CALIFORNIA COASTAL COMMISSION

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Staff: James Johnson Staff Report: 4/26/07 Hearing Date: 5/9/07



STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-06-009

APPLICANT: Los Angeles County Department of Public Works

PROJECT DESCRIPTION: Repair a 150 foot section of roadway and road shoulder,

and replace a damaged, existing 50-foot long corrugated drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cu. yds. of un-grouted riprap) at outfall of the existing drainpipe as an energy dissipater; paving roadway and berm with approximately 1.4 tons of asphalt concrete, and revegetation of the reconstructed slope with Jute-mesh netting and planting native mix

seeds.

PROJECT LOCATION: Upper Corral Canyon Road At Mile Marker 0.02, north of

Malibu Bowl, Santa Monica Mountains; Los Angeles County

(APN: 4462-033-915)

LOCAL APPROVALS RECEIVED: N/A

SUBSTANTIVE FILE DOCUMENTS: Emergency Coastal Development Permit No. 4-06-009-G (LACDPW); Los Angeles County Department of Public Works, Biological Reconnaissance Survey, Corral Canyon Road Repair Project at MM 0.02, Malibu, California, by URS dated February 8, 2006; ; "Repair, Maintenance and Utility Hook-Up Exclusions From Permit Requirements", adopted by the Commission on Sept. 5, 1978; National Park Service, 2000 Draft general management plan & environmental impact statement, Santa Monica Mountains National Recreation Area - California; California Resources Agency. 2001 Missing Linkages: Restoring Connectivity to the California Landscape: California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS. San Diego Zoo and The Nature Conservancy. Available http://www.calwild.org/pubs/reports/linkages/index.htm; September 2002 staff report for the Malibu LCP; Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne, 2000, Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys; Franklin, J. 1997; Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report; Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning.

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SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with two (2) special conditions regarding a chaparral habitat restoration plan and an assumption of risk. All development proposed as part of this application has been previously completed pursuant to Emergency Coastal Development Permit 4-06-009-G, which was issued on February 15, 2006. Pursuant to Special Condition Five (5) of the emergency permit, the emergency work was authorized on an interim basis only and a follow-up regular coastal development permit is required in order to authorize the development on a permanent basis. This application is the follow-up to the previously issued emergency permit and is a request by the County of Los Angeles to permanently authorize the emergency work that was previously completed.

The proposed project is along the upper portion of Corral Canyon Road at the end of the paved road portion. The project proposes to repair a 150 foot section of the roadway, road shoulder, and replace a damaged, existing 50-foot long corrugated drainpipe with rock rip rap dissipater. With the exception of the proposed repair/repavement of approximately 150 foot length of roadway surface, the proposed project is located primarily along a 16 foot section of or road embankment which descends to an unnamed drainage leading to Solstice Creek. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic yards of ungrouted riprap) at the toe of the drainpipe as an energy dissipater; paving the road and a berm with approximately 1.4 tons of asphalt concrete, and revegetating the reconstructed slope with jute-mesh netting and planting native mix seeds

The project site drains into a 50 foot section of corrugated drainpipe to an unnamed natural drainage leading to Solstice Creek, a significant blue line stream, which is located approximately 2,000 ft. downslope to the west of the project site. The installation of the proposed 50 sq. ft. of rip rap at the base of the filled road embankment will result in the permanent loss of chaparral habitat area on site.

The County has submitted an engineering and alternatives analysis for the proposed project, which indicates that the proposed corrugated drainpipe and rip rap at its outlet is necessary to dissipate the energy from flowing water from the outlet of the drainpipe. The applicant considered the potentially feasible alternatives to the proposed fill along the slope including the construction of a vertical concrete retaining wall and lessening the steepness of the existing slope to avoid using rip rap at the toe of the drainpipe. A third alternative was considered to replace the existing metal drainpipe with an open concrete culvert. Staff has reviewed the submitted alternatives analysis and concurs with the County that none of the three alternative repair strategies are considered environmentally preferable to the proposed project because they would result in greater adverse impacts to sensitive habitat than the proposed project itself. Further, the County has also indicated that they believe the identified alternatives should not be considered viable due to excessive costs, poor aesthetic aspects, and resultant limitations in replanting the repaired slope.

The new 50 sq. ft. rip rap energy dissipater has been incorporated into the outlet of the reconstructed drainpipe on the slope as shown on Exhibit 5 and will not result in any expansion to the footprint of the previously existing slope on site. Staff has reviewed the analysis and concurs that there are no less environmentally damaging alternatives to provide for stability of the reconstructed slope and drainpipe; however, the installation of the proposed rip rap at the outlet of the drainpipe will still result in the permanent loss of chaparral habitat area on site as the rip rap displaces about 50 sq. ft. of former chaparral vegetation.

Although this remediation project is a repair and maintenance project of the sort described in the Commission's 1978 Repair and Maintenance Guidelines, it is located within a chaparral environmentally sensitive habitat area (ESHA) and on State property outside the roadway prism, and, thus, requires a coastal development permit. The standard of review for the coastal permit is consistency with the Chapter 3 policies of the Coastal Act, including the protection of ESHA; therefore, in order to mitigate for adverse impacts to chaparral habitat, Special Condition One (1) requires the applicant to implement a chaparral restoration plan that provides for habitat restoration at a 3:1 or greater ratio for all areas of the site that are disturbed by the proposed project. The applicant has considered the feasible alternatives to the fill slope, finding that the proposed project is the environmentally preferred alternative. The proposed project, as conditioned, is as consistent as possible with the applicable resource protection provisions of the Coastal Act.

I. STAFF RECOMMENDATION

MOTION: I move that the Commission approve Coastal Development Permit No. 4-06-009 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. <u>Notice of Receipt and Acknowledgment</u>. 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.
- **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.** <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4.** <u>Assignment</u>. 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.
- **5.** <u>Terms and Conditions Run with the Land</u>. 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. Chaparral Habitat Mitigation and Restoration Plan

Prior to issuance of this Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Chaparral Habitat Restoration Plan and Monitoring Program, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for all areas of the project site temporarily disturbed by grading and/or construction activities and permanently displaced due to the installation of the rip rap. Within 60 days of the issuance of this coastal development permit, the applicant shall commence implementation of the approved Chaparral Habitat Mitigation and Restoration Plan. The Executive Director may grant additional time for good cause. 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. <u>Technical Specifications</u>

The Restoration Plan shall provide for the restoration of Chaparral habitat permanently displaced by the proposed development with native plant species that are appropriate for a chaparral area at a 3:1 (displaced area to restored area) or greater ratio (including the 50 sq. ft. area where rip rap has been installed in the calculation of the permanently displaced area). Areas where chaparral vegetation have been temporarily disturbed or removed due to construction activities shall be replanted with native plant species that are appropriate for a chaparral area in the same location. The restoration area shall be

delineated on a site plan and shall be located in the same vicinity of the project site within the Santa Monica Mountain coastal zone. All invasive and non-native plant species shall be removed from the restoration area.

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.

The plan shall also provide information on removal methods for exotic species, salvage of existing vegetation, revegetation methods and vegetation maintenance. The plan shall further include details regarding the types, sizes, and location of plants to be placed within the mitigation area. Only native plant species appropriate for a chaparral and which are endemic to the Santa Monica Mountains shall be used, as listed by the California Native Plant Society - Santa Monica Mountains Chapter in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains dated February 5, 1996. All native plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized or maintained within the property. Site restoration shall be deemed successful 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 initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting/revegetation work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting/revegetation work.

Five years from the date of issuance of this coastal development permit, the applicant shall submit for the review and approval of the Executive Director, a Chaparral Habitat Restoration Monitoring Report, prepared by a qualified biologist or Resource Specialist, that certifies whether the on-site restoration is in conformance with the restoration plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the monitoring report indicates the vegetation and restoration is not in conformance with or has failed to meet the performance standards specified in the restoration plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director and shall implement the approved version of the plan. The revised restoration plan must be prepared by a qualified biologist or Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

2. Assumption of Risk

- A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion, flooding, and slope failure; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description, Background, Alternatives, and Permit Requirements

1. Project Description

The applicant requests approval to repair a 150 foot section of existing roadway and road shoulder and to replace a damaged, existing 50-foot long corrugated drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic yards of ungrouted riprap) at the outfall of a drainpipe as an energy dissipater; paving a roadway and berm with approximately 1.4 tons of asphalt concrete, and revegetation of the reconstructed slope with Jute-mesh netting and planting native mix seeds (Exhibits 1-5).

The proposed project is along the upper portion of Corral Canyon Road at the end of the paved road portion. The proposed project is primarily located along a 150 foot section of existing roadway and a 16 foot section of its embankment. The project site drains down into a 50 foot section of corrugated drainpipe to an unnamed natural drainage leading to Solstice Creek, a significant blue line stream, which is located approximately 2,000 ft. downslope to the west of the project site. The installation of the proposed 50 sq. ft. of rip rap at the base of the filled road embankment will result in the permanent loss of chaparral habitat area on site.

The County has submitted an engineering and alternatives analysis for the proposed project, which indicates that the proposed corrugated drainpipe and rip rap at its outlet is necessary to dissipate the energy from flowing water from the outlet of the drainpipe. The applicant considered the feasible alternatives to the proposed fill along the slope including the construction of a vertical concrete retaining wall and lessening the steepness of the existing slope to avoid using rip rap at the toe of the drainpipe. A third alternative was considered to replace the existing metal drainpipe with an open concrete culvert. Staff has reviewed the submitted alternatives analysis and concurs with the County that none of the three identified alternative repair strategies are considered environmentally preferable to the proposed project because they would result in greater adverse impacts to sensitive habitat than the proposed project itself. Further, the County has also indicated that they believe the identified alternatives should not be considered viable due to excessive costs, poor aesthetic aspects, and resultant limitations in replanting the repaired slope.

2. Background

During the January 2005 winter storm season, the roadway embankment slope along this 150 foot long section of Corral Canyon Road was subject to significant erosion as a result of increased amounts of stormwater runoff. The County's engineers subsequently determined, in anticipation of the 2005-2006 winter season, that the public road was in imminent danger of failure due to slope failure as a result of rapid erosion of the slope due to heavier than normal rainfall in 2005. On February 15, 2006, Emergency Permit 4-06-009-G was issued to remediate an active slope failure on the downslope road shoulder of Corral Canyon Road. Slope repair included work on a 150 foot section of roadway and road shoulder and the replacement of a damaged, existing 50-foot long corrugated pipe drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic vards) of ungrouted riprap at the outfall of a drainpipe as an energy dissipater; and paving a roadway and berm with approximately 1.4 tons of asphalt concrete. The purpose of this remediation was to maintain the public's ability to use these roads for vehicular access and to provide for emergency services/access to the developed Malibu Creek State Park and Santa Monica Mountains National Recreation Area located to the west, north and east of the project site. State Parks granted a Right to Entry Permit to Los Angeles County on October 31, 2005 to complete this project on State property adjacent to the roadway to the west.

All proposed development has been previously completed pursuant to Emergency Permit 4-06-009-G (LACDPW), which was issued on February 15, 2006. The emergency permit granted temporary authorization of the work only, and permanent retention of the development requires the issuance of a follow-up regular coastal

development permit by the California Coastal Commission. This application was submitted by the County in follow-up to their emergency permit in order to request permanent authorization for the work that was temporarily authorized by Emergency Permit 4-06-009-G.

3. Coastal Permit Required for Repair and Maintenance within ESHA

The proposed work is designed to maintain the existing road in a safe condition. The project constitutes repair and maintenance work. The Commission has expressly recognized, since 1978, certain types of repair and maintenance work related to roads as exempt from permit requirements pursuant to Section 13252 of the Commission's regulations and Section 30610(d) of the Public Resource Code. See California Public Resources Code ("PRC") Section 30610(d) and the "Repair, Maintenance and Utility Hook-Up Exclusions From Permit Requirements" (adopted by the Commission on Sept. 5, 1978) (hereafter, "R&M Exclusions") Appendix I, § 3 (referring to "installation of slope protection devices, minor drainage facilities"). However, the exemptions provided by the above referenced sections and the R&M Exclusions are limited. Accordingly, California Code of Regulations, Title 14 ("14 CCR"), Section 13252(a lists extraordinary methods of repair and maintenance that do still require a permit. Among those methods is any repair or maintenance "located in an environmentally sensitive habitat area." 14 CCR § 13252(a)(3). Since this project would occur within such an area, the method by which this project is conducted is not exempt, and a permit is required. In addition, further review of the R&M Exclusions Guidelines confirms that this proposed repair and maintenance is not exempt from permit requirements based on that document because the proposed development is located outside the "roadway prism" or the roadway property or easement.

Similarly, 14 CCR Section 13252(a) states that "activities specifically described in the [R&M Exclusions guidance document that] will have a risk of substantial adverse impact on . . . environmentally sensitive habitat area" are not exempt based on that document and may require a coastal development permit, pursuant to the normal application of section 13252. Thus, in this case, although the project is a repair and maintenance project, since the work is to be performed within an ESHA, Section 13252(a)'s limits on the repair and maintenance exemption do apply, and this project does require a permit to ensure that the method employed is as consistent as possible with the Chapter 3 policies of the Coastal Act. Moreover, this project involves excavation, and the R&M Exclusions guidance document expressly states that a permit is required "for excavation . . . outside of the roadway prism" Id. at § II.A., page 2. Therefore, a coastal development permit is required for this project.

B. <u>Environmentally Sensitive Habitat and Marine Resources</u>

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.

Section **30107.5** of the Coastal Act, defines an environmentally sensitive area as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

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.

The applicant requests after-the-fact approval to repair a 150 foot section of existing roadway and road shoulder, and to replace a damaged, existing 50-foot long corrugated drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic yards of ungrouted riprap) at the outfall of a drainpipe as an energy dissipater; paving a roadway and berm with approximately 1.4 tons of asphalt concrete, and revegetation of the reconstructed slope with Jute-mesh netting and planting native mix seeds (Exhibits 1-5).

The proposed project is along the upper portion of Corral Canyon Road at the end of the paved road portion. The proposed project is primarily located along a 150 foot section of existing roadway and a 16 foot section of its embankment. The project site drains down into a 50 foot section of corrugated drainpipe to an unnamed natural drainage leading to Solstice Creek, a significant blue line stream, which is located approximately 2,000 ft. downslope to the west of the project site. The installation of the proposed 50 sq. ft. of rip rap at the base of the filled road embankment will result in the permanent loss of chaparral habitat area on site.

For habitats in the Santa Monica Mountains, particularly chaparral, there are three site-specific tests to determine whether an area is ESHA because of its especially valuable role in the ecosystem. First, is the habitat properly identified, for example as chaparral and oak woodlands? The requisite information for this test generally should be provided by a site-specific biological assessment. Second, is the habitat largely undeveloped and otherwise relatively pristine? Third, is the habitat part of a large, contiguous block of relatively pristine native vegetation? For those habitats that are absolutely rare or that support individual rare species, it is not necessary to find that they are relatively pristine, and are neither isolated nor fragmented.

As noted above, the Coastal Act provides a definition of "environmentally sensitive area" as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

The first test of ESHA is whether a habitat or species is rare. Rarity can take several forms, each of which is important. Within the Santa Monica Mountains, rare species and habitats often fall within one of two common categories. Many rare species or habitats are globally rare, but locally abundant. They have suffered severe historical declines in overall abundance and currently are reduced to a small fraction of their original range, but where present may occur in relatively large numbers or cover large local areas. This is probably the most common form of rarity for both species and habitats in California and is characteristic of coastal sage scrub, for example. Some other habitats are geographically widespread, but occur everywhere in low abundance. California's native perennial grasslands fall within this category.

A second test for ESHA is whether a habitat or species is especially valuable. Areas may be valuable because of their "special nature," such as being an unusually pristine example of a habitat type, containing an unusual mix of species, supporting species at the edge of their range, or containing species with extreme variation. For example,

reproducing populations of valley oaks are not only increasingly rare, but their southernmost occurrence is in the Santa Monica Mountains. Generally, however, habitats or species are considered valuable because of their special "role in the ecosystem." For example, many areas within the Santa Monica Mountains may meet this test because they provide habitat for endangered species, protect water quality, provide essential corridors linking one sensitive habitat to another, or provide critical ecological linkages such as the provision of pollinators or crucial trophic connections. Of course, all species play a role in their ecosystem that is arguably "special." However, the Coastal Act requires that this role be "especially valuable." This test is met for relatively pristine areas that are integral parts of the Santa Monica Mountains Mediterranean ecosystem because of the demonstrably rare and extraordinarily special nature of that ecosystem as detailed below.

Finally, ESHAs are limited to those areas that could be easily disturbed or degraded by human activities and developments. Within the Santa Monica Mountains, as in most areas of southern California affected by urbanization, all natural habitats are in grave danger of direct loss or significant degradation as a result of many factors related to anthropogenic changes.

The applicant requests approval to repair a 150 foot section of existing roadway, road shoulder, and replace a damaged, existing 50-foot long corrugated drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic yards) of ungrouted riprap at the toe of the drainpipe as a energy dissipater; pave approximately 1.4 tons of asphalt concrete for roadway and berm, and revegetation of the reconstructed slope with Jute-mesh netting and planting native mix seeds (Exhibits 1-5).

The proposed project is along the upper portion of Corral Canyon Road at the end of the paved road portion. The proposed project is primarily located along a 150 foot section of existing roadway and a 16 foot section of its embankment where the fill and replacement drainpipe was placed. The project site drains down into a 50 foot section of corrugated drainpipe to an unnamed natural drainage leading to Solstice Creek, a significant blue line stream, which is located approximately 2,000 ft. downslope to the west of the project site. The installation of the proposed 50 sq. ft. of rip rap at the base of the filled road embankment will result in the permanent loss of chaparral habitat area on site.

The project site is located in part within a Los Angeles County road right-of-way and in part on Malibu Creek State Park parcels. The site is surrounded by chaparral vegetation with the nearest residence located about a mile to the south of the project site.

1. Ecosystem Context of the Habitats of the Santa Monica Mountains

The Santa Monica Mountains comprise the largest, most pristine, and ecologically complex example of a Mediterranean ecosystem in coastal southern California. California's coastal sage scrub, chaparral, oak woodlands, and associated riparian

areas have analogues in just a few areas of the world with similar climate. Mediterranean ecosystems with their wet winters and warm dry summers are only found in five localities (the Mediterranean coast, California, Chile, South Africa, and south and southwest Australia). Throughout the world, this ecosystem with its specially adapted vegetation and wildlife has suffered severe loss and degradation from human Worldwide, only 18 percent of the Mediterranean community type remains undisturbed¹. However, within the Santa Monica Mountains, this ecosystem is remarkably intact despite the fact that it is closely surrounded by some 17 million people. For example, the 150,000 acres of the Santa Monica Mountains National Recreation Area, which encompasses most of the Santa Monica Mountains, was estimated to be 90 percent free of development in 2000². Therefore, this relatively pristine area is both large and mostly unfragmented, which fulfills a fundamental tenet of conservation biology³. The need for large contiguous areas of natural habitat in order to maintain critical ecological processes has been emphasized by many conservation biologists⁴.

In addition to being a large single expanse of land, the Santa Monica Mountains ecosystem is still connected, albeit somewhat tenuously, to adjacent, more inland ecosystems⁵. Connectivity among habitats within an ecosystem and connectivity among ecosystems is very important for the preservation of species and ecosystem integrity. In a recent statewide report, the California Resources Agency⁶ identified wildlife corridors and habitat connectivity as the top conservation priority. In a letter to Governor Gray Davis, sixty leading environmental scientists have endorsed the conclusions of that report. The chief of natural resources at the California Department

National Park Service. 2000. Draft general management plan & environmental impact statement. Santa Monica Mountains National Recreation Area – California.

³ Harris, L. D. 1988. Edge effects and conservation of biotic diversity. Conserv. Biol. 330-332. Soule, M. E, D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. Conserv. Biol. 2: 75-92. Yahner, R. H. 1988. Changes in wildlife communities near edges. Conserv. Biol. 2:333-339. Murphy, D. D. 1989. Conservation and confusion: Wrong species, wrong scale, wrong conclusions. Conservation Biol. 3:82-

⁴ Crooks, K. 2000. Mammalian carnivores as target species for conservation in Southern California. p. 105-112 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. and R. F. Noss. 1998. Do habitat corridors provide connectivity? Conserv. Biol. 12:1241-1252. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. In: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

The SMM area is linked to larger natural inland areas to the north through two narrow corridors: 1) the Conejo Grade connection at the west end of the Mountains and 2) the Simi Hills connection in the central region of the SMM (from Malibu Creek State Park to the Santa Susanna Mountains).

⁶ California Resources Agency. 2001. Missing Linkages: Restoring Connectivity to the California Landscape. California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS, San Diego Zoo and The Nature Conservancy. Available at: http://www.calwild.org/pubs/reports/linkages/index.htm Letters received and included in the September 2002 staff report for the Malibu LCP.

of Parks and Recreation has identified the Santa Monica Mountains as an area where maintaining connectivity is particularly important⁸.

The species most directly affected by large scale connectivity are those that require large areas or a variety of habitats, e.g., gray fox, cougar, bobcat, badger, steelhead trout, and mule deer⁹. Large terrestrial predators are particularly good indicators of habitat connectivity and of the general health of the ecosystem¹⁰. Recent studies show that the mountain lion, or cougar, is the most sensitive indicator species of habitat fragmentation, followed by the spotted skunk and the bobcat¹¹. Sightings of cougars in both inland and coastal areas of the Santa Monica Mountains¹² demonstrate their continued presence. Like the "canary in the mineshaft," an indicator species like this is good evidence that habitat connectivity and large scale ecological function remains in the Santa Monica Mountains ecosystem.

The habitat integrity and connectivity that is still evident within the Santa Monica Mountains is extremely important to maintain, because both theory and experiments over 75 years in ecology confirm that large spatially connected habitats tend to be more stable and have less frequent extinctions than habitats without extended spatial structure¹³. Beyond simply destabilizing the ecosystem, fragmentation and disturbance can even cause unexpected and irreversible changes to new and completely different kinds of ecosystems (habitat conversion)¹⁴.

⁸ Schoch, D. 2001. Survey lists 300 pathways as vital to state wildlife. Los Angeles Times. August 7, 2001.

⁹ Martin, G. 2001. Linking habitat areas called vital for survival of state's wildlife Scientists map main migration corridors. San Francisco Chronicle, August 7, 2001.

Noss, R. F., H. B. Quigley, M. G. Hornocker, T. Merrill and P. C. Paquet. 1996. Conservation biology and carnivore conservation in the Rocky Mountains. Conerv. Biol. 10: 949-963. Noss, R. F. 1995. Maintaining ecological integrity in representative reserve networks. World Wildlife Fund Canada. Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. In: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

¹² Recent sightings of mountain lions include: Temescal Canyon (pers. com., Peter Brown, Facilities Manager, Calvary Church), Topanga Canyon (pers. com., Marti Witter, NPS), Encinal and Trancas Canyons (pers. com., Pat Healy), Stump Ranch Research Center (pers. com., Dr. Robert Wayne, Dept. of Biology, UCLA). In May of 2002, the NPS *photographed* a mountain lion at a trip camera on the Back Bone Trail near Castro Crest – Seth Riley, Eric York and Dr. Ray Sauvajot, National Park Service, SMMNRA.

¹³ Gause, G. F. 1934. The struggle for existence, Balitmore, William and Wilkins 163 p. (also reprinted by

¹³ Gause, G. F. 1934. The struggle for existence. Balitmore, William and Wilkins 163 p. (also reprinted by Hafner, N.Y. 1964). Gause, G. F., N. P. Smaragdova and A. A. Witt. 1936. Further studies of interaction between predators and their prey. J. Anim. Ecol. 5:1-18. Huffaker, C. B. 1958. Experimental studies on predation: dispersion factors and predator-prey oscillations. Hilgardia 27:343-383. Luckinbill, L. S. 1973. Coexistence in laboratory populations of *Paramecium aurelia* and its predator *Didinium nasutum*. Ecology 54:1320-1327. Allen, J. C., C. C. Brewster and D. H. Slone. 2001. Spatially explicit ecological models: A spatial convolution approach. Chaos, Solitons and Fractals. 12:333-347.

¹⁴ Scheffer, M., S. Carpenter, J. A. Foley, C. Folke and B. Walker. 2001. Catastrophic shifts in ecosystems. Nature 413:591-596.

As a result of the pristine nature of large areas of the Santa Monica Mountains and the existence of large, unfragmented and interconnected blocks of habitat, this ecosystem continues to support an extremely diverse flora and fauna. The observed diversity is probably a function of the diversity of physical habitats. The Santa Monica Mountains have the greatest geological diversity of all major mountain ranges within the transverse range province. According to the National Park Service, the Santa Monica Mountains contain 40 separate watersheds and over 170 major streams with 49 coastal outlets¹⁵. These streams are somewhat unique along the California coast because of their topographic setting. As a "transverse" range, the Santa Monica Mountains are oriented in an east-west direction. As a result, the south-facing riparian habitats have more variable sun exposure than the east-west riparian corridors of other sections of the coast. This creates a more diverse moisture environment and contributes to the higher biodiversity of the region. The many different physical habitats of the Santa Monica Mountains support at least 17 native vegetation types 16 including the following habitats considered sensitive by the California Department of Fish and Game: native perennial grassland, coastal sage scrub, red-shank chaparral, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamorealder woodland, oak riparian forest, coastal salt marsh, and freshwater marsh. Over 400 species of birds, 35 species of reptiles and amphibians, and more than 40 species of mammals have been documented in this diverse ecosystem. More than 80 sensitive species of plants and animals (listed, proposed for listing, or species of concern) are known to occur or have the potential to occur within the Santa Monica Mountains Mediterranean ecosystem.

The Santa Monica Mountains are also important in a larger regional context. Several recent studies have concluded that the area of southern California that includes the Santa Monica Mountains is among the most sensitive in the world in terms of the number of rare endemic species, endangered species and habitat loss. These studies have designated the area to be a local hot-spot of endangerment in need of special protection ¹⁷.

Therefore, the Commission finds that the Santa Monica Mountains ecosystem is itself rare and especially valuable because of its special nature as the largest, most pristine, physically complex, and biologically diverse example of a Mediterranean ecosystem in coastal southern California. The Commission further finds that because of the rare and special nature of the Santa Monica Mountains ecosystem, the ecosystem roles of substantially intact areas of the constituent plant communities discussed below are "especially valuable" under the Coastal Act.

¹⁵ NPS. 2000. op.cit.

¹⁶ From the NPS report (2000 op. cit.) that is based on the older Holland system of subjective classification. The data-driven system of Sawyer and Keeler-Wolf results in a much larger number of distinct "alliances" or vegetation types.

¹⁷ Myers, N. 1990. The biodiversity challenge: Expanded hot-spots analysis. Environmentalist 10:243-256. Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca and J. A. Kent. 2000. Biodiversity hot-spots for conservation priorities. Nature 403:853-858. Dobson, A. P., J. P. Rodriguez, W. M. Roberts and D. S. Wilcove. 1997. Geographic distribution of endangered species in the United States. Science 275:550-553.

2. <u>Major Habitats within the Santa Monica Mountains</u>

The most recent vegetation map that is available for the Santa Monica Mountains is the map that was produced for the National Park Service in the mid-1990s using 1993 satellite imagery supplemented with color and color infrared aerial imagery from 1984, 1988, and 1994 and field review¹⁸. The minimum mapping unit was 5 acres. For that map, the vegetation was mapped in very broad categories, generally following a vegetation classification scheme developed by Holland¹⁹. Because of the mapping methods used the degree of plant community complexity in the landscape is not represented. For example, the various types of "ceanothus chaparral" that have been documented were lumped under one vegetation type referred to as "northern mixed chaparral." Dr. Todd Keeler-Wolf of the California Department of Fish and Game is currently conducting a more detailed, quantitative vegetation survey of the Santa Monica Mountains.

The National Park Service map can be used to characterize broadly the types of plant communities present. The main generic plant communities present in the Santa Monica Mountains²⁰ are: coastal sage scrub, chaparral, riparian woodland, coast live oak woodland, and grasslands.

3. Chaparral

Another shrub community in the Santa Monica Mountain Mediterranean ecosystem is chaparral. Like "coastal sage scrub," this is a generic category of vegetation. Chaparral species have deep roots (tens of feet) and hard waxy leaves, adaptations to drought that increase water supply and decrease water loss at the leaf surface. Some chaparral species cope more effectively with drought conditions than do desert plants²¹. Chaparral plants vary from about one to four meters tall and form dense, intertwining stands with nearly 100 percent ground cover. As a result, there are few herbaceous species present in mature stands. Chaparral is well adapted to fire. Many species regenerate mainly by crown sprouting; others rely on seeds which are stimulated to germinate by the heat and ash from fires. Over 100 evergreen shrubs may be found in chaparral²². On average, chaparral is found in wetter habitats than coastal sage scrub, being more common at higher elevations and on north facing slopes.

¹⁸ Franklin, J. 1997. Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report. June 13, 1997, Dept. of Geography, San Diego State University, USFS Contract No. 53-91S8-3-TM45.

¹⁹ Holland R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Dept. of Fish and Game, Natural Heritage Division, Sacramento, CA. 95814.

National Park Service. 2000. <u>Draft</u>: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000. (Fig. 11 in this document.)

²¹ Dr. Stephen Davis, Pepperdine University. Presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

²² Keely, J.E. and S.C. Keeley. Chaparral. Pages 166-207 in M.G. Barbour and W.D. Billings, eds. North American Terrestrial Vegetation. New York, Cambridge University Press.

The broad category "northern mixed chaparral" is the major type of chaparral shown in the National Park Service map of the Santa Monica Mountains. However, northern mixed chaparral can be variously dominated by chamise, scrub oak or one of several species of manzanita or by ceanothus. In addition, it commonly contains woody vines and large shrubs such as mountain mahogany, toyon, hollyleaf redberry, and sugarbush²³. The rare red shank chaparral plant community also occurs in the Santa Monica Mountains. Although included within the category "northern mixed chaparral" in the vegetation map, several types of ceanothus chaparral are reported in the Santa Monica Mountains. Ceanothus chaparral occurs on stable slopes and ridges, and may be dominated by bigpod ceanothus, buck brush ceanothus, hoaryleaf ceanothus, or greenbark ceanothus. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage, holly-leaf redberry, sugarbush, and coast golden bush²⁴.

Several sensitive plant species that occur in the chaparral of the Santa Monica Mountains area are: Santa Susana tarplant, Lyon's pentachaeta, marcescent dudleya, Santa Monica Mountains dudleya, Braunton's milk vetch and salt spring checkerbloom²⁵. Several occurring or potentially occurring sensitive animal species in chaparral from the area are: Santa Monica shieldback katydid, western spadefoot toad, silvery legless lizard, San Bernardino ring-neck snake, San Diego mountain kingsnake, coast patch-nosed snake, sharp-shinned hawk, southern California rufous-crowned sparrow, Bell's sparrow, yellow warbler, pallid bat, long-legged myotis bat, western mastiff bat, and San Diego desert woodrat.²⁶

Coastal sage scrub and chaparral are the predominant generic community types of the Santa Monica Mountains and provide the living matrix within which rarer habitats like riparian woodlands exist. These two shrub communities share many important ecosystem roles. Like coastal sage scrub, chaparral within the Santa Monica Mountains provides critical linkages among riparian corridors, provides essential habitat for species that require several habitat types during the course of their life histories, provides essential habitat for sensitive species, and stabilizes steep slopes and reduces erosion, thereby protecting the water quality of coastal streams.

Many species of animals in Mediterranean habitats characteristically move among several plant communities during their daily activities, and many are reliant on different communities either seasonally or during different stages of their life cycle. The importance of an intact mosaic of coastal sage scrub, chaparral, and riparian community types is perhaps most critical for birds. However, the same principles apply to other taxonomic groups. For example, whereas coastal sage scrub supports a higher diversity of native ant species than chaparral, chaparral habitat is necessary for the

²³ Ibid.

²⁴ Ibid.

²⁵ Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.
²⁶ Ibid.

coast horned lizard, an ant specialist²⁷. Additional examples of the importance of an interconnected communities, or habitats, were provided in the discussion of coastal sage scrub above. This is an extremely important ecosystem role of chaparral in the Santa Monica Mountains.

Chaparral is also remarkably adapted to control erosion, especially on steep slopes. The root systems of chaparral plants are very deep, extending far below the surface and penetrating the bedrock below²⁸, so chaparral literally holds the hillsides together and prevents slippage.²⁹ In addition, the direct soil erosion from precipitation is also greatly reduced by 1) water interception on the leaves and above ground foliage and plant structures, and 2) slowing the runoff of water across the soil surface and providing greater soil infiltration. Chaparral plants are extremely resistant to drought, which enables them to persist on steep slopes even during long periods of adverse conditions. Many other species die under such conditions, leaving the slopes unprotected when rains return. Since chaparral plants recover rapidly from fire, they quickly re-exert their ground stabilizing influence following burns. The effectiveness of chaparral for erosion control after fire increases rapidly with time³⁰. Thus, the erosion from a 2-inch rain-day event drops from 5 yd³/acre of soil one year after a fire to 1 yd³/acre after 4 years.³¹

Therefore, because of its important roles in the functioning of the Santa Monica Mountains Mediterranean ecosystem, and its extreme vulnerability to development, chaparral within the Santa Monica Mountains meets the definition of ESHA under the Coastal Act.

Nonetheless, the proposed project is a necessary repair project partially located within a chaparral plant community and will result in significant adverse impacts to chaparral habitat. As discussed in greater detail above, the Commission finds that chaparral habitat, such as the native vegetation located on the subject site, provide important habitat for riparian plant and animal species. In past permit actions, the Commission has found that new development within chaparral habitat areas, such as the proposed project, results in potential adverse effects to chaparral habitat and downstream riparian habitat and ultimately marine resources from increased erosion, contaminated storm runoff, disturbance to wildlife, and loss of chaparral plant and animal habitat. The Coastal Act further requires that environmentally sensitive habitat areas, such as the

southern California. Ecology 36(4):667-678. Kummerow, J. and W. Jow. 1977. Root systems of chaparral shrubs. Oecologia 29:163-177.

29 Radtke, K. 1983. Living more safely in the chaparral-urban interface. General Technical Report PSW

A.V. Suarez. Ants and lizards in coastal sage scrub and chaparral. A presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.
 Helmers, H., J.S. Horton, G. Juhren and J. O'Keefe. 1955. Root systems of some chaparral plants in southern California. Ecology 36(4):667-678. Kummerow, J. and W. Jow. 1977. Root systems of

²⁹ Radtke, K. 1983. *Living more safely in the chaparral-urban interface*. General Technical Report PSW-67. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Berkeley, California. 51 pp.

³⁰ Kittredge, J. 1973. Forest influences — the effects of woody vegetation on climate, water, and soil. Dover Publications, New York. 394 pp. Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. (Table 1). The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. Vicars, M. (ed.) 1999. FireSmart: protecting your community from wildfire. Partners in Protection, Edmonton, Alberta.

³¹ Ibid.

subject site, be maintained, enhanced, and where feasible, restored to protect coastal water quality downstream...

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 1986 LUP has been found to be consistent with the Coastal Act and provides specific standards for development 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:

Environmentally sensitive habitat areas (ESHAs) shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Residential use shall not be considered a resource dependent use..

Specifically, Policy 68 of the LUP, in concert with the Coastal Act, limits development within ESHA areas. 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. LUP Policy 94 states:

Cut and fill slopes should be stabilized with planting at the completion of final grading. In Environmentally Sensitive Habitat Areas and Significant Watersheds, planting should be of native plant species using acceptable planting procedures, consistent with fire safety requirements. Such planting should be adequate to provide 90% coverage within 90 days, and should be repeated if necessary to provide such coverage. This requirement should apply to all disturbed soils. Jute netting or other stabilization techniques may be utilized as temporary methods. ...

In addition, Section 30231 of the Coastal Act specifically provides that the quality of coastal waters and streams shall be maintained and restored whenever feasible. As noted above, the project site includes chaparral habitat that meets the first and second tests of ESHA as the habitat is rare and is especially valuable as an unfragmented expanse of ESHA.. This ESHA also meets the third test as it is located in an area that could be easily disturbed or degraded by human activities and developments. Within the Santa Monica Mountains, as in most areas of southern California affected by urbanization, all natural habitats are in grave danger of direct loss or significant degradation as a result of many factors related to anthropogenic changes.

The proposed project is designed to repair the existing public road that was previously damaged due to storm activity. The project constitutes necessary repair and maintenance work. The Commission has expressly recognized, since 1978, certain types of public road-related repair and maintenance work as exempt from permit requirements pursuant Public Resources Code ("PRC") Section 30610(d) See "Repair,

Maintenance and Utility Hook-Up Exclusions From Permit Requirements" (adopted by the Commission on Sept. 5, 1978) (hereafter, "R&M Exclusions") Appendix I, § 3 (referring to "installation of slope protection devices, minor drainage facilities"). However, the exemptions provided by the above referenced section of the Public Resources Code and the R&M Exclusions are limited. Accordingly, California Code of Regulations, Title 14 ("14 CCR"), Section 13252(a) of lists extraordinary methods of repair and maintenance that do still require a permit. Among those methods is any repair or maintenance "located in an environmentally sensitive habitat area" 14 CCR § 13252(a)(3). Since this project would occur within such an area, the method by which this project is conducted is not exempt, and a permit is required.

In addition, further review of the R&M Exclusions Guidelines confirms that this proposed repair and maintenance is not exempt from permit requirements under that document either, because the proposed development is located outside the "roadway prism" or the roadway property or easement.

Similarly, Section 13252(a) of the Commission's regulations states that "activities specifically described in the [R&M Exclusions guidance document] that will have a risk of substantial adverse impact on ... environmentally sensitive habitat area" are not exempt based on that document and may require a coastal development permit, pursuant to the normal application of section 13252.

Thus, in this case, although the project is a repair and maintenance project, since the work is to be performed within an ESHA, Section 13252(a)'s limits on the repair and maintenance exemption do apply, and this project does require a permit to ensure that the method employed is as consistent as possible with the Chapter 3 policies of the Coastal Act. Moreover, this project involves excavation, and the R&M Exclusions guidance document expressly states that a permit is required "for excavation . . . outside of the roadway prism" <u>Id.</u> at § II.A., page 2. Therefore, a coastal development permit is required for this project.

Therefore, in this case, although the Commission finds that the proposed repair of the of the existing public roadway and its supporting slopes is generally consistent with the types of repair and maintenance activities that are allowed under Coastal Act and the R&M Guidelines for public projects, in this case, a coastal development permit is In addition, The Los Angeles County Department of Public Works, has submitted an Engineering Analysis for the implemented emergency repair strategy and the three identified alternatives to repair the failed outboard slope and drainpipe of the road at Corral Canyon Road at Mile Marker 0.02 that was damaged during the January 2005 storm event. The applicant's implemented emergency repair strategy consisted of a repair involved replacing 50-foot long corrugated metal pipe drainpipe with a new 18inch diameter, 50-foot long corrugated metal drainpipe. . The road embankment, shoulder, and road surface has been reconstructed. The road embankment was backfilled and compacted with 200 cubic yards of native earth material. Approximately 1.4 tons of asphalt concrete was used for reconstruction. 18 tons (9 cubic yards) of ungrouted riprap was installed at the outlet of the drainpipe to serve as an energy dissipater. Erosion control was implemented using Jute-mesh netting and planting native mix seeds. It was necessary to place the riprap at the toe of the drainpipe to dissipate the energy from the runoff and prevent further erosion during future storm events. Without the placement of this riprap the repaired compacted fill slope could fail in future storm events. This could occur during an intense storm event when storm water runoff would erode the backfilled surface of the repaired slope causing it to fail again. The slope could also fail if it became saturated from this storm water runoff, lose it cohesion, causing a slope failure and damage to the road above.

The applicant considered the following three alternatives prior to proposing the subject project:

- 1. Construction of concrete drainage: This alternative would involve replacement of the existing metal drainpipe with an open concrete drainage ("V" ditch) However, since this alternative would be more intrusive, it would involve installing a permanent concrete structure and preclude additional area from native plantings. This alternative would also be more costly than the implemented repair strategy due to its increased material cost, added excavation and backfill.
- **2.** Construction of vertical concrete retaining wall: The retaining wall repair solution is high cost and has poor aesthetic features to blend in with the hillside. It also would limit the amount of area of the repaired slope for replanting to occur.
- 3. Lessening the steepness of the existing slope to avoid using rip rap at the outlet of the drainpipe: This alternative would involve placement of substantial fill down slope such that the completed repaired slope would approach 2:1 (2 feet Horizontal to 1 foot Vertical slope) and enable the repair to be completed using only sediment with no rip rap being placed at the toe of the drainpipe. However, due to the existing topography this cannot be practically implemented and if it was implemented it would cause removal of native vegetation and trees that otherwise would be undisturbed. This alternative would also be more costly than the implemented repair strategy due to its expanded footprint, increased excavation and backfill.

As noted above the discussion of alternative repair strategies 1, 2, and 3 are not considered viable for implementation due to excessive costs, poor aesthetic aspects, and resultant limitations in replanting the repaired slope. Exhibit 5 identifies the repaired roadway, drainage pipe and slope on 4-2-07. Exhibit 5 also identifies the slope with jute netting and some native plants now growing on the slope and the drainpipe in addition to the 50 sq. ft. of rock rip rap at the base of the drainpipe serving as an energy dissipater. However, as identified in Exhibit 5 there is a need to augment the native planting to ensure its 90% coverage within five years of planting.

Therefore, although the proposed project is the environmentally preferred alternative, it will still result in some unavoidable adverse impacts to ESHA on site, including the placement of approximately 50 sq. ft. rip rap that will result in the loss of chaparral habitat. In past permit actions, the Commission has found that in order to ensure that repair work is as consistent as possible with the above referenced resource protection policies of both the Coastal Act and LUP, all sensitive chaparral habitat areas on site

that will be disturbed as a result of proposed development should be revegetated and restored. Therefore, the Commission finds that **Special Condition One (1)** is necessary to ensure that adverse effects to the chaparral habitat and nearby riparian areas from increased erosion and sedimentation are minimized. Specifically, **Special Condition One (1)** requires that prior to issuance of the permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Chaparral Habitat Restoration Plan and Monitoring Program, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for all areas of the project site either temporarily disturbed by grading and construction activities or permanently displaced due to the installation of the fill material and rip rap. Within 60 days of the issuance of this coastal development permit, the applicant shall commence implementation of the approved chaparral habitat restoration and mitigation plan. The Executive Director may grant additional time for good cause.

The Restoration Plan required pursuant to **Special Condition One (1)** shall provide for the restoration of chaparral habitat permanently displaced by the proposed development at a 3:1 or greater ratio (including, but not limited to, the approximately 50 sq. ft. area where rip rap has been installed). Areas where riparian and native vegetation have been either temporarily disturbed or removed due to construction activities shall be replanted with appropriate chaparral plant species in the same general vicinity appropriate for a chaparral habitat area. The mitigation areas shall be delineated on a site plan and shall be located in the same vicinity of the project site within the Santa Monica Mountain coastal zone. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor within the Restoration Plan area. In addition, **Special Condition One (1)** also requires the applicant implement a five year monitoring program to ensure the success of the replanting.

The Commission finds that the proposed project, only as conditioned, will serve to maintain and enhance the quality of coastal waters and to minimize impacts to environmentally sensitive habitat area, consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

C. <u>Hazards and Geologic Stability</u>

Coastal Act Section **30253** states in part:

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.

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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 applicant requests approval to repair a 150 foot section of existing roadway, road shoulder, and replace a damaged, existing 50-foot long corrugated drainpipe. The project includes placement of approximately 200 cu. yds. of fill material; placement of approximately 18 tons (9 cubic yards) of ungrouted riprap at the outlet of the drainpipe as an energy dissipater; pave approximately 1.4 tons of asphalt concrete for roadway and berm, and revegetation of the reconstructed slope with Jute-mesh netting and planting native mix seeds (Exhibits 1-5).

The proposed project is along the upper portion of Corral Canyon Road at the end of the paved road portion. The proposed project is primarily located along a 150 foot section of existing roadway and a 16 foot section of its embankment. The project site drains down into a 50 foot section of corrugated drainpipe to an unnamed natural drainage leading to Solstice Creek, a significant blue line stream, which is located approximately 2,000 ft. downslope to the west of the project site. The installation of the proposed 50 sq. ft. of rip rap at the base of the filled road embankment will result in the permanent loss of chaparral habitat area on site.

During the January 2005 winter storm season, the roadway embankment slope along this 50 foot long section of Corral Canyon Road was subject to significant erosion as a result of increased amounts of stormwater runoff. The County's engineers subsequently determined that the public road was in imminent danger of failure due to slope failure as a result of rapid erosion of the slope due to heavier than normal rainfall in 2005 in anticipation of the 2005-2006 winter season. On February 15, 2006, Emergency Permit 4-06-009-G was issued to remediate an active slope failure on the downslope road shoulder of Corral Canyon Road. The applicant implemented the repair to a 150 foot section of roadway, road shoulder, and replaced a damaged, existing 50foot long steel corrugated drainpipe. The applicant also; 1) placed approximately 200 cu. yds. of fill material; 2) placed approximately 18 tons (9 cubic yards) of ungrouted riprap at the outlet of the drainpipe as an energy dissipater; 3) paved approximately 1.4 tons of asphalt concrete for roadway and berm, and 4) installed jute netting and revegetated the reconstructed slope with native vegetation. The purpose of this remediation was to maintain the public's ability to use these roads for vehicular access and provide for emergency services/access to Malibu Creek State Park and the Santa Monica Mountains National Recreation Area. All proposed development has been previously completed pursuant to Emergency Permit 4-06-009-G (LACDPW) which was issued on February 15, 2006. The emergency permit granted temporary authorization of the work only and permanent retention of the development requires the issuance of a follow-up regular coastal development permit from the California Coastal Commission. This application was submitted by the County in follow-up to their emergency permit in order to request permanent authorization for the work that was temporarily authorized by Emergency Permit 4-06-009-G.

However, the Commission also notes that the proposed development, although necessary to remediate a hazardous eroding slope condition, will still not eliminate the potential for erosion of the steep slope on the subject site. The Commission finds that minimization of site erosion will add to the stability of the site. Erosion can best be minimized by requiring the applicant to plant all disturbed areas of the site with native plants compatible with the surrounding chaparral habitat. Further, in past permit actions, the Commission has found that invasive and non-native plant species are typically characterized as having a shallow root structure in comparison with their high surface/foliage weight and/or require a greater amount of irrigation and maintenance than native vegetation. The Commission notes that non-native and invasive plant species with high surface/foliage weight and shallow root structures do not serve to stabilize steep slopes, such as the slopes on the subject site, and that such vegetation results in potential adverse effects to the geologic stability of the project site. comparison, the Commission finds that native plant species are typically characterized not only by a well developed and extensive root structure in comparison to their surface/foliage weight but also by their low irrigation and maintenance requirements. Therefore, in order to ensure the stability and geotechnical safety of the site, Special Condition One (1) specifically requires that all proposed disturbed areas on subject site be stabilized with native vegetation appropriate for a chaparral habitat area. The existing plantings (Exhibit 5) do not appear to be adequate to meet the Commission's standard of 90% coverage within five years of planting and thus, this Special Condition One (1) is necessary to be implemented.

Further, the proposed project, as conditioned to ensure that the disturbed slopes on sites are revegetated with native vegetation, has been designed to ensure slope stability on site to the maximum extent feasible. However, the Coastal Act recognizes that certain development projects located in geologically hazardous areas, such as the subject site, still involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. As such, the Commission finds that due to the foreseen possibility of erosion, flooding, and slope failure, the applicant shall assume these risks as a condition of approval. Therefore, Special Condition Two (2) requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. The applicant's assumption of risk, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and which may adversely affect the stability or safety of the proposed development.

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

D. <u>Local Coastal Program</u>

Section 30604 of the Coastal Act states:

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 Development 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 are 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 County of Los Angeles' ability to prepare a Local Coastal Program for this area which is also consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

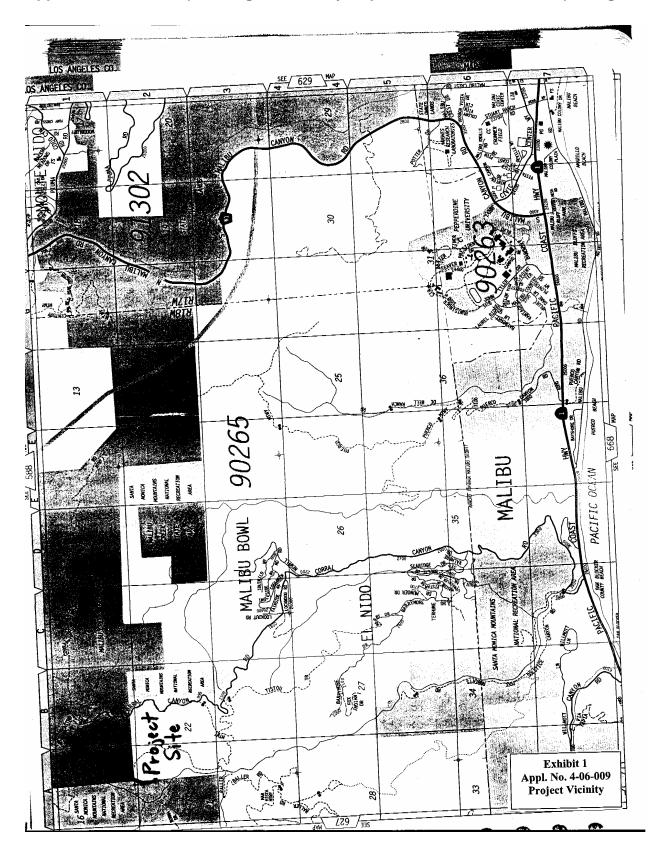
E. CEQA

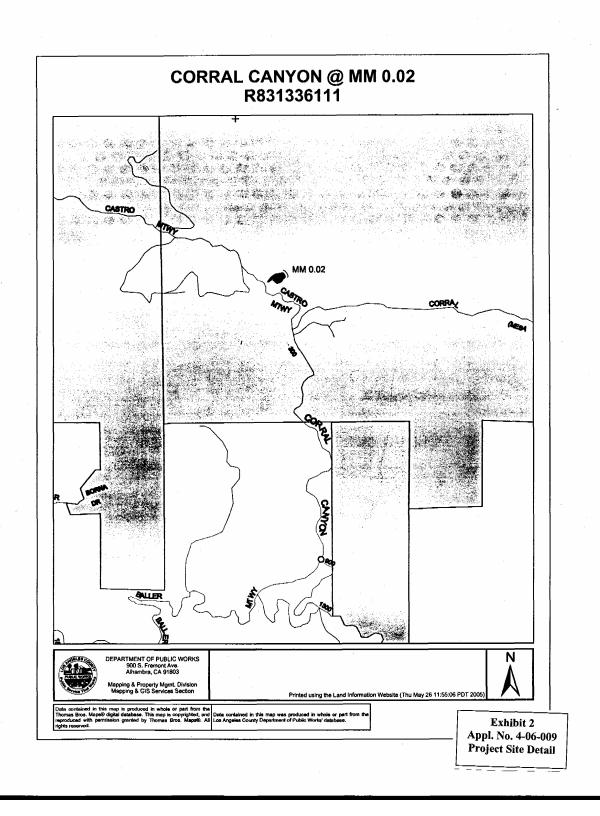
Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California 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 that the activity may have on the environment.

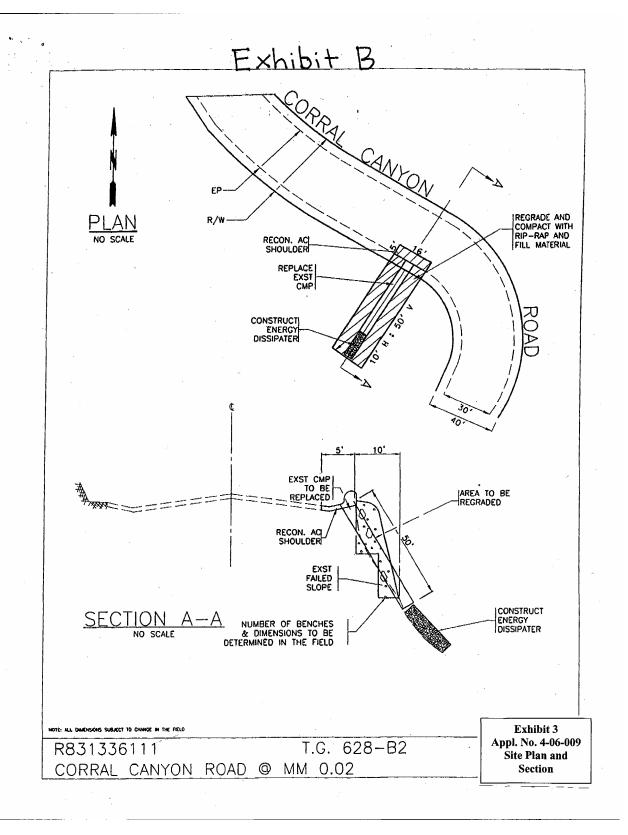
The County of Los Angeles found that the proposed project was statutorily exempt pursuant to Section 21080 (b) (3) of the California Environmental Quality Act in October 2005.

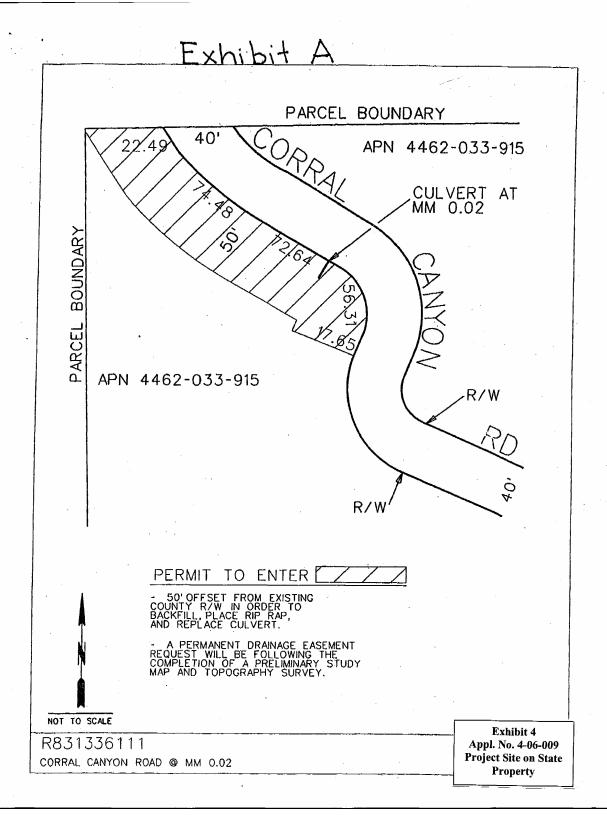
The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental effects have been required as special conditions and all reasonable alternatives were considered to the proposed project which was found to be the environmentally preferred alternative. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

4-06-009 LACDPW report FINAL











Corral Canyon Road **Pavement and Berm** Reconstruction **Looking Southwest**



Top of Slope Fill, Drainpipe, Jute **Netting and Some Native Plants**



Slope with Drainpipe and Rock Rip-Rap at Pipe Outlet as **Energy Dissipator**

> Exhibit 5 Appl. No. 4-06-009 Site Photos February 2007