

**Additional Information for Nationwide Permit Pre-Construction Notification,
El Camino Real at Santa Margarita Creek Bridge Replacement Project,
Santa Margarita Creek, San Luis Obispo County**

SECTION 4. Description of the Proposed Activity

a. Complete description of the Proposed Activity (continued):

The project goals include: 1) replace the deteriorating, hydraulically inadequate bridge; 2) accommodate a consistent 55 miles per hour (mph) posted speed corridor; 3) maintain traffic during construction; and 4) add a new center turn-lane for improved safety.

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 free-span bridge over the creek crossing. 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.

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 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 oak 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.

c. Direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands and other waters of the U.S. expected to result from the NWP activity (continued):

The existing bridge structure includes more concrete in the creek channel than the proposed bridge will include. Approximately 1,018 square feet of concrete will be removed from the creek channel during project implementation. Table 1 below includes estimated impacts to jurisdictional areas without consideration of the concrete removal and estimated impacts of the concrete removal. Removal of the existing concrete and construction of the new bridge will result in a net reduction of approximately 206 square feet of concrete below the OHWMs of Santa Margarita Creek, thereby improving the habitat conditions in the stream by opening up more of the natural channel.

Table 1. Estimated Impacts in Jurisdictional Areas Including Existing Concrete Removal

Jurisdictional Feature	Estimated Impacts	
	Permanent	Temporary
Clean Water Act—Other Waters (Section 404/401)	21 ft ² (0.0005 acre)	581 ft ² (0.014 acre)
Existing Concrete Removal	-417 ft ² (0.01 acre)	n/a
Total Clean Water Act—Other waters (after concrete removal)	-396 ft² (-0.0095 acre)	581 ft ² (0.014 acre)

d. Description of any proposed mitigation measures intended to reduce the environmental effects caused by the proposed activity (continued):

Prior to construction, all personnel will participate in an environmental awareness training program conducted by a qualified biologist. The program shall include a description of the biological resources within the project area, the boundaries of construction and other pertinent measures to be implemented prior to, during, and after construction.

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.

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.

A Stormwater Control Plan has been prepared for the project (attached). 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.

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 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.

Caltrans, on behalf of FHWA, completed Section 7 consultation with NMFS and USFWS for potential impacts to federally endangered species. Copies of the Biological Opinions are enclosed.

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.