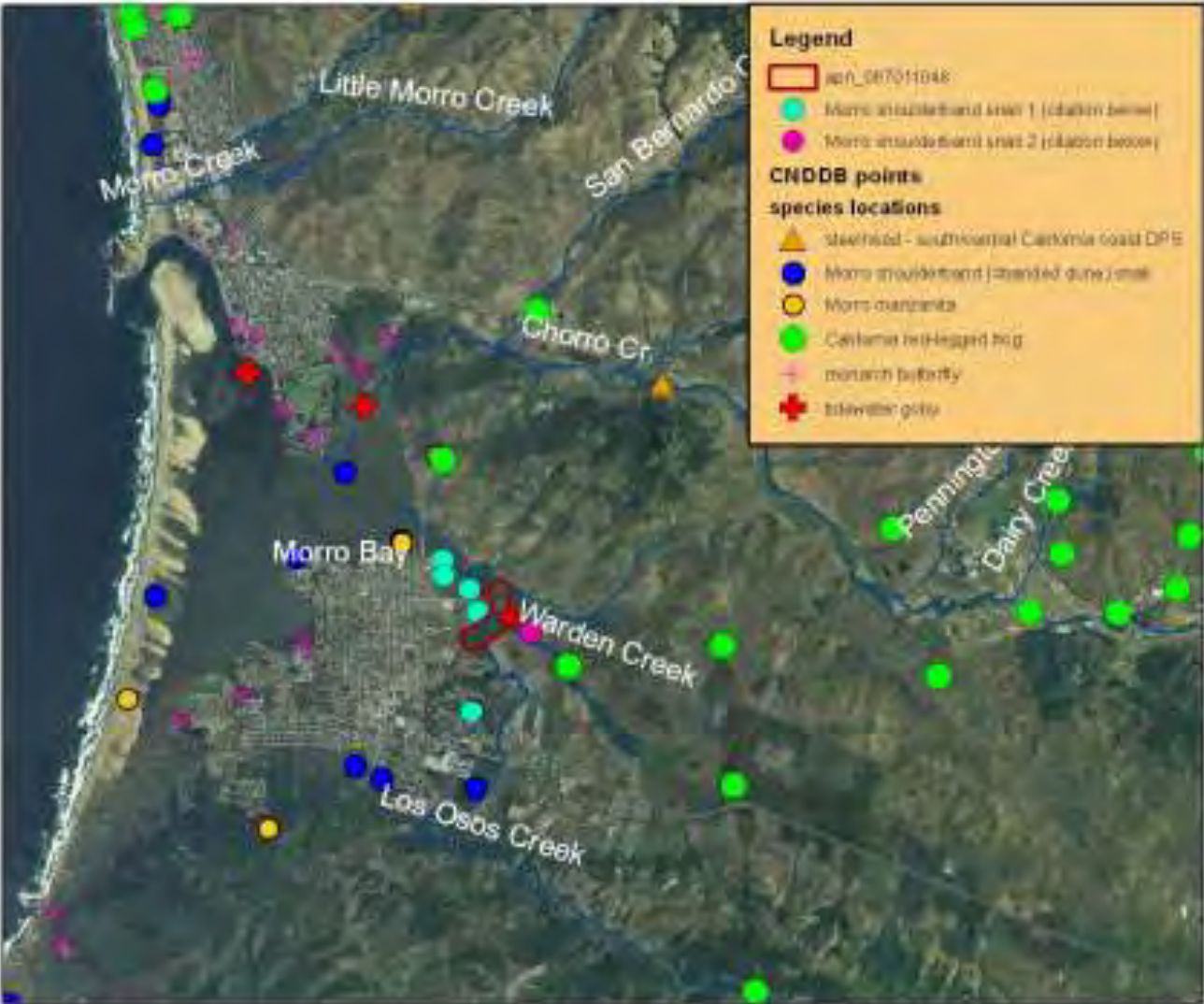
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101	Aquatic saline	1.0	1.0%
104	Baywood fine sand, 2 to 9 percent slopes	33.4	18.3%
105	Baywood fine sand, 9 to 15 percent slopes	26.7	14.6%
110	Briosa-Tierra complex, 15 to 50 percent slopes	11.8	6.5%
126	Corralles variant loamy sand	24.5	13.4%
131	Diablo and Ocho rays, 15 to 30 percent slopes	1.5	0.7%
159	Los Osos Item, 9 to 15 percent slopes	0.8	0.4%
168	Marine sandy clay loam, occasionally flooded	79.0	43.7%
197	Sallinas silty clay loam, 0 to 2 percent slopes, ML RA 14	2.8	1.4%
Totals for Area of Interest		182.7	100.0%

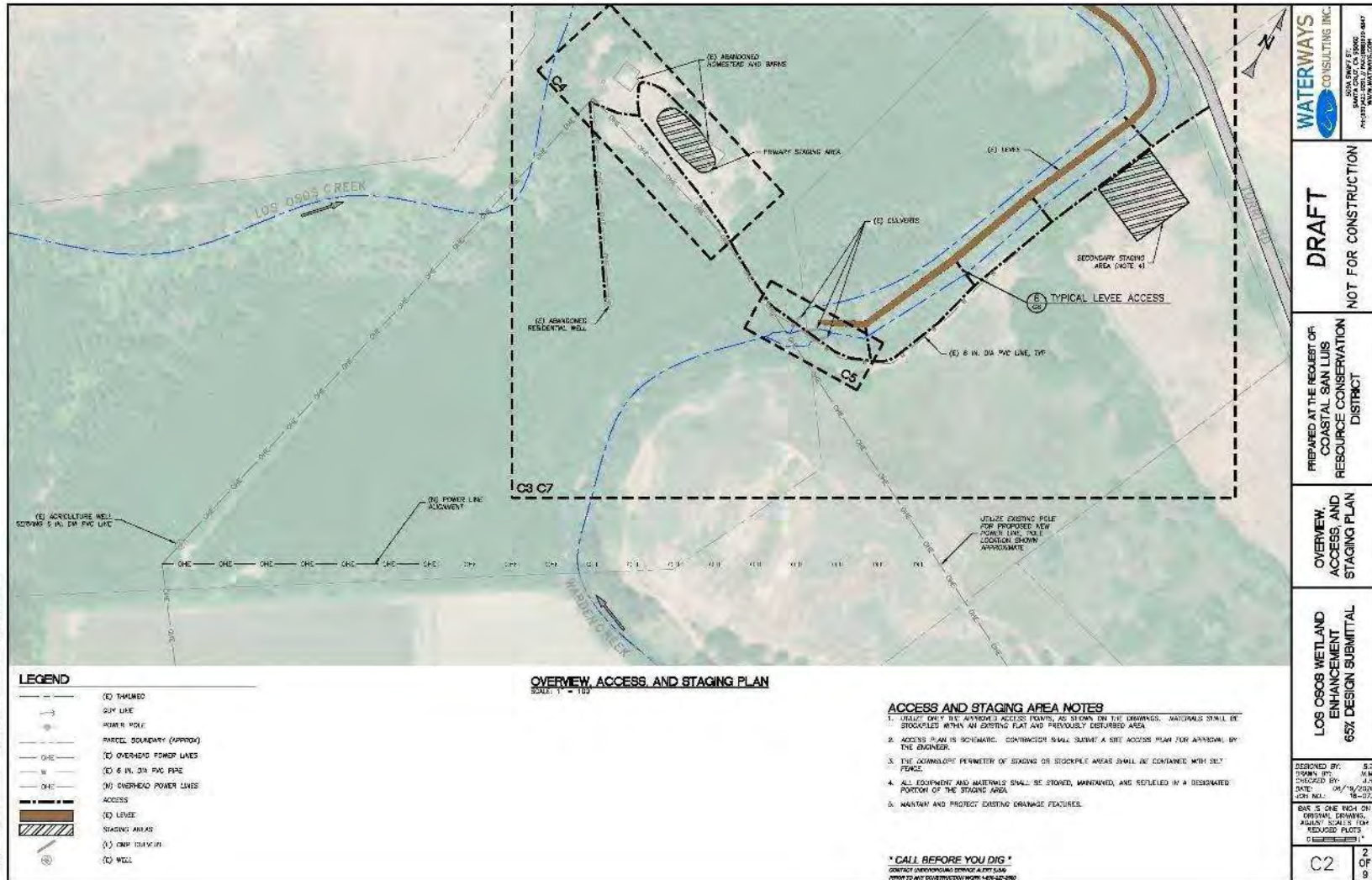
6. County of San Luis Obispo Zoning Map

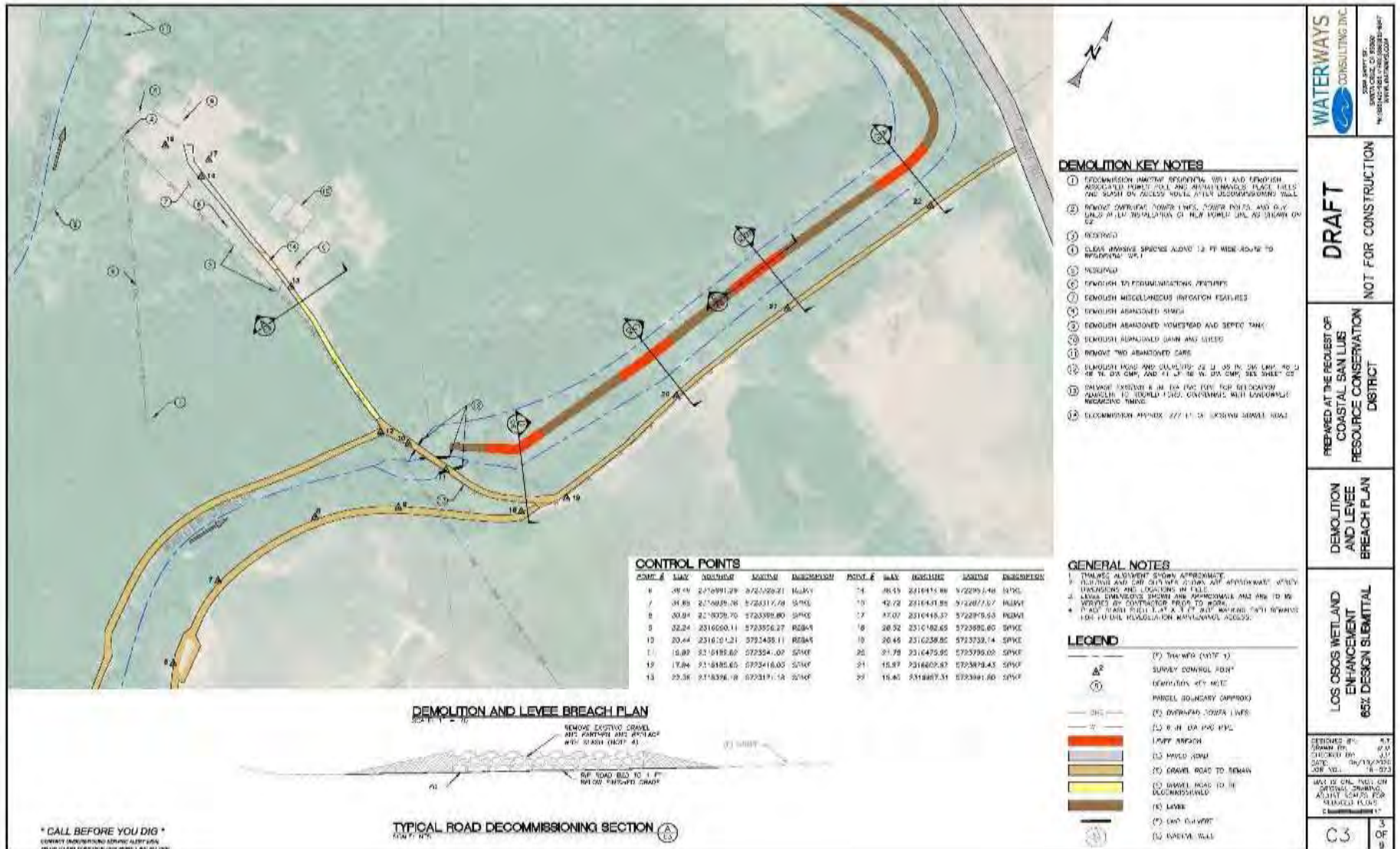


7. CNDDDB Map



Appendix B: 65% Design Plans





WATERWAYS CONSULTING INC.
 2008 AVENUE 24, SUITE 200, LOS OSOS, CA 94028
 TEL: 805.435.8800
 WWW.WATERWAYS.COM

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PREPARED AT THE REQUEST OF
 COASTAL SAN LUIS
 RESOURCE CONSERVATION
 DISTRICT

DEMOLITION
 AND LEVEE
 BREACH PLAN

LOS OSOS WETLAND
 ENHANCEMENT
 65% DESIGN SUBMITTAL

REVISION #1
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 06/17/2020
 SHEET NO.: 18 OF 22
 DATE BY CHG. FILED ON
 ORIGINAL DRAWING
 ADJUST LINES FOR
 REVISION #1, DATE
 06/17/2020

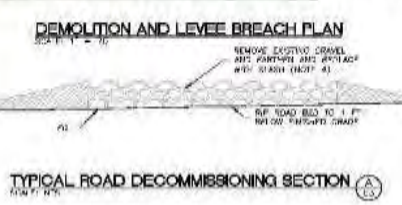
C3 3 OF 9

- DEMOLITION KEY NOTES**
1. DEMOLITION IMPACT RESPONSIBILITY WILL BE PROVIDED ASSOCIATED PERMIT PLAN AND PERMIT CONDITIONS. PLACE FLAGS AND MARKS ON EXISTING STRUCTURES TO BE DEMOLISHED. SHALL
 2. REMOVE CONCRETE TOWER WALLS, ASPHALT PAVEMENT AND ONLY LEAVE IN PLACE REPLICATION OF NEW PAVEMENT AS SHOWN ON 02
 3. RESURFACED
 4. CLEAR EXISTING SPACES ABOVE 12 FT HIGH ADJUST TO RECONSTRUCT TO 12 FT
 5. RESURFACED
 6. REMOVE EXISTING FOUNDATION FOOTINGS
 7. ENOUGH MISCELLANEOUS IRRIGATION FEATURES
 8. ENOUGH ABANDONED SIGNS
 9. ENOUGH ABANDONED VESTIBULE AND SEPTIC TANK
 10. ENOUGH ABANDONED BARN AND GUEST
 11. REMOVE TWO ABANDONED CARS
 12. ENOUGH ROAD AND CALCULATE 22.5 LB IN 200 GPM, 20.0 LB IN 100 GPM, AND 11.0 LB IN 50 GPM, SEE SHEET 02
 13. DEMOLISH EXISTING 8 IN. DIA. PVC PIPE FOR SUBSEQUENT ANALYSIS TO DETERMINE PROPER CONSTRUCTION WITH UNDERGROUND RESOURCES
 14. DEMOLITION IMPACT 277 FT IN EXISTING BRIDGE ROAD

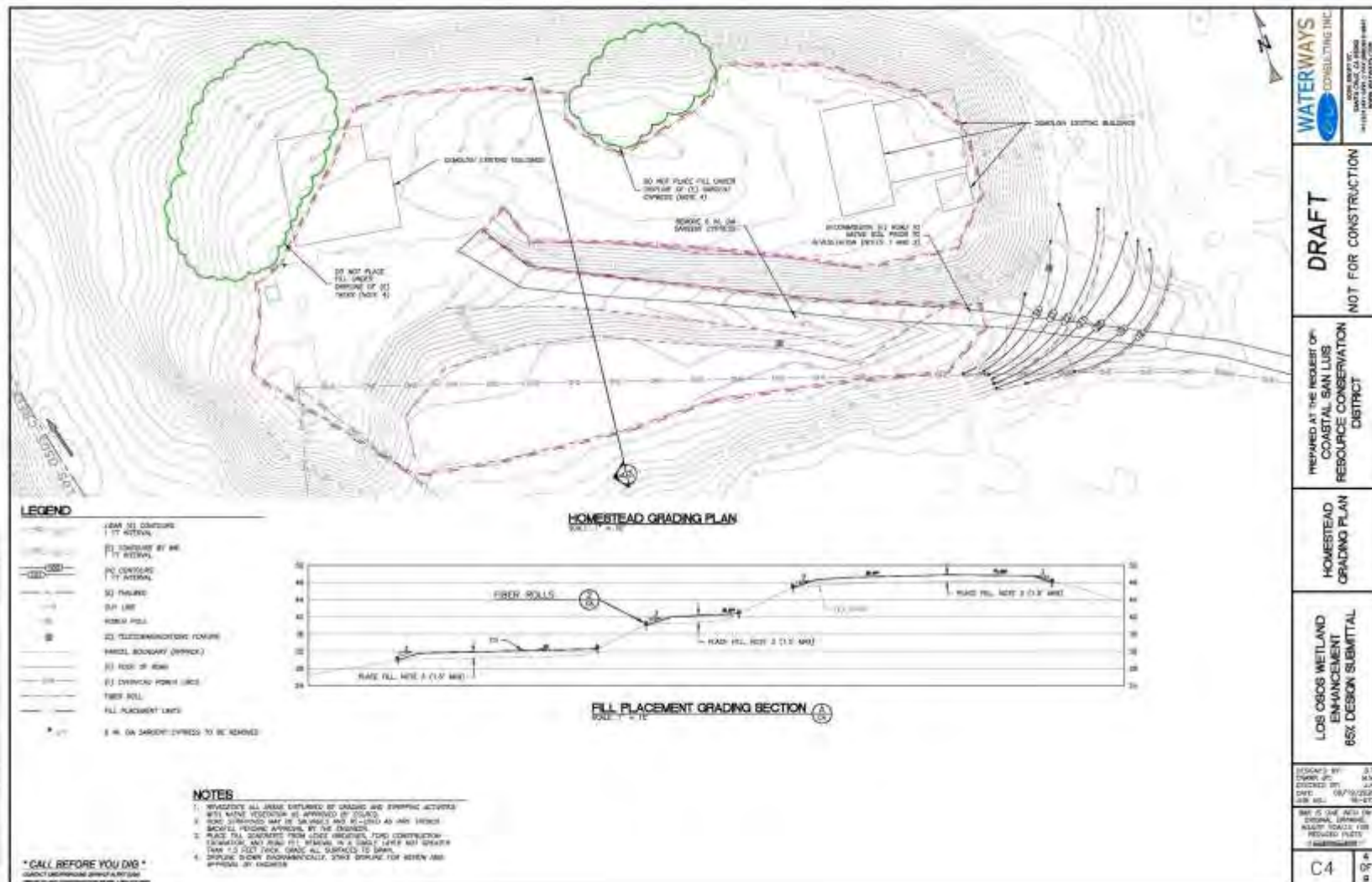
- GENERAL NOTES**
1. DIMENSIONS AND OFFSETS SHOWN APPROXIMATE. OBTAIN AND USE CITY OF LOS OSOS APPROVED UTILITY DRAWINGS AND LOCATIONS IN FULL.
 2. LEVEE DIMENSIONS SHOWN ARE APPROXIMATE AND ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO WORK.
 3. PLACE STAKE POINTS AT A 5 FT SPACING ALONG THE LEVEE FOR FUTURE RECONSTRUCTION RECONSTRUCTION ACCESS.

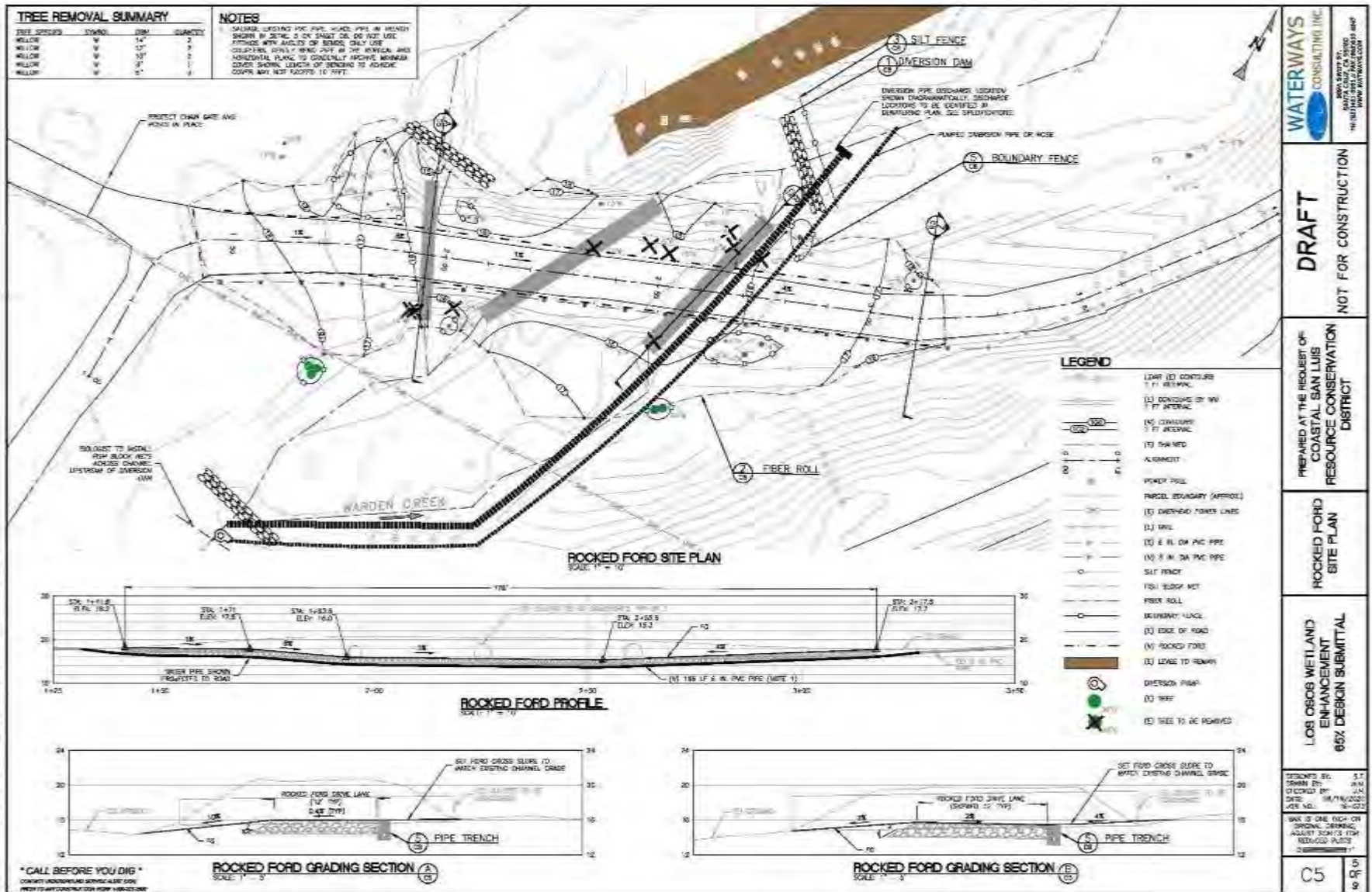
LEGEND

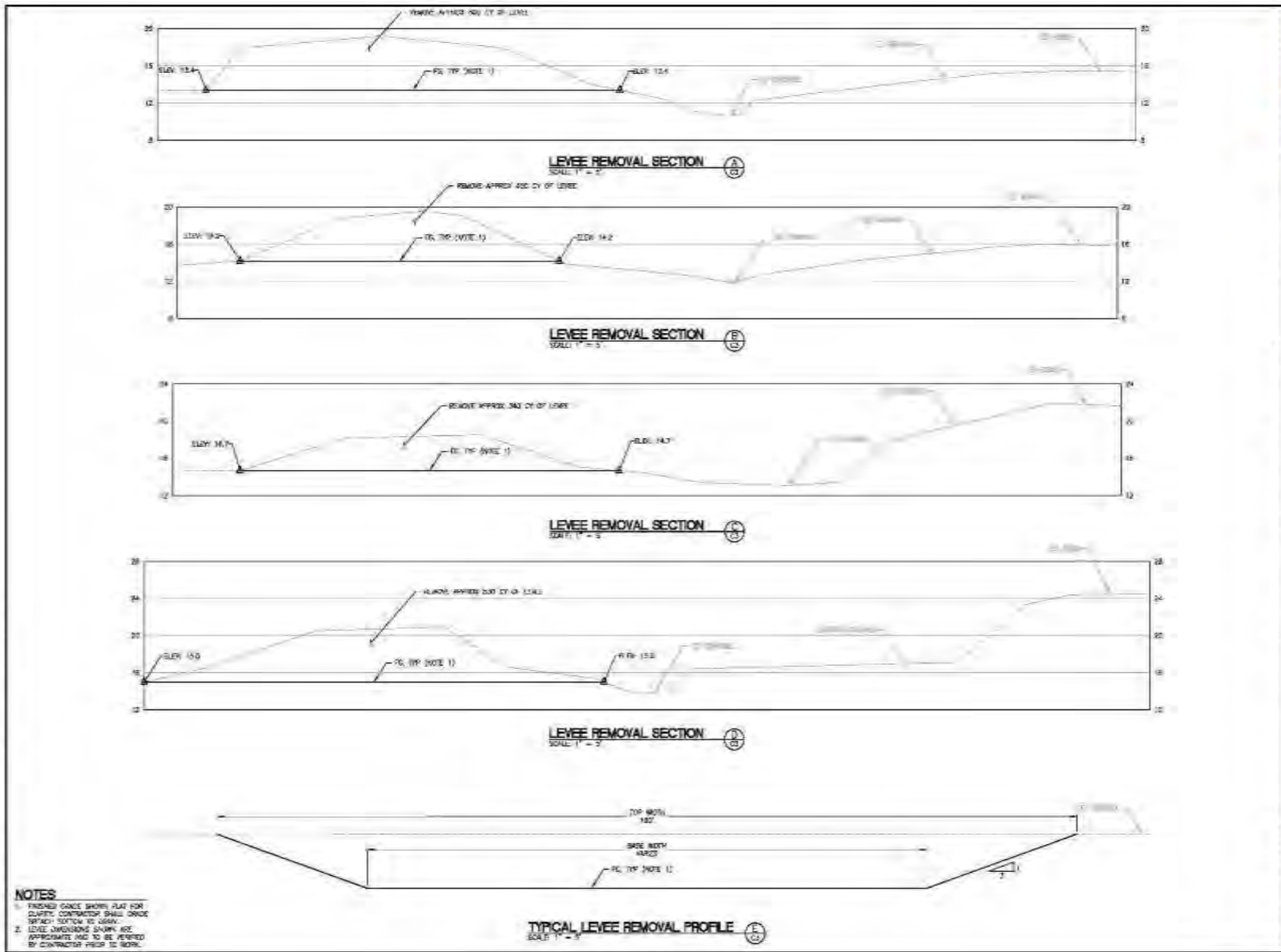
- (P) TYPICAL (NOT TO SCALE)
- ▲ SURVEY CONTROL POINT
- DEMOLITION KEY NOTE
- PERMIT BOUNDARY (APPROX)
- OVERLAP LOWER LEVEE
- 6 IN. DIA. PVC PIPE
- LEVEE BREACH
- ROAD ROAD
- ROAD ROAD TO REMAIN
- ROAD ROAD TO BE RECONSTRUCTED
- LEVEE
- CAR PARKING
- EXISTING WALL



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COASTAL SAN LUIS
RESOURCE CONSERVATION
DISTRICT

LEVEE BREACH
GRADING
PROFILE AND
SECTIONS

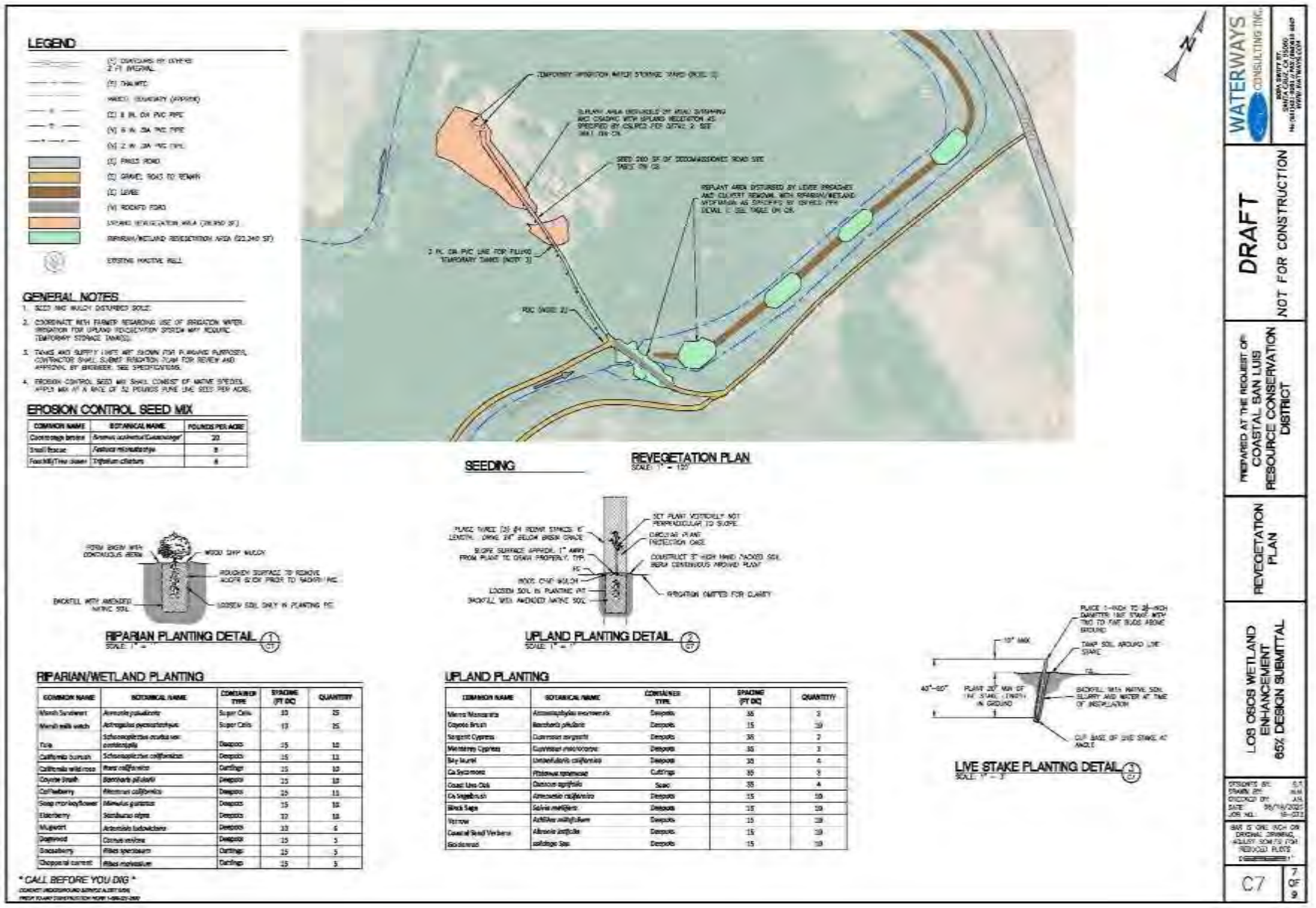
LOS OSOS WETLAND
ENHANCEMENT
65% DESIGN SUBMITTAL

DESIGNED BY:	SL
DRAWN BY:	WJ
CHECKED BY:	WJ
DATE:	04/14/2021
REV. NO.:	15 OF 211

THIS IS ONE INCH ONE ORIGINAL DRAWING. ALL OTHER SIZES ARE REDUCED PLOTS.

C6

NO. 002



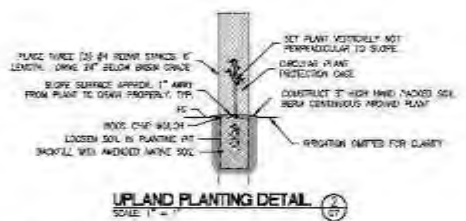
LEGEND

- (C) DIVERSION BY DIVERTER 2 FT. WIDE
- (D) DRAINAGE
- (E) EROSION CONTROL
- (F) EXISTING (AS SHOWN)
- (G) 8 IN. DIA. PVC PIPE
- (H) 6 IN. DIA. PVC PIPE
- (I) 2 IN. DIA. PVC PIPE
- (J) GRAVEL ROAD
- (K) GRAVEL ROAD TO REMAIN
- (L) LEASE
- (M) ROCKY ROAD
- (N) SPAN/VEGETATION AREA (22,240 SF)
- (O) RIPARIAN/WETLAND RESTORATION AREA (22,240 SF)
- (P) EXISTING EXISTING WALL

- GENERAL NOTES**
1. SEE AND VERIFY DISTURBED SOIL.
 2. COORDINATE WITH PLANTER REGARDING USE OF IRRIGATION WATER. IRRIGATION FOR UPLAND RESTORATION SYSTEM MAY REQUIRE TEMPORARY STORAGE DAMS.
 3. TERMS AND SUPPLY LIMITS ARE SHOWN FOR PURCHASING PURPOSES. CONTRACTOR SHALL SUBMIT REQUEST FOR QUOTE FOR REVIEW AND APPROVAL BY AGENCIES. SEE SPECIFICATIONS.
 4. EROSION CONTROL SEED MIX SHALL CONSIST OF MIXTURES WHICH MAY AT A RATE OF 25 POUNDS PER ACRE (SEE SPEC. PER ACRE).

EROSION CONTROL SEED MIX

COMMON NAME	BOTANICAL NAME	POUNDS PER ACRE
Coverage grass	<i>Stemona californica/Coverage</i>	25
Small fescue	<i>Festuca microstachya</i>	8
Fourmix/True grass	<i>Trifolium-citratum</i>	8

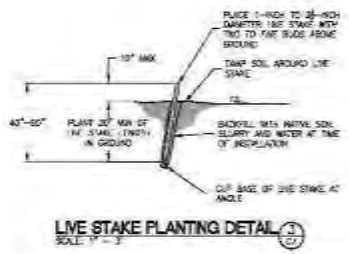


RIPARIAN/WETLAND PLANTING

COMMON NAME	BOTANICAL NAME	CONTAINER TYPE	SPACING (FT. DIA.)	QUANTITY
Marsh Smartweed	<i>Artemisia glandulosa</i>	Super Cells	33	25
Marsh salt wick	<i>Arthrocnemum peruvianum</i>	Super Cells	13	25
Flax	<i>Schlotheimia californica var. contorta</i>	Deepots	15	10
California burnrub	<i>Schlotheimia californica</i>	Deepots	15	10
California wild rose	<i>Rosa californica</i>	Cartridges	15	10
Coyote shrub	<i>Rhamnus californica</i>	Deepots	23	10
California blackberry	<i>Rubus californicus</i>	Deepots	20	10
Goat monkeyflower	<i>Mimulus guttatus</i>	Deepots	15	10
Blackberry	<i>Rubus idaeus</i>	Deepots	27	10
Mulwort	<i>Achillea tuberosa</i>	Deepots	23	6
Deepwort	<i>Cornus amomum</i>	Deepots	15	5
Blackberry	<i>Rubus spectabilis</i>	Cartridges	25	5
Chopped carrot	<i>Daucus carota</i>	Cartridge	25	5

UPLAND PLANTING

COMMON NAME	BOTANICAL NAME	CONTAINER TYPE	SPACING (FT. DIA.)	QUANTITY
Meadow Monarda	<i>Artemisia tridentata</i>	Deepots	30	2
Coyote brush	<i>Baccharis pilularis</i>	Deepots	15	30
Sagebrush	<i>Quercus agrifolia</i>	Deepots	30	2
Manzanita	<i>Quercus macrocarpa</i>	Deepots	30	2
Bay laurel	<i>Umbellularia californica</i>	Deepots	30	2
Go Sycamore	<i>Platanus occidentalis</i>	Cartridge	30	2
Coast Live Oak	<i>Quercus agrifolia</i>	Sack	30	4
California poppy	<i>Eschscholzia californica</i>	Deepots	15	50
Black Sage	<i>Salvia mellissorum</i>	Deepots	25	30
Yarrow	<i>Achillea millefolium</i>	Deepots	25	30
Common Sand Verbena	<i>Ambrosia trifida</i>	Deepots	15	30
Redwood	<i>Calocedrus decurrens</i>	Deepots	15	30



* CALL BEFORE YOU DIG *
CONTACT UNDERGROUND UTILITY LOCATOR
BEFORE ANY CONSTRUCTION WORK BEGINS

WATERWAYS CONSULTING INC.
1000 AVENUE 240, SUITE 200
LOS ANGELES, CA 90048
WWW.WATERWAYS.COM

DRAFT
NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF
COASTAL SAN LUIS
RESOURCE CONSERVATION
DISTRICT

REVEGETATION PLAN

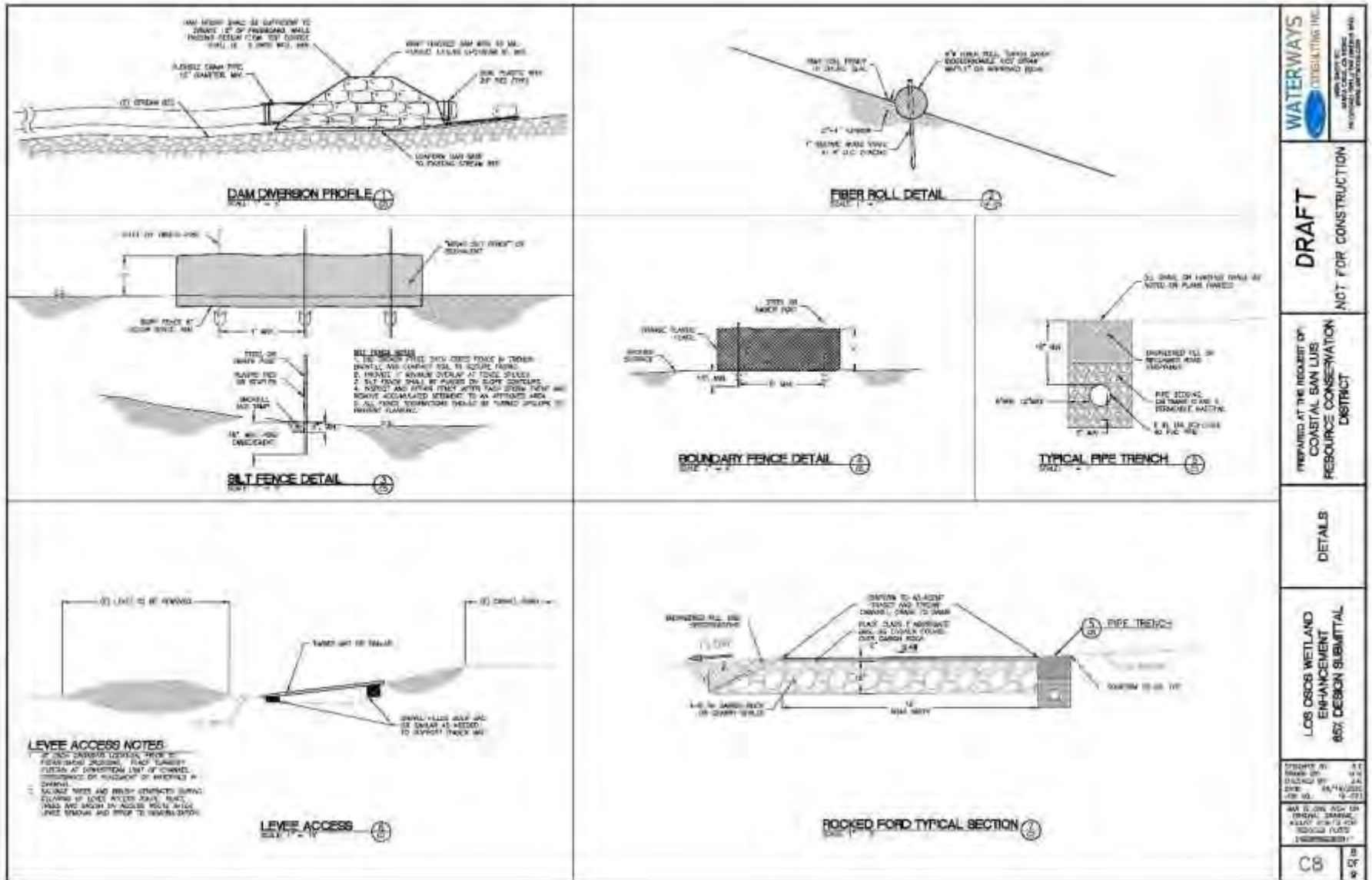
LOS OSOS WETLAND
ENHANCEMENT
65% DESIGN SUBMITTAL

PROJECT NO. 19-011
CHECKED BY: [Signature]
DATE: 10/14/2020
JOB NO.: 19-011

DATE: 10/14/2020
JOB NO.: 19-011

DATE: 10/14/2020
JOB NO.: 19-011

C7 of 7



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PREPARED AT THE REQUEST OF
COASTAL SAN LUIS
RESOURCE CONSERVATION
DISTRICT

DETAILS

LOS OSOS WETLAND
ENHANCEMENT
657 DESIGN SUBMITTAL

PROJECT NO: 17-1
DRAWN BY: J.A.
CHECKED BY: J.A.
DATE: 10/14/2020
JOB NO: 17-021

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C8 8 OF 9

Appendix C: CNDDDB Species List

California Natural Diversity Database - QUAD Morro Bay South						A-
Los Osos Wetland Conservation Project						
SCINAME	COMNAME	FEDSTATUS	CALSTATUS	DFGSTATUS	CNPSUST	
1	Rana draytonii	California red-legged frog	Threatened	None	SSC	
2	Accipiter cooperii	Cooper's hawk	None	None	WL	
3	Laterallus jamaicensis coturniculus	California black rail	None	Threatened	FP	
4	Rallus longirostris obsoletus	California clapper rail	Endangered	Endangered	FP	
5	Oncorhynchus mykiss irideus	steelhead - south/central California coast D	Threatened	None	SSC	
6	Eucyclogobius newberryi	tidewater goby	Endangered	None	SSC	
7	Antrozous pallidus	pallid bat	None	None	SSC	
8	Nyctinomops macrotis	big free-tailed bat	None	None	SSC	
9	Dipodomys heermanni morroensis	Morro Bay kangaroo rat	Endangered	Endangered	FP	
10	Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC	
11	Taxidea taxus	American badger	None	None	SSC	
12	Anniella pulchra nigra	black legless lizard	None	None	SSC	
13	Anniella pulchra pulchra	silvery legless lizard	None	None	SSC	
14	Phrynosoma blainvillii	coast horned lizard	None	None	SSC	
15	Central Dune Scrub	Central Dune Scrub	None	None		
16	Central Maritime Chaparral	Central Maritime Chaparral	None	None		
17	Valley Needlegrass Grassland	Valley Needlegrass Grassland	None	None		
18	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	None	None		
19	Coastal Brackish Marsh	Coastal Brackish Marsh	None	None		
20	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None		
21	Cicindela hirticollis gravida	sandy beach tiger beetle	None	None		
22	Coelus globosus	globose dune beetle	None	None		
23	Plebejus icarioides morroensis	Morro Bay blue butterfly	None	None		
24	Danaus plexippus	monarch butterfly	None	None		
25	Helminthoglypta walkeriana	Morro shoulderband (=banded dune) snail	Endangered	None		
26	Tryonia imitator	mimic tryonia (=California brackishwater sn	None	None		
27	Cladonia firma	firm cup lichen	None	None		
28	Sulcaria isidiifera	splitting yarn lichen	None	None		
29	Cirsium fontinale var. obispoense	Chorro Creek bog thistle	Endangered	Endangered		18.2

SCINAME	COMNAME	FEDSTATUS	CALSTATUS	DFGSTATUS	CNPSLIST	
30	Erigeron blochmaniae	Blochman's leafy daisy	None	None		18.2
31	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	None		18.1
32	Layia jonesii	Jones' layia	None	None		18.2
33	Dithyrea maritima	beach spectaclepod	None	Threatened		18.1
34	Streptanthus albidus ssp. peramoenus	most beautiful jewel-flower	None	None		18.2
35	Arenaria paludicola	marsh sandwort	Endangered	Endangered		18.1
36	Atriplex joaquinana	San Joaquin spearscale	None	None		18.2
37	Chenopodium littoreum	coastal goosefoot	None	None		18.2
38	Suaeda californica	California seablite	Endangered	None		18.1
39	Calystegia subcaulis ssp. episcopalis	Cambria morning-glory	None	None		4.2
40	Dudleya abramsii ssp. bettinae	Betty's dudleya	None	None		18.2
41	Dudleya abramsii ssp. murina	mouse-gray dudleya	None	None		18.3
42	Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	None		18.1
43	Arctostaphylos cruzensis	Arroyo de la Cruz manzanita	None	None		18.2
44	Arctostaphylos luciana	Santa Lucia manzanita	None	None		18.2
45	Arctostaphylos morroensis	Morro manzanita	Threatened	None		18.1
46	Arctostaphylos pechoensis	Pecho manzanita	None	None		18.2
47	Arctostaphylos pilosula	Santa Margarita manzanita	None	None		18.2
48	Arctostaphylos tomentosa ssp. dactylo	dacte manzanita	None	None		18.1
49	Arctostaphylos osoensis	Oso manzanita	None	None		18.2
50	Astragalus didymocarpus var. milesian	Miles' milk-vetch	None	None		18.2
51	Eriodictyon altissimum	Indian Knob mountainbalm	Endangered	Endangered		18.1
52	Monardella crista	crisp monardella	None	None		18.2
53	Monardella palmeri	Palmer's monardella	None	None		18.2
54	Monardella frutescens	San Luis Obispo monardella	None	None		18.2
55	Camissoniopsis hardhamiae	Hardham's evening-primrose	None	None		18.2
56	Chorizanthe breweri	Brewer's spineflower	None	None		18.3
57	Delphinium parryi ssp. eastwoodiae	Eastwood's larkspur	None	None		18.2
58	Castilleja densiflora ssp. obispoensis	San Luis Obispo owl's-clover	None	None		18.2
59	Chloropyron maritimum ssp. maritimu	salt marsh bird's-beak	Endangered	Endangered		18.2
60	Carex obispoensis	San Luis Obispo sedge	None	None		18.2
61	Calochortus obispoensis	La Panza mariposa-lily	None	None		18.2
62	Fritillaria viridea	San Benito fritillary	None	None		18.2

Appendix D. Asbestos removal and disposal Protocol

The following protocols are published by the Department of Industrial Relations and are designed to regulate asbestos exposure in all construction work as defined in section 1502.

(1) All Class I, II and III asbestos work shall be conducted within regulated areas. All other operations covered by this standard shall be conducted within a regulated area where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed a PEL. Regulated areas shall comply with the requirements of subsections (2), (3), (4), and (5) of this subsection.

(2) Demarcation. The regulated area shall be demarcated in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area. Signs shall be provided and displayed pursuant to the requirements of subsection (k)(7) of this section.

(3) Access. Access to regulated areas shall be limited to authorized persons and to persons authorized by the Chief or Director.

(4) Respirators. All persons entering a regulated area where employees are required pursuant to subsection (h)(1) of this section to wear respirators shall be supplied with a respirator selected in accordance with subsection (h)(2) of this section.

(5) Prohibited activities. The employer shall ensure that employees do not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area.

(6) Competent Persons. The employer shall ensure that all asbestos work performed within regulated areas is supervised by a competent person, as defined in subsection (b) of this section. The duties of the competent person are set out in subsection (o) of this section.

(f) Exposure assessments and monitoring.

(1) General monitoring criteria.

(A) Each employer who has a workplace or work operation where exposure monitoring is required under this section shall perform monitoring to determine accurately the airborne concentrations of asbestos to which employees may be exposed.

(B) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee.

(C) Representative 8-hour TWA employee exposure shall be determined on the basis of one or more samples representing full-shift exposure for employees in each work area. Representative 30-minute short-term employee exposures shall be determined on the basis of one or more samples representing 30 minute exposures associated with operations that are most likely to produce exposures above the excursion limit for employees in each work area.

(2) Initial Exposure Assessment.

(A) Each employer who has a workplace or work operation covered by this standard shall ensure that a "competent person" conducts an exposure assessment immediately before or at the

initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly.

(B) Basis of Initial Exposure Assessment: Unless a negative exposure assessment has been made pursuant to subsection (f)(2)(C) of this section, the initial exposure assessment shall, if feasible, be based on monitoring conducted pursuant to subsection (f)(1)(C) of this section. The assessment shall take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the employer which indicate the levels of airborne asbestos likely to be encountered on the job. For Class I asbestos work, until the employer conducts exposure monitoring and documents that employees on that job will not be exposed in excess of the PELs, or otherwise makes a negative exposure assessment pursuant to subsection (f)(2)(C) of this section, the employer shall presume that employees are exposed in excess of the TWA and excursion limit.

(C) Negative Exposure Assessment: For any one specific asbestos job which will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data which conform to the following criteria;

1. Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or
2. Where the employer has monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job, the monitoring and analysis were performed in compliance with the asbestos standard in effect; and the data were obtained during work operations conducted under workplace conditions "closely resembling" the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that employee exposures will not exceed the TWA and excursion limit; or
3. The results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

(3) Periodic monitoring.

(A) Class I and II operations. The employer shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work, unless the employer pursuant to subsection (f)(2)(C) of this section, has made a negative exposure assessment for the entire operation.

(B) All operations under the standard other than Class I and II operations. The employer shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

(C) Exception: When all employees required to be monitored daily are equipped with supplied-air respirators operated in the pressure demand mode, or other positive pressure mode respirator, the employer may dispense with the daily monitoring required by this subsection. However, employees performing class I work using a control method which is not listed in subsection (g)(4)(A), (B), or (C) of this section or using a modification of a listed control method, shall continue to be monitored daily even if they are equipped with supplied-air respirators.

(4) Termination of monitoring.

(A) If the periodic monitoring required by subsection (f)(3) of this section reveals that employee exposures, as indicated by statistically reliable measurements, are below the permissible exposure limit and excursion limit the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

(B) Additional monitoring. Notwithstanding the provisions of subsections (f)(2), (f)(3), and (f)(4) of this section, the employer shall institute the exposure monitoring required under subsection (f)(3) of this section whenever there has been a change in process, control equipment, personnel or work practices that may result in new or additional exposures above the permissible exposure limit and/or excursion limit or when the employer has any reason to suspect that a change may result in new or additional exposures above the permissible exposure limit and/or excursion limit. Such additional monitoring is required regardless of whether a "negative exposure assessment" was previously produced for a specific job.

(5) Employee Notification of Monitoring Results.

(A) As soon as possible but not later than 5 working days following receipt of monitoring results required by this section, the employer shall notify affected employees of the monitoring results.

(B) The employer shall notify affected employees of the results of monitoring representing the employee's exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees.

(C) The written notification required by subsection (f)(5)(A) of this section shall include the corrective action being taken by the employer to reduce employee exposure to or below the PEL and/or excursion limit wherever monitoring results have indicated that the PEL and/or excursion limit has been exceeded.

(6) Observation of monitoring.

(A) The employer shall provide affected employees and their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section.

(B) When observation of the monitoring of employee exposure to asbestos requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

(g) Methods of compliance

(1) Engineering controls and work practices for all operations covered by this section. The employer shall use the following engineering controls and work practices in all operations covered by this section, regardless of the levels of exposure:

(A) Vacuum cleaners equipped with HEPA filters to collect all debris and dust containing ACM and PACM, except as provided in subsection (g)(8)(B) of this section in the case of roofing material.

(B) Wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to for example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provided in subsection (g)(8)(B) of this section; and

(C) Prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers except in roofing operations, where the procedures specified in subsection (g)(8)(B) of this section apply.

(2) In addition to the requirements of subsection (g)(1) of this section, the employer shall use the following control methods to achieve compliance with the TWA permissible exposure limit and excursion limit prescribed by subsection (c) of this section;

(A) Local exhaust ventilation equipped with HEPA filter dust collection systems;

(B) Enclosure or isolation of processes producing asbestos dust;

(C) Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;

(D) Use of other work practices and engineering controls that the Assistant Secretary can show to be feasible.

(E) Wherever the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the permissible exposure limit and/or excursion limit prescribed in subsection (c) of this section, the employer shall use them to reduce employee exposure to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with the requirements of subsection (h) of this section.

(3) Prohibitions. The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM or PACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- (A) High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
- (B) Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- (C) Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and PACM.
- (D) Employee rotation as a means of reducing employee exposure to asbestos.

(4) Class I Requirements. In addition to the provisions of subsections (g)(1) and (2) of this section, the following engineering controls and work practices and procedures shall be used.

- (A) All Class I work, including the installation and operation of the control system shall be supervised by a competent person as defined in subsection (b) of this section;
- (B) For all Class I jobs involving the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material; for all other Class I jobs, where the employer cannot produce a negative exposure assessment pursuant to subsection (f)(2)(C) of this section, or where employees are working in areas adjacent to the regulated area, while the Class I work is or being performed, the employer shall use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

1. Critical barriers shall be placed over all the openings to the regulated area, except where activities are performed outdoors; or
2. The employer shall use another barrier or isolation method which prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area surveillance during each work shift at each boundary of the regulated area, showing no visible asbestos dust; and perimeter area monitoring showing that clearance levels contained in 40 CFR Part 763, Subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels, measured by Phase Contrast Microscopy (PCM) are no more than background levels representing the same area before the asbestos work began. The results of such monitoring shall be made known to the employer no later than 24 hours from the end of the work shift represented by such monitoring.

(h) A small walk-in enclosure which accommodates no more than two persons (mini-enclosure) may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices.

- a. The fabricated or job-made enclosure shall be constructed of 6 mil plastic or equivalent:
 - b. The enclosure shall be placed under negative pressure by means of a HEPA filtered vacuum or similar ventilation unit:
2. Work practices:
- a. Before use, the mini-enclosure shall be inspected for leaks and smoke tested to detect breaches, and any breaches sealed.

b. Before reuse, the interior shall be completely washed with amended water and HEPA-vacuumed.

c. During use, air movement shall be directed away from the employee's breathing zone within the mini-enclosure.

(I) For removing roofing material which contains ACM the employer shall ensure that the following work practices are followed:

1. Roofing material shall be removed in an intact state to the extent feasible.
2. Wet methods shall be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.
3. Cutting machines shall be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.
4. When removing built-up roofs with asbestos-containing roofing felts and an aggregate surface using a power roof cutter, all dust resulting from the cutting operation shall be collected by a HEPA dust collector, or shall be HEPA vacuumed by vacuuming along the cut line. When removing built-up roofs with asbestos containing roofing felts and a smooth surface using a power roof cutter, the dust resulting from the cutting operation shall be collected either by a HEPA dust collector or HEPA vacuuming along the cut line, or by gently sweeping and then carefully and completely wiping up the still-wet dust and debris left along the cut line. The dust and debris shall be immediately bagged or placed in covered containers.
5. Asbestos-containing material that has been removed from a roof shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground via covered, dust-tight chute, crane or hoist:
 - a. Any ACM that is not intact shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift. While the material remains on the roof it shall either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.
 - b. Intact ACM shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.
6. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.
7. Roof level heating and ventilation air intake sources shall be isolated or the ventilation system shall be shut down.
8. Notwithstanding any other provision of this section, removal or repair of sections of intact roofing less than 25 square feet in area does not require use of wet methods or HEPA vacuuming as long as manual methods which do not render the material nonintact are used to remove the material and no

visible dust is created by the removal method used. In determining whether a job involves less than 25 square feet, the employer shall include all removal and repair work performed on the same roof on the same day.

(J) When removing cementitious asbestos-containing siding and shingles or transite panels containing ACM on building exteriors (other than roofs, where subsection (g)(8)(B) of this section applies) the employer shall ensure that the following work practices are followed:

1. Cutting, abrading or breaking siding, shingles, or transite panels, shall be prohibited unless the employer can demonstrate that methods less likely to result in asbestos fiber release cannot be used.
2. Each panel or shingle shall be sprayed with amended water prior to removal.
3. Unwrapped or unbagged panels or shingles shall be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.
4. Nails shall be cut with flat, sharp instruments.

(K) Signs.

1. Warning signs that demarcate the regulated area shall be provided and displayed at each location where a regulated area is required to be established by subsection (e) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.

2. The warning signs required by subsection (k)(7) of this section shall bear the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

Appendix E. Mitigation, Monitoring, Reporting Plan

Mitigation, Monitoring, Reporting Plan for the Los Osos Wetland Restoration Project

This Mitigation, Monitoring, Reporting Plan (Plan) has been prepared for use in implementing the mitigation measures identified in the Mitigated Negative Declaration (MND) for the Los Osos Wetland Restoration Project (project). This Plan has been prepared by the Coastal San Luis Resource Conservation District (District) in compliance with State law to ensure that adopted mitigation measures are implemented (Section 21081.6 of the Public Resources Code).

Section I. Mitigation and Avoidance Measures

Section 21081.6 of the California Public Resources Code and Section 15091(d) and 15097 of the State CEQA Guidelines require public agencies “to adopt a reporting or monitoring program for changes to the project which it has adopted or made conditions of project approval in order to mitigate or avoid significant effects on the environment.” An MMRP is required for the project because the MND for the project identified potentially significant adverse impacts related to project restoration components, and mitigation measures have been identified to reduce those impacts to a less-than significant-level. This Plan is to be used by the District to ensure that adopted mitigation measures identified in the MND are implemented and that implementation is documented. The Plan contains the following information:

Mitigation Measures: Provides the text of the mitigation measures (by issue area), as provided in the IS/MND, each of which has been adopted and incorporated into the project.

Time Frame for Implementation: Identifies the timing of implementation of the mitigation measure.

Responsible Party: Identifies the party responsible for implementation of the mitigation measure.

Avoidance, Minimization, or Mitigation Measure	Time Frame for Implementation	Responsible Party
Biological Resources: California red-legged frog		
A-1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.	Pre-construction	Service-approved biologists
A-2. Ground disturbance would not begin until written approval is received from the Service that project biologist(s) are qualified to conduct the work.		Contractor
A-3. A Service-approved biologist would survey the project site no more than 48 hours before the onset of work activities.		Service-approved biologists
A-4. Before any activities begin on a project, a Service-approved biologist would conduct a training session for all construction personnel.		Service-approved biologists
A-5. A Service-approved biologist will be present at the work site until all ground-disturbing activities are completed. After this time, the Service-approved biologist will monitor the project area for compliance with all avoidance and minimization measures, or the Service-approved biologist will designate a person to monitor the project area for compliance with all avoidance and minimization measures if the Service-approved biologist will not be present. The Service-approved biologist will ensure that this monitor receives sufficient training in the identification of California red-legged frogs. The designated monitor must have experience and a background in natural resources. The Service-approved biologist or designated monitor will be given full authority to stop work if the avoidance and minimization measures are not being followed. If work is stopped, the Service will be notified immediately.	During Construction	Service-approved biologists
A-6. Unless approved by the Service, the project proponent would not impound water in the course of project activities in a manner that may attract California red-legged frogs.		District (permittee)
A-7. A Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs (<i>Rana catesbeiana</i>), signal and red swamp crayfish (<i>Pacifastacus leniusculus</i> ; <i>Procambarus clarkii</i>), and centrarchid fishes from the project area, to the maximum extent possible. The Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.		Service-approved biologist

<p>A-9. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the biologists would follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force at all times.</p>		<p>Service-approved biologist</p>
<p>Biological Resources: Steelhead</p>		
<p>Avoidance or Mitigation Measure</p>	<p>Time Frame</p>	<p>Responsible Party</p>
<p>B-1. Work shall not begin until a) the NOAA RC and/or Corps has notified the permittee that the requirements of the ESA and Clean Water Act have been satisfied and that the activity is authorized and b) all other necessary permits and authorizations are finalized.</p>	<p>Pre-construction</p>	<p>District (permittee)</p>
<p>B-2. The general construction season shall be from June 1 to November 30. Restoration, construction, fish relocation and dewatering activities within any wetted or flowing stream channel shall occur only within this period. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.</p>	<p>During Construction</p>	<p>District (permittee)</p>
<p>B-3. Prior to construction, the land manager and each contractor shall be provided with the specific protective measures to be followed during implementation of the project.</p>	<p>Pre-construction</p>	<p>Contractor/ Biologist/ District</p>
<p>B-4. If the thalweg of the stream has been altered due to construction activities, efforts shall be undertaken to reestablish it to its original configuration.</p>	<p>During Construction</p>	<p>Contractor</p>
<p>B-5. In those specific cases where it is deemed necessary to work in a flowing stream/creek, the work area shall be isolated and all the flowing water shall be temporarily diverted around the work site to maintain downstream flows during construction.</p>	<p>Pre-construction</p>	<p>CCC</p>
<p>B-6. Exclude fish from reentering the work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8-inch diameter.</p>		<p>CCC</p>
<p>B-7. Prior to dewatering, determine the best means to bypass flow through the work area to minimize disturbance to the channel and avoid direct mortality of fish and other aquatic vertebrates (as described more fully below under General Conditions for Fish Capture and Relocation). Bypass stream flow around the work area, but maintain the stream flow to channel below the construction site.</p>		<p>CCC/Biologist/Contr actor/ District</p>

B-8. Coordinate project site dewatering with a qualified biologist to perform fish and amphibian relocation activities.		Biologist/CCC
B-9. Prior to dewatering a construction site, qualified individuals will capture and relocate fish and amphibians to avoid direct mortality and minimize take. This is especially important if listed species are present within the project site.		Service-approved biologist
B-10. When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that will allow flow to resume with the least disturbance to the substrate. Cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than one inch per hour. This will minimize the risk of beaching and stranding of fish as the area upstream becomes dewatered.	Post Construction	CCC
B-11. Fish relocation and dewatering activities shall only occur between June 1 and November 30 of each year. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring.	Pre-Construction	Service-approved biologist
B-12. A qualified fisheries biologist shall perform all seining, electrofishing, and fish relocation activities.		Service-approved biologist
B-13. All electrofishing will be conducted according to NMFS' Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS 2000), including modifications for South Central and Southern California streams		Service-approved biologist
B-14. A minimum of three passes with the seine shall be utilized to ensure maximum capture probability of steelhead within the area.		Service-approved biologist
B-15. All captured fish shall be processed and released prior to each subsequent pass with the seine.		Service-approved biologist
B-16. The seine mesh shall be adequately sized to ensure fish are not gilled during capture and relocation activities.		Service-approved biologist
B-17. Fish shall not be overcrowded into buckets, allowing no more than 150 0+ fish (approximately six cubic inches per 0+ individuals) per 5-gallon bucket and fewer individuals per bucket for larger/older fish.		Service-approved biologist

B-18. Every effort shall be made not to mix 0+ steelhead with larger steelhead, or other potential predators, that may consume the smaller steelhead. Have at least two containers and segregate young-of-year (0+) fish from larger age-classes. Place larger amphibians in the container with larger fish.		Service-approved biologist
B-19. Salmonid predators, including other fishes and amphibians, collected and relocated during electrofishing or seining activities shall not be relocated so as to concentrate them in one area.		Service-approved biologist
B-20. All captured steelhead shall be relocated, preferably upstream, of the proposed construction project and placed in suitable habitat. Captured fish shall be placed into a pool, preferably with a depth of greater than two feet with available instream cover.		Service-approved biologist
B-21. Minimize handling of steelhead. However, when handling is necessary, always wet hands or nets prior to touching fish. Handlers will not wear insect repellents containing the chemical N,N-Diethyl-meta-toluamide (DEET).		Service-approved biologist
B-22. If more than 3 percent of the steelhead captured are killed or injured, the project permittee shall contact NMFS and CDFW.		Biologist/District (permittee)

Biological Resources: Marsh sandwort

Avoidance or Mitigation Measure	Time Frame	Responsible Party
C-1. A qualified botanist will conduct a pre-construction survey to confirm absence of marsh sandwort and Gambel’s watercress prior to commencing ground disturbance activities in the project area. If the plants are found during pre-construction surveys, including any Gambel’s watercress hybrids, the botanist will flag the area and inform all workers of the need to stay out of the flagged area.	Pre-construction	Service-approved biologist
C-2. Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will conduct a training session for all personnel. At a minimum, the training will include a description of relevant plants and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel.		Service-approved biologist/CCC/ Contractor/ District

Biological Resources: Morro shoulderband snail

Avoidance or Mitigation Measure	Time Frame	Responsible Party
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E-1. Only biologists approved by the Ventura Fish and Wildlife Office may conduct <i>any</i> activities related to Morro shoulderband snails. The possession of a section 10(a)(1)(A) permit does not take the place of the required approval.	Pre/During/Post Construction	Service-approved biologist
E-2. Prior to any site disturbance (e.g. vegetation removal, grading), an approved biologist will develop and deliver training to all project-related personnel.	Pre Construction	Service-approved biologist
E-3. Construction areas will be clearly marked with high-visibility flagging or barrier fencing. Construction equipment and personnel will be restricted to areas within the marked areas.		Service-approved biologist
E-4. Prior to the start of any site disturbance activities an approved biologist will conduct surveys for Morro shoulderband snail.		Service-approved biologist
E-5. An approved permitted biologist will be present daily during the site preparation (e.g. vegetation removal, ground-disturbance, grading) to monitor for the presence of Morro shoulderband snail. Any live individuals of any life stage detected during these monitoring events will be captured and moved out of harm's way or relocated to a Service-approved site by the biologist.	During Construction	Service-approved biologist
E-6. The Federal Action Agency should encourage the Permittee to collect information on the survival of Morro shoulderband snails captured and relocated as part of this project in order to provide an understanding of the efficacy of this practice as a minimization measure.	Post Construction	Service-approved biologist
E-7. The Federal Action Agency should encourage the Permittee to prepare and seek publication of an article describing all of those habitat types or conditions in which Morro shoulderband snails are found during the course of the project to provide a greater understanding of the species.		Service-approved biologist
Biological resources: General Protection of Riparian, Aquatic and Wetland Habitats		
Avoidance or Mitigation Measure	Time Frame	Responsible Party
D-1. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable.	Post Construction	CCC
D-2. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would	During Construction	District (permittee)

coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project		
D-3. Construction will occur between June 1 and November 30. Revegetation activities, including soil preparation, may extend beyond November 30, if necessary, to better ensure successful plant establishment during the onset of winter precipitation.	Post Construction	CCC
D-4. Debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/ concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State.	During Construction	Contractor
D-5. Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric. No mechanized equipment (e.g. internal combustion hand tools) will enter wetted channels.		
D-6. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires crossing a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle		
D-7. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).		
D-8. Prior to use, clean all equipment to remove external oil, grease, dirt, or mud. Wash sites must be located in upland locations so wash water does not flow into the stream channel or adjacent wetlands.		
D-9. All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings.		
D-11. To minimize further disturbance to the work area, crew size will be limited, and number of vehicles and equipment to the maximum extent feasible.		
D-12. Removal of any vegetation will be minimized to the extent feasible.		

D-13. Depending on determinations made by the ACOE, compensatory mitigation will be completed at the requisite ratio to impacts.		District (permittee)
D-14. No fill or dredge material will be placed within a designated wetland		Contractor

Cultural Resources

Avoidance or Mitigation Measure	Time Frame	Responsible Party
CR-1. For all ground disturbing construction activities, the applicant shall retain a county-approved archaeologist to monitor these activities. The applicant shall install any necessary protective field measures, as directed by the archaeologist, and shall keep them in good working order during construction. Upon discovery, the applicant shall take immediate remedial actions should corrective actions be needed. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity of the resource until such time as the resources can be evaluated by an archaeologist and any other appropriate individuals.	During Construction	District (permittee)
CR-2. If buried cultural materials are discovered by archaeologists or construction personnel, work in the immediate area of the find would be diverted until the discovery is evaluated and any necessary plans are developed for treatment of the find(s) or mitigation of adverse effects.		
CR-3 If it becomes impossible to implement the project at a worksite without disturbing cultural or paleontological resources, then activity at that worksite shall be discontinued.		

Geology and Soils

Avoidance or Mitigation Measure	Time Frame	Responsible Party
Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.	Pre Construction	CCC
Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free	During Construction	CCC/ District (permittee)/ Contractor

<p>straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.</p>		
<p>Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.</p>		<p>District (permittee)</p>
<p>Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.</p>		<p>CCC/ District (permittee)</p>
<p>Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.</p>		<p>District (permittee)/ Contractor</p>
<p>Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.</p>	<p>Post Construction</p>	<p>CCC</p>
<p>Sed-7. All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.</p>		<p>CCC/ District (permittee)</p>
<p>Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.</p>		<p>CCC/ District (permittee)</p>
<p>Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.</p>		<p>District (permittee)</p>

Hazards and Hazardous Materials		
Avoidance or Mitigation Measure	Time Frame	Responsible Party
ASB-1. All Class I, II and III asbestos work shall be conducted within regulated areas. All other operations covered by this standard shall be conducted within a regulated area where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed a PEL. Regulated areas shall comply with the requirements of subsections (2), (3), (4), and (5) of this subsection.	During Construction	Asbestos Contractor
ASB-2. The regulated area shall be demarcated in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area. Signs shall be provided and displayed pursuant to the requirements of subsection (k)(7) of this section.		
ASB-3. Access to regulated areas shall be limited to authorized persons and to persons authorized by the Chief or Director.		
ASB-4. All persons entering a regulated area where employees are required pursuant to subsection (h)(1) of this section to wear respirators shall be supplied with a respirator selected in accordance with subsection (h)(2) of this section.		
ASB-5. Prohibited activities. The employer shall ensure that employees do not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area.		
ASB-6. Competent Persons. The employer shall ensure that all asbestos work performed within regulated areas is supervised by a competent person, as defined in subsection (b) of this section		
Hydrology + Water Quality		
Avoidance or Mitigation Measure	Time Frame	Responsible Party
Sed-1. When appropriate, isolate the construction area from flowing water until project materials	Pre Construction	CCC

are installed and erosion protection is in place.		
Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.	During Construction	CCC/ District (permittee)/ Contractor
Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.		District (permittee)
Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.		CCC/ District (permittee)
Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.		District (permittee)/ Contractor
Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.	Post Construction	CCC
Sed-7. All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.		CCC/ District (permittee)
Sed-8. Where straw, mulch, or slash is used as erosion control on		CCC/ District

bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.		(permittee)
Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.		District (permittee)

Section II. Monitoring and Reporting

The District, as the permittee, shall meet each of the reporting requirements described below:

Obligations of the Permittee
The District shall have primary responsibility for monitoring compliance with all measures in this Plan. Measures must be implemented within the time periods indicated above and the reporting program listed below.
The District shall ensure that implementation of the measures in this Plan and shall monitor the effectiveness of the measures.
Reporting
The District shall submit all requisite documents and plans to each regulatory agency involved in the Project prior to commencing project activities
A Service-approved biologist will convene a training session for all field staff. The District shall submit the sign-in sheet from that training session to CDFW within one week of the training
The District shall submit results of the pre-activity surveys to each regulatory agency involved in the Project at least one week prior to commencing construction.
The District shall provide a list of Biologists approved to handle CRLF and Steelhead to CDFW prior to the start of Project activities
The District shall provide results of nesting bird surveys if any project activities are scheduled during the the avian nesting season, submitted to CDFW within one week of project activities
The District shall submit an Emergency Response Plan to each regulatory agency involved in the Project at least two weeks prior to commencing construction.
The District shall provide final designs of dewatering activities to each regulatory agency involved in the Project at least two weeks prior to commencing construction.
The District shall provide a planting plan to CDFW least two weeks prior to starting implementation
The District shall provide an annual report of compensatory plantains to CDFW by December 31 of each year.

The District shall provide a seed mix to be used for erosion control to CDFW for approval prior to application

The District shall provide a final project report within 30 days after the completion of the project to each regulatory agency involved in the Project.