

Additional Information for Notification of Lake or Streambed Alteration Application, El Camino Real at Santa Margarita Creek Bridge Replacement Project, Santa Margarita Creek, San Luis Obispo County

Section 8: Project LOCATION (continued)

Figure 1: Project Vicinity Map

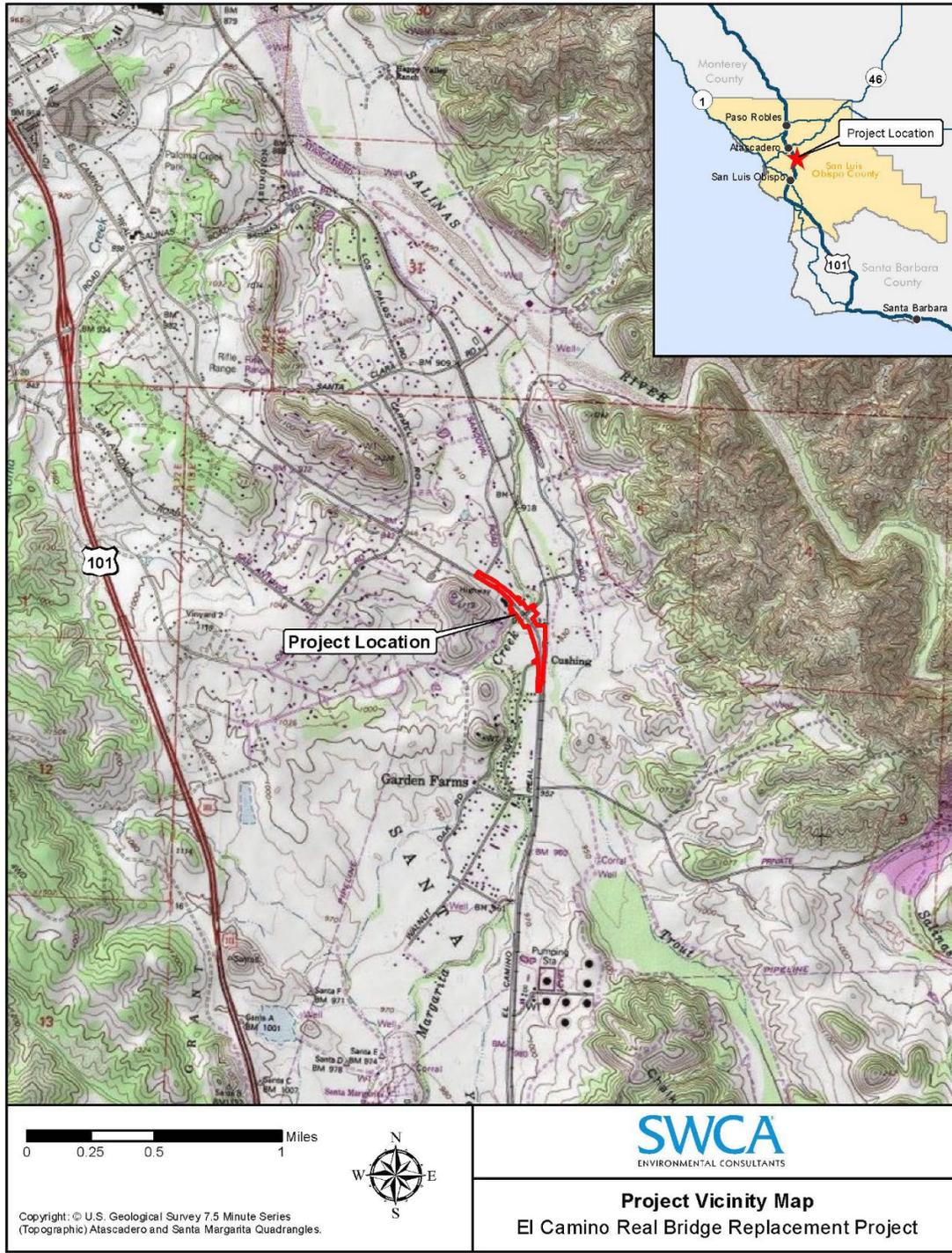
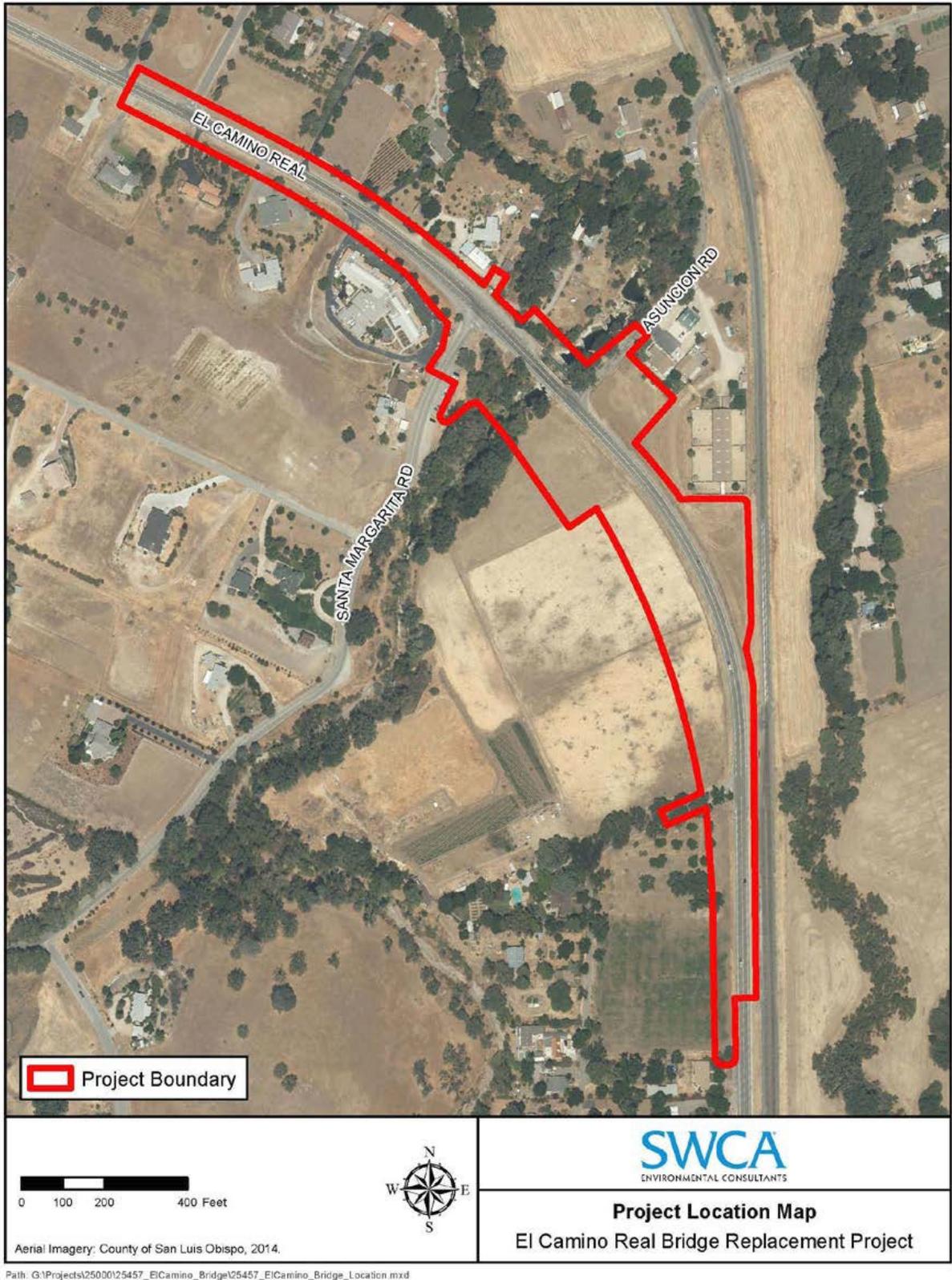


Figure 2: Project Location Map



Section 10: PROJECT DESCRIPTION (continued)

In order to minimize the project footprint, the proposed design will follow the existing alignment as much as possible. Implementation of the project will occur in two phases, so that through traffic can be maintained during construction. During phase one, traffic will be shifted over to the west side of the existing bridge and cross the creek on a new temporary detour alignment using a temporary bridge that will free-span the creek. While traffic is on the temporary detour alignment the existing bridge will be demolished and replaced with a new structure. The new structure will be constructed on the existing alignment in one stage. Once the new bridge is completed as much of the new approaches to the bridge will be constructed while traffic remains on the temporary detour. After the new bridge and approaches are constructed, traffic will be shifted onto the new bridge and roadway while the remaining roadway improvements are done with daily traffic control and lane closures.

The new bridge will be a cast-in-place (CIP) pre-stressed (PS) concrete slab type bridge, approximately 142 feet long with three spans, and a structure depth of approximately two feet to clear the hydraulic opening of the creek.

The new bridge will have an improved clear deck width of 49 feet between the railings to accommodate two 12-foot vehicle lanes, 12-foot center turn lane, plus a five-foot shoulder on the west and eight-foot shoulder on the east. The additional shoulder width on the east is required to accommodate sight distance at the intersection of Asuncion Road. Due to the extensive history of scour on-site, the new bridge design includes cast-in-drilled-hole (CIDH) piles under each column extension. Given the exposed sandstone at the site, driven piles cannot be used. Installation of the CIDH piles will require contractor equipment access within the creek channel to drill these foundations. Installation of the cast-in-place pre-stressed concrete slab superstructure will require installation of temporary falsework within the creek channel.

Four sets of columns and piles will support the new structure. Two sets would be located behind the existing location of the abutments on the creek banks and another two sets would be located within the creek channel. The sets in the creek channel will consist of approximately two-foot diameter columns spaced approximately ten and a half feet apart. Each column will be supported on an approximately four-foot diameter CIDH concrete pile. The abutments will be supported on approximately two-foot diameter CIDH concrete piles. Removal of the existing concrete and construction of the new bridge will result in a net reduction of approximately 206 square feet of concrete within the OHWMs of Santa Margarita Creek, thereby improving the habitat conditions in the stream by opening up more of the natural channel.

The contractor will need access into the creek channel to install the temporary falsework and CIDH piles and to remove the existing bridge. Access may be achieved by temporarily diverting water through or around the work area and constructing a temporary access path down into the creek channel. Water diversion may use a combination of cofferdams, pipes, clean gravel bags, and temporary fill. If a temporary culvert or diversion dam is required, it will be sized appropriately to facilitate fish passage during construction. However, this component is not expected. Isolated plunge pools will be dewatered and any resident fish will be captured and relocated prior to dewatering.

The primary temporary access would be located on the north bank. Access from the southern bank would be limited to maintain the natural rock formations on the south bank. The temporary access path would traverse the creek bank, enter the channel, and extend under the proposed

and existing bridges. The contractor may place clean crushed rock into the creek in order to create the temporary path and construct the CIDH piles, as well as provide level surfaces to place pads for construction of temporary falsework. Temporary fill associated with the creek diversion and the access path would be removed after construction is complete. This project is anticipated to span one construction season and the contractor will be required to remove the diversion system as well as temporary fill within the creek channel at the completion of the structure and removal of the temporary free-span bridge used for the detour.

UngROUTED RSP will be placed around the abutments along the banks to prevent potential erosion. Based on the current project goals and plans, RSP would be placed immediately below the bridge abutments and extend beyond the bridge rails on the northeast, northwest, and southeast banks. The RSP would range from 2.5 feet thick to 4.5 feet thick and include 0.25-ton material.

In order to accommodate the wider bridge and middle turn lane between Santa Margarita Road and Asuncion Road the north and south bridge approaches require modification. The horizontal alignment will matching the existing roadway but will have corrected super elevation and a raised vertical profile to accommodate the hydraulic requirements of Santa Margarita Creek.

The southern approach will consist of approximately 1,200 feet of new roadway in order to conform to back to the existing roadway. Intersections at both Walnut Avenue and Asuncion Road will be reconstructed to conform to the new roadway. The intersection of Asuncion Road will require relocation to the south to allow for the new bridge construction. Approximately 230 feet of Asuncion Road will be realigned in order to match the grade and super elevation of El Camino Real.

The north bound approach will consist of approximately 930 feet of new roadway in order to conform to the existing roadway. The intersection of Santa Margarita Road will also require reconstruction along with several driveways within this section of roadway.

It is anticipated that the temporary detour required to maintain traffic will be paved. Temporary pavement that is required outside of the final roadway width will be removed once it is no longer needed and restored to the preconstruction conditions.

Removal of any native habitat types would be mitigated on-site to the extent feasible as described within the Habitat Mitigation and Monitoring Plan (HMMP). Mitigation for the removal of native trees will also be included within the plan. A conceptual plan will be created for agency review during the permitting process and the plan will be finalized prior to acquiring any necessary permits.

This project will require extensive utility coordination as well as some utility relocation work. The existing Nacimiento Water Line bridge which is parallel to the existing bridge will be removed as part of this project and the waterline will be shifted over to be carried by the new bridge. Due to the size and impacts the bridge replacement project and that it falls within the limits of the State General Permit National Pollutant Discharge Elimination System limits, post-construction stormwater measures are required. To accommodate these requirements several stormwater treatment areas are anticipated. The treatment areas are planned along the toe of the west side of the south and north approach fills. These will be located within the project limits and the future County Right-of-Way.

Section 11: PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Implementation of the project as proposed requires an estimated total of 1,225 cubic yards of cut and 965 cubic yards of fill and will result in jurisdictional impacts of approximately 0.60 acre.

Sources of temporary impacts would be primarily from the use of construction equipment, cut/fill, installation of temporary access roads, installation of temporary falsework within the stream channel, diversion and dewatering of Santa Margarita Creek, and associated worker foot traffic. Permanent impacts will primarily consist of the bridge footings placed in the stream channel and the location of the road curve re-alignment.

The following table provides a summary of potential impacts to jurisdictional areas that would be subject to environmental permitting. Areas with negative impact values represent areas where existing concrete will be removed from the channel.

Table 1: Summary of Impacts to Jurisdictional Areas

Jurisdictional Feature	Estimated Impacts	
	Permanent	Temporary
State – California Fish and Game Code (Sections 1600-1602 and 401)	7,586 ft ² (0.17 acre)	19,622 ft ² (0.45 acre)
Existing Concrete Removal	-1,018 ft ² (-0.02 acre)	--
Total State – California Fish and Game Code and 401 (after concrete removal)	6,568 ft² (0.15 acre)	19,622 ft² (0.45 acre)

Jurisdictional areas that would be filled or otherwise replaced with a structure, or permanently altered from the current condition, were considered permanent impacts. Permanent impacts will result from installation of the approach abutments, placement of RSP, and construction of the fill slopes. Temporarily impacted areas are expected to be returned to the pre-construction condition following project completion. Temporary impacts will occur within an estimated 110-foot-wide dewatering and construction corridor that spans approximately 30 feet upstream and downstream of the proposed bridge. The corridor would include the dewatered area, temporary crossing, and associated riparian vegetation removal. Temporary impacts will also occur in the riparian vegetation located within 10 feet of either side of the proposed temporary clear span bridge. Project staging areas have been selected to minimize unnecessary impacts to native riparian vegetation.

B. Will the project affect any vegetation?

Table 2: Impacts by Vegetation Type (continued)

Vegetation Type	Temporary Impact	Permanent Impact
Coast Live Oak Woodland	25 ft (linear) 5,662 ft ² (0.13 acre)	10 ft (linear) 60 ft ² (0.0001 acre)
Valley Oak Woodland	50 ft (linear) 15,453 ft ² (0.35 acre)	35 ft (linear) 5,792 ft ² (0.13 acre)

Table 3: Tree Removal Impacts (continued)

Tree Species	Number of Trees to be Removed	Tunk Diameter (range)
Box Elder	2	4" & 5"
Juniper (Ornamental)	2	6" & 10"

Section 12: MEASURES TO PROTECT FISH, WILDLIFE AND PLANT RESOURCES (continued)

A. Describe the techniques that will be used to prevent sediment, hazardous, or other deleterious materials from entering watercourses during and after construction.

During construction, erosion control measures (e.g., silt fencing, fiber rolls and barriers) will remain available on-site and will be utilized as necessary to prevent erosion and sedimentation in jurisdictional areas. No synthetic plastic mesh products will be used for erosion control and use of these materials on-site is prohibited. Erosion control measure and other suitable Best Management Practices used will be checked to ensure that they are intact and functioning effectively and maintained on a daily basis throughout the duration of the construction. The contractor will also apply adequate dust control techniques, such as site watering, during the construction to protect water quality.

During construction, the cleaning and refueling of equipment and vehicles will occur only within a designated staging area and at least 100 feet (30 meters) from wetlands or other aquatic areas. At a minimum, equipment and vehicles will be checked and maintained daily to ensure proper operation and avoid potential leaks or spills.

The County may incorporate gravel augmentation practices in the proposed project. When removing material from the channel, the contractors will utilize a hopper or screen to separate the coarser materials from the fine sediments. The fine sediments will be permanently removed from the channel and the coarse materials will be salvaged and returned back into the channel. If additional material is needed to create the desired channel topography, the additional material will consist of a variety of sized gravels to enhance the steelhead spawning substrates. The material must be clean and may not include any pollutants.

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Prior to construction, the County will retain a qualified biological monitor(s) to conduct pre-construction surveys for special-status species, monitor initial ground-disturbance and vegetation removal during construction, and ensure compliance with the avoidance and minimization efforts outlined within all the project environmental documents. Surveys will also be conducted directly before and following any dewatering activities. If Coast Range newt, foothill

yellow-legged frog, southwestern pond turtle, or western spadefoot are found, the qualified biologist will halt project activities, allow the animal(s) to leave the work area on its own volition, and if necessary, will move the species out of harm's way to the nearest suitable habitat outside the project construction area.

Construction activities within jurisdictional areas will be conducted during the dry season when stream flows will be at annual lows (typically June 1 and October 31) in any given year, or as otherwise directed by the regulatory agencies. Deviations from this work window can be made with permission from the relevant regulatory agencies.

Prior to initiation of any construction activities, including vegetation clearing or grubbing, sturdy high-visibility orange construction fencing will be installed to protect the jurisdictional areas adjacent to the designated work areas and to delineate the project limits where activities are allowed to occur. This fencing will be placed so that unnecessary adverse effects to the adjacent habitats are avoided. No construction work (including storage of materials) will occur outside of the specified project limits. The fencing will remain in place during the entire construction period, be monitored periodically by a qualified biologist, and maintained as needed by the contractor.

All trees to remain that are within 50 feet of construction or grading activities will be marked for protection with protective fencing and their root zone fenced prior to any grading. The fencing will be checked periodically to ensure that it remains intact and is functioning effectively and maintained as needed throughout the duration of construction. Avoidance areas shall be shown in the project plans as an Environmental Sensitive Area. The root zone will be defined at 1.5 times the diameter of the canopy dripline. All activities within the root zone shall be avoided to the extent feasible.

Prior to construction, a Stormwater Control Plan will be prepared for the project. Provisions of this plan will be implemented during and after construction as necessary to avoid and minimize erosion and storm water pollution in and near the work area.

Prior to construction, the contractor will prepare a Hazardous Materials Response Plan to allow for a prompt and effective response to any accidental spills. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

During construction, erosion control measures (e.g., silt fencing, fiber rolls, and barriers) will remain available on-site and will be utilized as necessary to prevent erosion and sedimentation in jurisdictional areas. No synthetic plastic mesh products will be used for erosion control and use of these materials on-site is prohibited. Erosion control measures and other suitable Best Management Practices used will be checked to ensure that they are intact and functioning effectively and maintained daily throughout construction. The contractor will also apply adequate dust control techniques, such as site watering, during construction to protect water quality.

During construction, the cleaning and refueling of equipment and vehicles will occur only within a designated staging area and at least 100 feet (30 meters) from wetlands or other aquatic areas. At a minimum, equipment and vehicles will be checked and maintained daily to ensure proper operation and avoid potential leaks or spills.

During construction, trash will be contained, removed from the work site, and disposed of regularly. Following construction, trash and construction debris will be removed from the work areas. Vegetation removed from the construction site will be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas (such as areas with poison hemlock or

other invasive exotic plant species) must be removed off-site, the top six inches (152 millimeters) containing the seed layer in areas with weedy species will be disposed of at a certified landfill.

During construction, no pets will be allowed on the construction site.

In-stream work will take place between June 1 and October 31 in any given year, when the surface water within Santa Margarita Creek is likely to be at seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies. During instream work, a qualified biologist will be retained with experience in steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capturing, handling, and relocating fish species. During in-stream work, the biological monitor(s) will continuously monitor placement and removal of any required stream diversions and will capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The biologist(s) will capture steelhead stranded as a result of diversion/dewatering and relocate steelhead to the nearest suitable instream habitat. The biologist(s) will note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation.

During in-stream work, if pumps are incorporated to assist in temporarily dewatering the site, intakes will be completely screened with no larger than 0.2-inch (five millimeter) wire mesh to prevent steelhead and other sensitive aquatic species from entering the pump system. Pumps will release the diverted water so that suspended sediment will not re-enter the stream. The form and function of pumps used during the dewatering activities will be checked regularly by a qualified biological monitor to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

Through the Caltrans local assistance process, consultation with the United States Fish and Wildlife Service (USFWS) was conducted to develop avoidance and minimization measures for the California red-legged frog (CRLF). These measures may include, for example, the measures described in the 2011 CRLF Programmatic Biological Opinion between the USFWS and Caltrans.

To protect special status avian species and those species protected by the Migratory Bird Treaty Act (MBTA) and Fish and Game Code Section 3503, vegetation clearing and earth disturbance should be avoided during the typical nesting season (February 1 to September 1). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area within one week prior to activity beginning on site. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive, passerine bird species, and a 250-foot buffer will be implemented for raptor species, and all activity will remain outside of that buffer until the qualified biologist, has determined that the young have fledged. Buffer reductions and/or work within non-disturbance buffer areas can be completed only with approval from relevant resource agencies.

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

A comprehensive Habitat Mitigation and Monitoring Plan that provides for a 1:1 restoration ratio for temporary effects and a 3:1 enhancement ratio for permanent effects will be conducted after construction. To the extent feasible, mitigation activities will be implemented within the Santa Margarita Creek riparian corridor. The HMMP shall specify a 4:1 replanting ratio for native oak trees removed for construction.