

**CALIFORNIA COASTAL COMMISSION**

SOUTH CENTRAL COAST AREA  
SOUTH CALIFORNIA ST., SUITE 200  
VENTURA, CA 93001  
(805) 641 - 0142

Filed: 2/22/00  
49th Day: 4/11/00  
180th Day: 8/20/00  
Staff: S. Hudson  
Staff Report: 3/23/00  
Hearing Date: 4/12/00  
Commission Action:

**RECORD PACKET COPY****STAFF REPORT: REGULAR CALENDAR**

**APPLICATION NO.:** 4-97-216

**APPLICANT:** Los Angeles County Department of Public Works

**PROJECT LOCATION:** Old Topanga Canyon Road Bridge over Red Rock Creek, Topanga; Los Angeles County

**PROJECT DESCRIPTION:** Demolition of an existing 29 ft. wide, 30 ft. long wooden bridge and the construction of a new 35 ft. wide, 30 ft. long reinforced concrete slab bridge; placement of 140 sq. ft. of ungrouted rip rap; and approximately 1,123 cu. yds. of grading (340 cu. yds. of cut and 783 cu. yds. of removal and recompaction).

**LOCAL APPROVALS RECEIVED:** N/A

**SUBSTANTIVE FILE DOCUMENTS:** Bridge Replacement Alternatives Analysis by Los Angeles County Department of Public Works dated 3/21/00; Geotechnical Engineering Investigation Report Addendum by Los Angeles County Department of Public Works dated 2/15/00; Geotechnical Engineering Investigation Report by Los Angeles County Department of Public Works dated 11/3/94; Hazardous Waste and Biological Study Report by Parsons Engineering Science, Inc. dated 9/27/95.

**SUMMARY OF STAFF RECOMMENDATION**

Staff recommends **approval** of the proposed project with eight special conditions as outlined on pages 3-5. The proposed project is for the demolition of an existing wooden bridge and the construction of a new reinforced concrete slab bridge in the same location. The Los Angeles County Department of Public Works has stated that the proposed improvements are necessary to meet current load carrying capacity code requirements and seismic standards for bridge crossings.

The project is located at the crossing of Old Topanga Canyon Road over Red Rock Creek. Red Rock Creek is designated as an environmentally sensitive habitat area (ESHA) by the previously certified Los Angeles County Malibu/Santa Monica Mountains Land Use Plan (LUP) and as a blueline stream by the United States Geologic Service. In addition, although the proposed project will not result in the removal of any oak trees, the project site is located immediately adjacent to an area designated as significant oak woodland by the LUP. The project will result in the unavoidable temporary loss of habitat for approximately 300 Mexican free-tailed bats which roost under the existing bridge to be demolished. Three letters in opposition to the proposed project have been received and are included as Exhibits 3a-c.

## **I. STAFF RECOMMENDATION**

**MOTION:**        *I move that the Commission approve Coastal Development Permit No. 4-97-216 pursuant to the staff recommendation.*

### **STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

### **RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

## **II. Standard Conditions**

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Compliance.** All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. **Interpretation.** Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.
5. **Inspections.** The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

### III. Special Conditions

#### 1. Riparian Habitat Restoration Plan and Monitoring Program

Prior to the issuance of the permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Riparian Habitat Restoration Plan and Monitoring Program, prepared by a qualified resource specialist, for all areas of the project site disturbed by grading and construction activities and/or permanently displaced due to the installation of the proposed bridge improvements (ie. wingwalls, rip rap, etc.). The plans shall identify the species, extent, and location of all plant materials to be removed or planted and shall incorporate the following criteria:

##### a. Technical Specifications

The Restoration Plan shall provide for the restoration of riparian habitat destroyed or damaged by construction activities or permanently displaced by the proposed development at a 3:1 or greater ratio. The mitigation areas shall be delineated on a site plan and shall be located on or immediately adjacent to the project site. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor on site. The stream channel/riparian vegetation corridor shall be revegetated with appropriate native riparian plant species.

The plan shall include detailed documentation of conditions on site prior to the approved construction activity (including photographs taken from pre-designated sites annotated to a copy of the site plans) and specify restoration goals and specific performance standards to judge the success of the restoration effort. Successful site restoration shall be determined if the revegetation of native plant species on site is adequate to provide 90% coverage by the end of the five (5) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation. The plan shall also include a detailed description of the process, materials, and methods to be used to meet the approved goals and performance standards and specify the preferable time of year to carry out restoration activities and describe the interim supplemental watering requirements that will be necessary.

##### b. Monitoring Program

A monitoring program shall be implemented to monitor the project for compliance with the specified guidelines and performance standards. The applicant shall submit, upon completion of the restoration and enhancement planting, and on an annual basis beginning from the date that the restoration planting is completed (but no later than December 31<sup>st</sup> each year), a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, indicating the success or failure of the restoration project. This report shall include further recommendations and requirements for additional restoration activities in order for the project to meet the specified criteria and performance standards. These reports shall also include photographs taken from

pre-designated sites (annotated to a copy of the site plans) indicating the progress of recovery at each of the sites.

At the end of a five year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has in part, or in whole, been unsuccessful, based on the approved performance standards, the applicant shall be required to submit a revised or supplemental program to compensate for those portions of the original program which were not successful. The revised, or supplemental restoration and enhancement program shall be processed as a coastal development permit.

## **2. Implementation of the Riparian Habitat Restoration Plan**

The applicant shall commence to implement the Riparian Habitat Restoration Plan required by Special Condition Two (2) within 30 days after construction of the proposed development has been completed. The Executive Director may grant additional time for good cause.

## **3. Construction Monitoring**

Prior to the issuance of the permit, the applicant shall retain the services of an independent resource specialist with appropriate qualifications acceptable to the Executive Director. The resource specialist shall be present on site during all construction activity. The monitor shall ensure compliance with all recommendations contained in the Hazardous Waste and Biological Study Report by Parsons Engineering Science, Inc. dated 9/27/95. Protective fencing shall be used around all oak trees and riparian vegetation which may be disturbed during construction activities. Protective fencing shall be used within all riparian areas to ensure that Pond Turtles and other terrestrial riparian fauna are excluded from the project site during construction activity.

The resource specialist shall immediately notify the Executive Director if unpermitted activities occur or if habitat is removed or impacted beyond the scope of the work allowed by Coastal Development Permit 4-97-216. This monitor shall have the authority to require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to any oak trees or other riparian flora/fauna on site beyond the scope of work allowed for by this permit, the applicant shall be required to submit a revised, or supplemental, restoration program to adequately mitigate such impacts. The revised, or supplemental, restoration program shall be processed as an amendment to this coastal development permit.

## **4. Timing of Construction**

Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a Construction Schedule for the proposed development which provides, to the maximum extent feasible, for the protection of the Mexican free-tail bats, Pond Turtles, and other sensitive riparian species which may be located on site through the avoidance of construction activities during applicable breeding seasons.

Construction activity shall not occur during the rainy season (November 1 – March 31) unless the Executive Director determines that such a schedule is consistent with the intent of this condition and is necessary to minimize adverse effects to the riparian habitat and Mexican free-tail bats.

#### **5. Construction Responsibilities and Debris Removal**

The applicant shall, by accepting this permit, agree: a) that no stockpiling of dirt or construction materials shall occur in any riparian areas on the subject site including the stream bed or banks; b) that any hazardous materials, such as, but not limited to, timber containing creosote, shall either be temporarily stored in a non-riparian area of the project site using a plastic sheet barrier between the ground and the wood or be immediately removed from the project site consistent with Special Condition Four; c) a plastic sheet be placed underneath the bridge during all demolition/construction activity (during dry weather conditions) to ensure that no debris or materials enter the stream channel; d) that all grading shall be properly covered and sand bags and/or ditches shall be used to prevent runoff and siltation; and e) that measures to control erosion must be implemented at the end of each day's work. In addition, the staging area for the proposed project shall be limited to non-riparian areas only, no machinery will be allowed in the streambed at any time. The permittee shall remove from the riparian area any and all debris that result from the construction period.

#### **6. Removal of Excavated and Hazardous Materials**

Prior to the issuance of the coastal development permit, the applicant shall submit evidence, for the review and approval of the Executive Director, of the location of the disposal site for all excavated and/or hazardous materials from the site. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required. All hazardous materials, including timber containing creosote, shall be disposed of at a location suitable for the disposal of toxic/hazardous materials.

#### **7. Material/Design Specifications**

Prior to the issuance of the coastal development permit, the applicant shall submit detailed plans, for the review and approval of the Executive Director, which show that: (1) all exposed surfaces of the approved bridge improvements, such as abutments or wing walls, shall be designed to include, or mimic, the native materials and appearance of the natural environment (such as the appearance of rock facing) and (2) the bridge shall be designed in a manner adequate to provide permanent bat habitat to mitigate for the loss of existing bat habitat on site consistent with the recommendations contained in the Hazardous Waste and Biological Studies Report by Parsons Engineering Science dated 9/27/95.

#### **8. Required Approvals**

Prior to the issuance of the coastal development permit, the applicant shall submit to the Executive Director a valid Streambed Alteration Agreement from the California Department of Fish & Game and a valid U.S. Army Corp of Engineers permit or evidence that such approval is not required.

## **IV. Findings and Declarations**

The Commission hereby finds and declares:

### **A. Project Description and Background**

The proposed project is for the demolition of an existing 29 ft. wide, 30 ft. long wooden bridge and the construction of a new 35 ft. wide, 30 ft. long reinforced concrete slab bridge in the same location; placement of 140 sq. ft. of ungrouted rip rap; and approximately 1,123 cu. yds. of grading (340 cu. yds. of cut and 783 cu. yds. of removal and recompaction). The Los Angeles County Department of Public Works has stated that the proposed improvements are necessary to provide for current load carrying capacity code requirements and seismic standards for bridge crossings. The project site is located at the crossing of Old Topanga Canyon Road over Red Rock Creek in the Old Topanga Canyon area of Los Angeles County (Exhibit 1). Demolition of the existing bridge will be conducted entirely from the roadway. The new reinforced concrete single-span bridge will provide approximately the same streamflow capacity as the existing bridge. Construction will be performed in two stages (1/2 of the bridge will be constructed at a time) to allow for one traffic lane to remain open at all times during construction activity. The new bridge will be only 6 ft. greater in width than the existing bridge to provide for current lane width requirements and will not serve to increase the number of available traffic lanes or capacity.

Red Rock Creek is designated as an environmentally sensitive habitat area (ESHA) by the previously certified Los Angeles County Malibu/Santa Monica Mountains Land Use Plan (LUP) and as a blueline stream by the United States Geologic Service. Red Rock Creek is a seasonal waterway with streamflow during the rainy season only. In addition, although the proposed project will not result in the removal of any oak trees, the project site is located immediately adjacent to an area designated as significant oak woodland by the LUP. The existing timber bridge currently provides habitat for approximately 300 Mexican free-tailed bats (*Tadarida brasiliensis*) which roost between the wood planks under the structure. The bats are native to the Santa Monica Mountains although migratory in nature returning to Mexico during the winter months. In addition, several species of special concern, such as the Southwestern Pond Turtle (*Clemmys marmorata pallida*) are known to exist in the Old Topanga Canyon Creek area and may potentially be found on site.

### **B. Hazards**

Section 30253 of the Coastal Act states in part that new development shall:

- (1) *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) *Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area*

*or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed development is located in the Santa Monica Mountains, an area which is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wild fires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property.

The proposed project is for the demolition of an existing 29 ft. wide, 30 ft. long wooden bridge and the construction of a new 35 ft. wide, 30 ft. long reinforced concrete slab bridge in the same location; placement of 140 sq. ft. of ungrouted rip rap; and approximately 1,123 cu. yds. of grading (340 cu. yds. of cut and 783 cu. yds. of removal and recompaction). The Los Angeles County Department of Public Works has stated that the proposed improvements are necessary to provide for current load carrying capacity code requirements and seismic standards for bridge crossings.

The proposed bridge replacement and grading will be implemented in accordance with the project plans prepared by engineers for LACDPW and with the guidelines contained within the "Standard Specifications for Public Works Construction" dated 1997. The Geotechnical Engineering Investigation Report by the Los Angeles County Department of Public Works dated 11/3/94, indicates that the proposed project is suitable from a geotechnical viewpoint. The report states:

*Based on our field exploration and laboratory testing, it is concluded that competent bedrock is suitable for support of the proposed foundation due to its dense condition and relatively shallow depth.*

In addition, the Los Angeles County Department of Public Works has indicated that the new reinforced concrete single-span bridge will provide approximately the same streamflow capacity as the existing bridge and will not result in any changes to streamflow velocity or increased downstream erosion. The Geotechnical Engineering Investigation Report Addendum by Los Angeles County Department of Public Works dated 2/15/00 states that:

*The configuration of the concrete bridge will match the configuration of the existing timber bridge associated with the span and clearance, but the width of the bridge will be moderately increased to accommodate the widening of the above road. All improvements will be limited to the location of the proposed bridge with no modifications to the upstream and downstream areas of the stream. The proposed improvements will not affect the streamflow capacity.*

...

*Therefore, the flowrate for the creek, the upstream and downstream creek velocities in the vicinity of the bridge, and the upstream and downstream erosion potential caused by the proposed improvements would not have any significant impacts.*

The proposed project also includes the placement of approximately 140 sq. ft. of ungrouted rip rap within the streambed at the terminus of two drainage outlets on either side of Old Topanga Canyon Road. The Los Angeles County Department of Public Works has indicated that the proposed rip rap is necessary to minimize erosion on site. The Department of Public Works has further indicated that the proposed rip rap will not result in any significant changes to streamflow velocity or result in increased erosion downstream. The Geotechnical Engineering Investigation Report Addendum by Los Angeles County Department of Public Works dated 2/15/00 states:

*The placement of approximately 140 square feet of ungrouted rip rap at the two locations will minimize erosion of the drainage outlet. The absence of rip rap would cause uncontrolled erosion of streambed from the drain outlets of the overside road drain and the existing 12-inch diameter corrugated metal pipe...its placement will not have a significant impact on the flow velocity and downstream effects.*

In addition, the Commission notes that the amount of new cut grading proposed by the applicant is larger than the amount of fill to be placed and will result in approximately 340 cu. yds. of excess excavated material. Excavated materials that are placed in stockpiles are subject to increased erosion. The Commission also notes that additional landform alteration would result if the excavated material were to be retained on site. In order to ensure that excavated material will not be stockpiled on site and that landform alteration is minimized, Special Condition Six (6) requires the applicant to remove all excavated material from the site to an appropriate location and provide evidence to the Executive Director of the location of the disposal site prior to the issuance of the permit. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required.

The Commission also notes that no feasible less environmentally damaging alternatives exist to the proposed project that would ensure structural stability and public safety. A stream crossing for a road may only be achieved in one of three ways: (1) a bridge, (2) a culvert, or (3) an Arizona Crossing. The construction of a culvert or Arizona Crossing, rather than a new bridge, would require the placement of a large amount of impermeable surface within the streambed, increase stream flow velocity, result in potential increased downstream erosion, and result in significantly greater adverse effects to the habitat value of the site than the proposed project. Further, as stated above, the LUP identifies the use of bridges as the environmentally preferred method to provide for stream crossings in the Santa Monica Mountains. In addition, the Los Angeles County Department of Public Works has indicated that reinforcement, rehabilitation, or replacement (using timber material) of the existing timber bridge are not feasible alternatives and that construction of the new concrete bridge is necessary to ensure structural stability and public safety (Exhibit 4). The Bridge Replacement Alternatives Analysis by Los Angeles County Department of Public Works dated 3/21/00 states:



*The reinforcing or rehabilitation of the existing 64-year old, structurally deficient bridge with timber members (beams and piles) was considered, however, the composite structures of wood/concrete or wood/steel would be useless when existing timber members have rotted. The timber members of this bridge have been repeatedly exposed to water and sunlight. With the eminent rotting of these members, the bridge is approaching the end of its useful life. Although the exact remaining life can not be determined, the piles in the Red Rock Creek, if not replaced, will eventually crumble allowing the roadway to sink. Timber members often rot from within, so visual inspection of the piles above ground does not provide any indication of the structural integrity of the piles below the ground surface.*

*Shoring up the existing bridge requires new members to take the place of the timber members that are rotting. This is not feasible, since the new members placed in the creek under the existing timber beams would obstruct water flows under the bridge. The treatment of timber may result in leaching of pentachlorophenol, ammoniacal copper arsenate or chromated copper arsenate into the creek. Steel and concrete structures have considerably lower maintenance and a much longer service life.*

As such, the Commission notes that reinforcement or rehabilitation of the existing timber bridge is not feasible. Although it is possible to construct a new timber bridge to replace the existing bridge on site, the Los Angeles County Department of Public Works has indicated that the construction of a steel and concrete structure, rather than timber, is the preferred alternative in order to minimize maintenance and ensure long-term structural stability and public safety. In addition, timber bridges are subject to potential damage and/or destruction from fire hazard. The loss of the timber bridge on the subject site during a wildfire event would result in the closure of an important transportation route for emergency vehicles and members of the public. Therefore, the Commission notes that no feasible alternatives to the proposed project exist which would serve to ensure structural integrity and public safety to a greater extent than the proposed project.

Therefore, for the reasons discussed above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

### **C. Environmentally Sensitive Resources**

Section 30230 of the Coastal Act states that:

*Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 states:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms*

*and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240 states:

*(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*

*(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.*

Sections 30230 and 30231 of the Coastal Act require that the biological productivity and the quality of coastal waters and streams be maintained and, where feasible, restored through among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values.

To assist in the determination of whether a project is consistent with Sections 30230, 30231, and 30240 of the Coastal Act, the Commission has, in past coastal development permit actions for new development in the Santa Monica Mountains, looked to the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) for guidance. The Malibu LUP has been found to be consistent with the Coastal Act and provides specific standards for development along the Malibu coast and within the Santa Monica Mountains. In its findings regarding the certification of the Malibu/Santa Monica Mountains LUP, the Commission emphasized the importance placed by the Coastal Act on protection of sensitive environmental resources finding that:

*Coastal canyons in the Santa Monica Mountains require protection against significant disruption of habitat values, including not only the riparian corridors located in the bottoms of the canyons, but also the chaparral and coastal sage biotic communities found on the canyon slopes.*

Specifically, Policy 78 of the LUP, in concert with the Coastal Act, provides that stream road crossings shall be undertaken by the least environmentally damaging feasible method. In addition, Policy 82 of the LUP, in concert with the Coastal Act, provides that grading shall be minimized to ensure that the potential negative effects of runoff and erosion on watershed and streams is minimized. Further, Policies 84 and 94, in concert

with the Coastal Act, provide that disturbed areas shall be revegetated with native plant species within environmentally sensitive habitat areas and significant watersheds.

The stream located on the project site is designated as an environmentally sensitive habitat area (ESHA) by the previously certified Los Angeles County Malibu/Santa Monica Mountains LUP and as a blueline stream by the United States Geologic Service. Red Rock Creek is a seasonal waterway with streamflow during the rainy season only. In addition, although no oak trees are proposed to be removed as part of the proposed project, the subject site is located immediately adjacent to an area designated as significant oak woodland by the LUP. The existing timber bridge currently provides habitat for approximately 300 Mexican free-tailed bats (*Tadarida brasiliensis*) which roost between the wood planks under the structure. The bats are native to the Santa Monica Mountains although migratory in nature, returning to Mexico during the winter months. Although not a species of special concern, the bats fill an important niche in the Santa Monica Mountains ecosystem and in controlling local insect and mosquito populations. In addition, several species of special concern, such as the Southwestern Pond Turtle (*Clemmys marmorata pallida*) are known to exist in the Old Topanga Canyon Creek area and may potentially be found on site.

In the case of the proposed project, the Commission notes that the proposed replacement of the existing timber bridge with a new concrete bridge will serve to increase the structural stability of the bridge crossing on the subject site and ensure public safety. However, the Commission also notes that seasonal streams, such as the creek located on the subject site provide important habitat for riparian plant and animal species. Section 30231 of the Coastal Act provides that the quality of coastal waters and streams shall be maintained and restored whenever feasible. In past permit actions, the Commission has found that new development within riparian areas, such as the proposed project, results in potential adverse effects to riparian habitat and marine resources from increased erosion, contaminated storm runoff, , disturbance to wildlife, and loss of riparian plant and animal habitat. Further, although the proposed new single-span reinforced concrete bridge will be located in approximately the same location as the existing timber bridge to be demolished, the Commission notes that construction activities and placement the new larger bridge, wingwalls, and rip-rap will result in potential adverse effects to riparian habitat and marine resources from increased erosion, contaminated storm runoff, disturbance to wildlife, and loss of riparian plant and animal habitat. As discussed above, the Coastal Act requires that environmentally sensitive habitat areas, such as the subject site, be maintained, enhanced, and where feasible, restored. Therefore, in order to mitigate adverse effects to riparian habitat from the proposed project, Special Condition One (1) requires the applicant to submit a detailed Riparian Habitat Restoration Plan and Monitoring Program, prepared by a qualified resource specialist, for all areas of the project site disturbed by grading and construction activities and/or permanently displaced due to the installation of the proposed bridge improvements (ie. wingwalls, rip rap, etc.). The Restoration Plan shall provide for the restoration of all riparian habitat destroyed or damaged by construction activities or permanently displaced by the proposed development at a 3:1 or greater ratio.

The mitigation areas shall be delineated on a site plan and shall be located on or immediately adjacent to the project site. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor on site. The stream channel/riparian vegetation corridor shall be revegetated with appropriate native plant species. In addition, Special Condition One (1) also requires the applicant to submit annual reports indicating the success or failure of the restoration effort for a period of five years to ensure the success of the Riparian Habitat Restoration Plan. If the restoration effort is in part, or in whole, unsuccessful, the applicant shall be required to submit a revised or supplemental restoration program. Special Condition Two (2) has been required to ensure that the Riparian Habitat Restoration Plan required by Special Condition One (1) will be implemented in a timely manner.

In addition, the Commission notes that the proposed grading and construction activity will be located within an environmentally sensitive riparian habitat area, as well as in proximity to several oak trees and that the proposed grading may result in potential adverse effects to those resources. In order to ensure that any potential adverse effects to the oak trees and riparian habitat on the project site are minimized, Special Condition Three (3) requires the applicant to retain the services of an environmental resource specialist to be present on site during all construction activity. In addition, Special Condition Three (3) also requires the use of protective fencing around all oak trees or riparian vegetation which may be disturbed by the proposed construction activity and the use of protective fencing to ensure that Pond Turtles and other terrestrial riparian fauna are excluded from the project site during construction activity. The monitor shall have the authority to require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. If significant adverse effects or damage to the habitat value of the site occur as a result of the proposed construction activity, beyond that allowed by this permit, the applicant shall be required to submit a revised, or supplemental, restoration program to adequately mitigate such adverse effects. The revised, or supplemental, restoration program shall be processed as an amendment to this coastal development permit.

Further, the applicant has submitted a Hazardous Waste and Biological Studies Report by Parsons Engineering Science dated 9/27/95 which indicates that although the soil on the project site is not contaminated, the timber of the existing bridge to be demolished has been previously treated with creosote (classified a hazardous waste by the United States Environmental Protection Agency) and that, therefore, the demolition of the existing timber bridge may result in potential adverse effects to the surrounding riparian habitat. The report states:

***Analytical results indicated that the soil has not been impacted, and is considered clean. The wood, however, is classified as a RCRA waste (EPA Hazardous Waste Number D026). Therefore, during bridge dismantlement activities, all wood material should be prevented from contacting the soil.***

...

***Based on the wood composite analytical results, disposal options for the wood are either landfill or incineration. Tentative landfill disposal locations are in the states of California and Colorado. Tentative incineration locations are in the states of Utah or Kansas.***

Therefore, in order to ensure that adverse effects to the riparian habitat from hazardous materials are minimized, Special Condition Five (5) requires that any hazardous materials, such as, but not limited to, timber containing creosote, shall either be temporarily stored in a non-riparian area of the project site using a plastic sheet barrier between the ground and the wood or be immediately removed from the project site consistent with Special Condition Six (6). Special Condition Five (5) further requires that a plastic sheet be placed underneath the bridge during all demolition/construction activity (during dry weather conditions) to ensure that no debris or materials enter the stream channel. In addition, Special Condition Six (6) requires the applicant to submit evidence, for the review and approval of the Executive Director, of the location of the disposal site for all excavated and/or hazardous materials from the site. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required. All hazardous materials, including timber containing creosote, shall be disposed of at a location suitable for the disposal of toxic/hazardous materials.

In addition, the Commission notes that construction activity within an environmentally sensitive stream channel, such as the proposed project, will result in the potential generation of debris and/or presence of equipment and materials that could be subject to streamflow. Further, if construction site materials are discharged into the marine environment or left inappropriately/unsafely exposed on the project site, such discharge to the marine environment would result in adverse effects to sensitive riparian habitat. To ensure that adverse effects to the marine environment are minimized, Special Condition Five (5), also requires the applicant to ensure that stockpiling of construction materials shall not occur in any riparian areas on the subject including the streambed or banks, that no machinery will be allowed in the streambed at any time, all grading shall be properly covered, and that sand bags and/or ditches shall be used to prevent runoff and siltation.

As previously discussed, the existing timber bridge currently provides habitat for approximately 300 Mexican free-tailed bats (*Tadarida brasiliensis*) which roost between the wood planks under the structure. The bats are native to the southern United States and Mexico and migratory in nature, returning to Mexico during the winter months. Although the bats are not considered a sensitive species, the Commission notes that the bats fill an important niche within the Santa Monica Mountains ecosystem providing insect and mosquito population control. Removal of the existing bridge, will destroy the roost of the bats and is an unavoidable impact of the proposed project. The Hazardous Waste and Biological Studies Report by Parsons Engineering Science dated 9/27/95 states:

***Removal of the existing bridge will destroy the roost of the Mexican free-tailed bats. This species does not have a special status and is considered common. However, the loss of a roosting location may be considered significant...The new concrete bridge can be***

*designed to be "bat friendly," ie., holes and crevices can be added to the design that may be used by rats for roosting.*

As noted in the Hazardous Waste and Biological Studies Report by Parsons Engineering Science dated 9/27/95, the proposed project will result in the unavoidable temporary loss of bat habitat during construction. In order, to mitigate the temporary loss of bat habitat, the applicant, in conjunction with the local Cub Scouts Troop, has previously installed several temporary wooden bat houses in the area immediately surrounding the project site to provide temporary housing during construction. Although the bats have not yet utilized the temporary bat houses, the applicant's biological consultant has indicated that the bats will likely utilize the temporary bat houses only after the actual demolition of the existing roost. Bats which do not utilize the temporary housing during construction of the new bridge are expected to join other groups of Mexican free-tailed bats which have established roosts under two other bridges in the Old Topanga Canyon Area. However, in order to ensure that the proposed project will not result in the permanent loss of bat habitat in the Santa Monica Mountains, Special Condition Seven (7) requires that the proposed bridge be designed in a manner adequate to provide permanent bat habitat consistent with the recommendations contained in the Hazardous Waste and Biological Studies Report by Parsons Engineering Science dated 9/27/95.

Further, the Commission notes that, in addition to the Mexican free-tailed bats, several other animal species, including some species of special concern, such as the Southwestern Pond Turtle (*Clemmys marmorata pallida*), are known to exist in the Old Topanga Canyon Creek area and may potentially be found on site. The Commission further notes that disturbance and noise from construction activity, in addition to the temporary loss of habitat, will result in adverse effects to the native animal species located on the subject site. The applicant's biological consultants have indicated that construction activity should be limited to certain times of the year (primarily late spring through early fall) in order to avoid breeding seasons of certain species including the Mexican free-tailed bats and Pond Turtles. The applicant has indicated that all construction activity will be limited to a period between August and January to avoid disrupting the bats' breeding season. However, the applicant has not submitted a finalized construction schedule as part of this application. Further, the Commission notes that the above referenced general timing schedule for construction would allow for development to occur during the rainy season when adverse effects to the riparian habitat from construction activities would be greatest. Therefore, in order to ensure that adverse effects to the habitat value of the subject site are minimized, Special Condition Four (4) requires the submittal of a Construction Schedule for all construction activity which provides, to the maximum extent feasible, for the protection of the Mexican free-tail bats, Pond Turtles, and other sensitive riparian species which may be located on site through the avoidance of construction activities during applicable breeding seasons. Construction activity shall not occur during the rainy season (November 1 – March 31) unless the Executive Director determines that such a schedule is consistent

with the intent of this condition and is necessary to minimize adverse effects to the riparian habitat and Mexican free-tail bats.

The Commission notes that any development located within a stream channel will require a Streambed Alteration Agreement from the California Department of Fish and Game and approval from the United States Army Corp of Engineers. In this case, the applicant has previously submitted a Stream Alteration Agreement from the Department of Fish and Game dated 11/19/97 for the proposed project. However, the Streambed Alteration Agreement expired on 11/1/98. Therefore, Special Condition Eight (8) has been required to ensure that, prior to the issuance of a coastal permit, the applicant shall submit to the Executive Director a valid Streambed Alteration Agreement or other evidence of approval from the California Department of Fish & Game and a valid U.S. Army Corp of Engineers permit or evidence that such approval is not required.

Therefore, for the reasons discussed above, the Commission finds that the proposed amendment, as conditioned, is consistent with Sections 30230 and 30231 of the Coastal Act. However, the Commission notes that Section 30240 of the Coastal Act limits development in areas designated as ESHA, such as the subject site, to only those uses dependent upon such resources. The Commission further finds that the proposed development (the construction of a bridge) is not a resource dependent use and is, therefore, not consistent with Section 30240 of the Coastal Act.

Section 30007.5 of the Coastal Act provides the Commission with the ability to resolve conflicts between Coastal Act policies. This section provides that:

*The legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner that on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.*

### **1. Conflict**

In order for the Commission to utilize the conflict resolution provision of Section 30007.5, the Commission must first establish that there is a substantial conflict between two statutory directives contained in Chapter 3 of the Coastal Act. The fact that a project is consistent with one policy of Chapter 3 and inconsistent with another policy does not necessarily result in a conflict. Rather, the Commission must find that to deny the project based on the inconsistency with one policy will result in Coastal Zone effects that are inconsistent with another policy.

In this case, the proposed project is inconsistent with the environmentally sensitive habitat protection policies of the Coastal Act because the proposed development (a bridge) is not an allowable use within an environmentally sensitive habitat area (ESHA)

as identified by Section 30240. Specifically, Section 30240 of the Coastal Act limits allowable uses within an ESHA to "only uses dependent on those resources." However, as discussed in detail above, the proposed project is for the replacement of an existing bridge which the Los Angeles County Department of Public Works has stated is not adequate to provide for current load carrying capacity code requirements and seismic standards for bridge crossings. Old Topanga Canyon Road is an important roadway and is a crucial transportation link in the Topanga Canyon area of the Santa Monica Mountains. In addition, failure of the existing bridge or failure to reconstruct a new bridge after demolition would sever an important public transportation corridor in the Santa Monica Mountains and severely limit access to hundreds of homes in the surrounding area (including emergency vehicle access) creating a hazardous condition in an area prone to wildfire activity. As such, the Commission notes that the proposed project is necessary to ensure the stability and structural integrity of an existing stream crossing and will serve to minimize risks to life and property as required by Section 30253 of the Coastal Act.

In addition, the Commission notes that the riparian habitat on the subject site has been previously developed with the existing bridge to be demolished. The proposed new bridge will be located in approximately the same footprint as the existing bridge (the replacement bridge will be 6 ft. greater in width to meet current traffic lane width standards) with the addition of approximately only 140 sq. ft. of ungrouted rip rap and slightly larger wingwalls in the streambed. As such, the proposed project will result in relatively few new adverse effects to the riparian habitat on site.

The Commission also notes that no feasible less environmentally damaging alternatives to the proposed project exist. A stream crossing for a road may only be achieved in one of three ways: (1) a bridge, (2) a culvert, or (3) an Arizona Crossing. The construction of a culvert or Arizona Crossing, rather than a new bridge, would require the placement of a large amount of impermeable surface within the streambed, increase stream flow velocity, result in potential increased downstream erosion, and result in significantly greater adverse effects to the habitat value of the site than the proposed project. Further, as stated above, the LUP identifies the use of bridges as the environmentally preferred method to provide for stream crossings in the Santa Monica Mountains.

In addition, as previously discussed in detail, the Los Angeles County Department of Public Works has indicated that reinforcement or rehabilitation of the existing timber bridge is not a feasible alternative because all existing wood components of the 64-year old bridge would need to be replaced in their entirety to ensure structural stability (effectively constituting the construction of a new timber bridge). However, the Commission notes that the construction of a new timber bridge, although resulting in the same short-term adverse effects during construction, would result in greater potential long-term adverse effects to the habitat value of the site than construction of the proposed concrete bridge due to the potential leaching of hazardous chemicals (necessary for preservation of timber structures) into the sensitive riparian habitat



including creosote, pentachlorophenol, ammoniacal copper arsenate, and chromated copper arsenate. In addition, timber bridges are subject to damage and/or destruction from fire hazard. The loss of the timber bridge on the subject site during a wildfire event would result in the closure of an important transportation route for emergency vehicles and members of the public. As such, the Commission notes that reinforcement or rehabilitation of the existing timber bridge is not a feasible alternative and that the construction of a new timber bridge, rather than the proposed concrete bridge, would not serve to reduce or minimize adverse effects to the habitat value of the site. Therefore, the Commission notes that no feasible less environmentally damaging alternatives to the proposed project exist.

In conclusion, the proposed project will allow for the construction of a non-resource dependent use within an area designated as environmentally sensitive habitat and is; therefore, not consistent with Section 30240 of the Coastal Act. However, this project will serve to ensure structural and geologic stability on the subject site and minimize risks to life and property. Without construction of the proposed project, significant potential adverse effects to public safety will occur. Therefore, the Commission finds that the proposed project creates a conflict among Coastal Act policies.

## **2. Conflict Resolution**

After establishing a conflict among Coastal Act policies, Section 30007.5 of the Coastal Act requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. In this case, the proposed new bridge, although located in an ESHA, will be sited in approximately the same footprint as the existing bridge (the replacement bridge will be 6 ft. greater in width to meet current traffic lane width standards) with the addition of approximately only 140 sq. ft. of ungrouted rip rap in the streambed. The proposed bridge will not be expanded to provide for additional traffic lanes or capacity. As such, the proposed project will not occupy a significantly larger area of the subject site than the existing bridge and will result in relatively few new adverse effects to riparian habitat on site. On the other hand, however, the proposed project will ensure structural and geologic stability on the subject site. In conclusion, the Commission finds that denial of the proposed project would result in significant adverse effects to coastal resources.

As such, in resolving this conflict, the Commission finds that the adverse effects on coastal resources from not constructing the project will be more significant than the project's impacts to the habitat value of the site. Therefore, the Commission finds that approving the project is, on balance, most protective of coastal resources.

## **D. Visual Resources**

Section 30251 of the Coastal Act states that:

*The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinated to the character of its setting.*

The proposed project includes the replacement of an existing timber bridge in a rural area of Topanga with a new concrete bridge and larger wingwalls in approximately the same location. The Commission notes that the new proposed concrete bridge will serve to increase the structural stability of the bridge crossing on the subject site and ensure public safety. However, the Commission also notes that the new concrete bridge, which will be visible from Old Topanga Canyon Road, will be more urban in appearance and will be less consistent with the rural nature of the area surrounding the project site than the existing timber bridge. Therefore, in order to ensure that any adverse effects to public views resulting from the proposed development are minimized, Special Condition Seven (7) requires that the surface of the proposed bridge wingwalls and other non-road surface areas be designed to include, or mimic, the color and texture of native materials and appearance of the natural environment (such as the appearance of rock facing). Therefore, for the reasons discussed above, the Commission finds that the proposed development, as proposed, will not result in any adverse effects to public views and is consistent with Section 30251 of the Coastal Act.

## **E. Local Coastal Program**

Section 30604 of the Coastal Act states that:

*a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a local program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).*

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the project and accepted by the applicant. As conditioned, the

proposed development will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the City's ability to prepare a Local Coastal Program for Malibu which is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604(a).

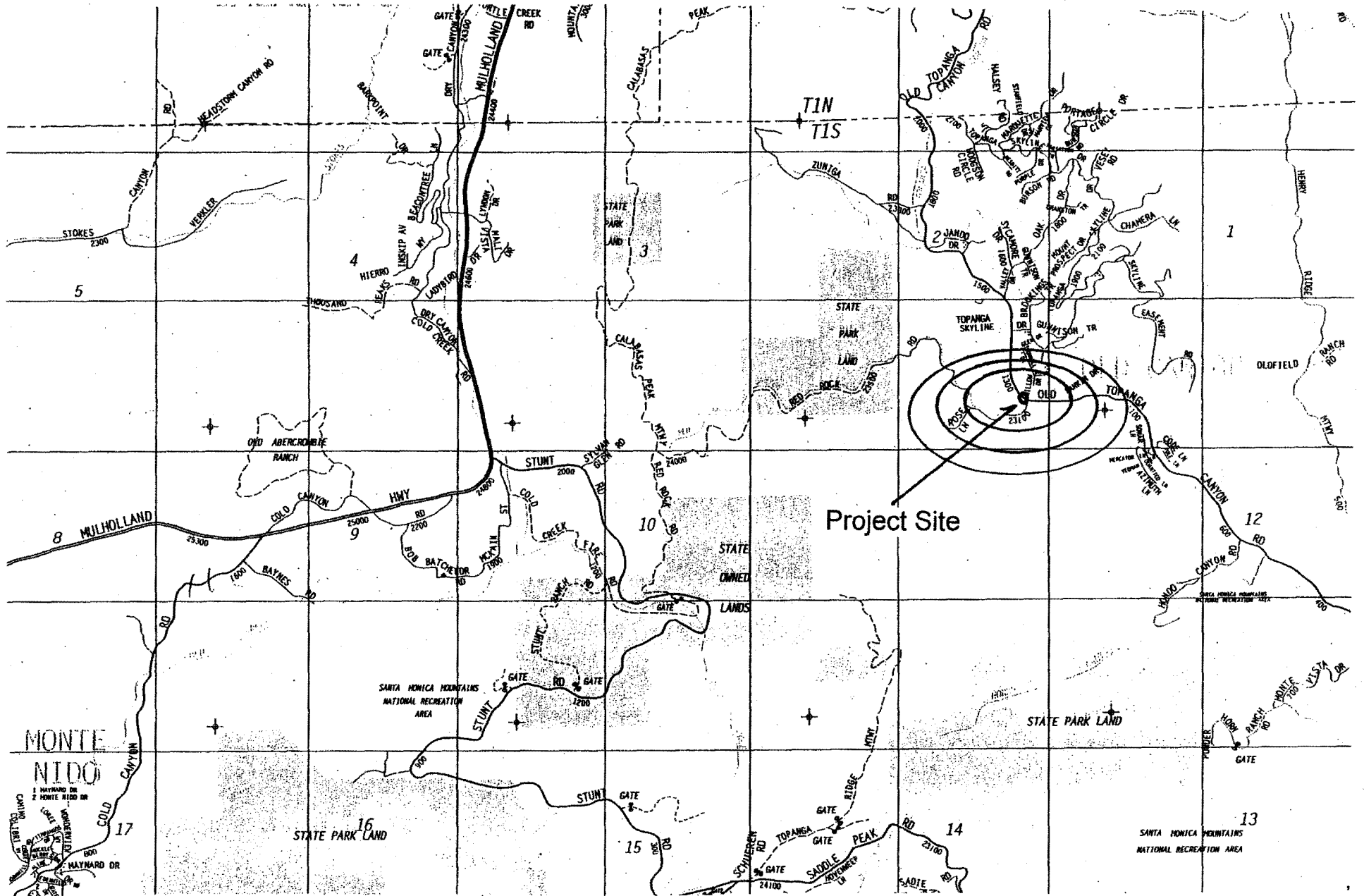
## **F. CEQA**

Section 13096(a) of the Commission's administrative regulations requires Commission approval of Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Commission finds that, the proposed project, as conditioned will not have significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.

## **SMH-VNT**

File:smh/permits/regular/4-97-216 LACDPW report



**EXHIBIT 1**  
**CDP 4-97-216 (LACDPW)**  
**Location Map**



**TOPANGA ASSOCIATION FOR A SCENIC COMMUNITY  
PO BOX 352 TOPANGA, CALIFORNIA 90290**

March 10,2000

California Coastal Commission  
South Central Coast Area  
89 South California Street  
Ventura, California 93001

re: application #4-97-216

Commissioners,

Our organization of over 600 residents in Topanga are concerned with the work that is slated for Old Topanga Canyon Road. The bridge in question is a major project to be done in the area. It has been expressed by a number of residents in Old Topanga Canyon that they would like to attend the hearing on this matter but could not make it because of the distance the meeting is from Topanga.

There are a number of items that need to be looked at in making a decision about the replacement or reinforcement of the bridge. One of them is the question of the real need for this work.

Has there been a traffic study done recently to determine the usage of the street? The flow of traffic was a very important factor in the determination to replace the bridge. There also seems to be many inconsistencies with this project in regards to the coastal act.

We would like to point out that there weren't any project alternatives discussed in the staff report. We are troubled with the approach that is being taken by Los Angeles County Public Works. We have structural engineers who will testify at the possible alternatives to the replacement of the bridge.

We are requesting that this matter be continued and rescheduled for the next meeting in Southern California. Thank you for your consideration in this matter.

Sincerely yours,



Roger Pugliese  
Chair TASC

EXHIBIT 3a

CDP 4-97-216 (LACDPW)

Letter of Concern



RECEIVED  
 MAR 13 2000  
 CALIFORNIA  
 COASTAL COMMISSION

9 March, 2000

California Coastal Commission  
 South Central Coast Area  
 89 South California Street  
 Ventura, California 93001

RECEIVED  
 MAR 14 2000  
 CALIFORNIA  
 COASTAL COMMISSION  
 SOUTH CENTRAL COAST DISTRICT

re: Application 4-97-216

Dear Commissioners,

The TCTC which is the liaison between our community of 11,107 folks and the various local, state, and Federal agencies is alarmed with the Bridge being proposed on Old Topanga Canyon Road.

Is the upgrade necessary?

Old Canyon is not a heavily used primary road as stated by staff.

When was the most recent traffic study done?

There are many inconsistencies in the staff report.

As there are several questions Topangan's would like to ask... We request a postponement and rescheduling to Southern California so our concerned citizens may have an opportunity to voice their questions.

Thanking you for your considerations in this matter:

Dale Robinette  
 President TCTC

EXHIBIT 3b
CDP 4-97-216 (LACDPW)
Letter of Concern

*Ven*

# Las Virgenes Homeowners Federation, Inc.

Post Office Box 353, Agoura Hills, California 91301

## EXECUTIVE COMMITTEE

*President*  
Jess Thomas

*Vice President*  
Robert Singer

*Secretary*  
Kathy Berkowitz

*Treasurer*  
Ruth Wilier

## Government Relations Committee

Les Hardie  
Toby Keeler  
Scott Solomon

## MEMBER ASSOCIATIONS

### Calabasas Highlands

Calabasas Hills

Calabasas Park

Calabasas Village

Cold Creek

Deer Springs

Fountainwood

Liberty Canyon

Malibu Canyon

### Malibu Lake Mountain Club

Malibu Lakeside

Monte Nido Valley

Mountain View Estates

Greater Mulwood

Old Agoura

Old Topanga

Saddle Peak

Saratoga Hills

Seminole Springs

Wagon Road Ranchos

Via Facsimile

March 12, 2000

California Coastal Commission  
89 South California St.  
Ventura, CA 93001

SUBJECT: Application #4-97-216

Dear Commissioners;

For over thirty year, the Las Virgenes Homeowners Federation has served the unincorporated areas in northwestern Los Angeles County, which includes the Old Topanga Homeowners. The community is concerned about Los Angeles County Department of Public Works plans to replace a bridge on Old Topanga Canyon Road, without exploring all the possible alternatives, which should include reinforcement in addition to potential replacement.

This issue is of sufficient concern to the community that we urge the Coastal Commission to continue this agenda item, and re-schedule the public hearing for the next meeting in the Los Angeles area. We do not believe this is an unreasonable request, in fact it is only fair and proper to consider those concerned residents of Topanga Canyon who wish to attend this hearing.

Respectfully yours,

Toby Keeler

Co-chair  
Government Relations Committee

RECEIVED  
MAR 13 2000

CALIFORNIA  
COASTAL COMMISSION

RECEIVED

MAR 14 2000

CALIFORNIA  
COASTAL COMMISSION  
SOUTH CENTRAL COAST DISTRICT

EXHIBIT 3c

CDP 4-97-216 (LACDPW)

Letter of Concern



Post-It® Fax Note	7671	Date	3/21/00	# of pages	1
To	STEVE HUDSON	From	MARIA SIM		
Co./Dept.	CA COASTAL COMMISSION	Co.	LACDPW		
Phone #	(805) 641-0142	Phone #	(626) 458-4329		
Fax #	(805) 641-172	Fax #			

March 21, 2000

TO: Steve Hudson  
California Coastal Commission

FROM: Maria Sim  
Los Angeles County Department of Public Works

RECEIVED  
MAR 21 2000

CALIFORNIA  
COASTAL COMMISSION  
SOUTH CENTRAL COAST DISTRICT

**BRIDGE REPLACEMENT AT OLD TOPANGA CANYON ROAD OVER THE RED ROCK CREEK**

As requested, the statements below explain the alternatives for the subject project:

- The reinforcing or rehabilitation of the existing 64-year old, structurally deficient bridge with timber members (beams and piles) was considered, however, the composite structures of wood/concrete or wood/steel would be useless when existing timber members have rotted. The timber members of this bridge have been repeatedly exposed to water and sunlight. With the eminent rotting of these members, the bridge is approaching the end of its useful life. Although the exact remaining life can not be determined, the piles in the Red Rock Creek, if not replaced, will eventually crumble allowing the roadway to sink. Timber members often rot from within, so visual inspection of the piles above ground does not provide any indication of the structural integrity of the piles below the ground surface.

Shoring up the existing bridge requires new members to take the place of the timber members that are rotting. This is not feasible, since the new members placed in the creek under the existing timber beams would obstruct water flows under the bridge. The treatment of timber may result in leaching of pentachlorophenol, ammoniacal copper arsenate or chromated copper arsenate into the creek. Steel and concrete structures have considerably lower maintenance and a much longer service life.

- The alternate structural systems that could be used in lieu of the slab bridge would be a cast-in-place concrete box girder, cast-in-place concrete T-girder, prestressed concrete I-girder, and steel stringer on concrete deck. These systems were not used because they are more costly, and the increased depth of the bridge deck would reduce water flow capacity under the bridge. Further, the taller span would add nothing to the bridge aesthetics.

MS:ro  
A:\MS9111.wpd

cc: Planning (Schales)

EXHIBIT 4
CDP 4-97-216 (LACDPW)
Bridge Alternatives Analysis

