CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
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VENTURA, CA 93001
(805) 585-1800

Th 11c

ADDENDUM

DATE: June 7, 2010

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item 11c, Thursday, June 10, 2010, CDP 4-09-087 (Los Angeles County Department of Public Works)

A. Revision

The following revisions to the findings and special conditions of the report are made as follows(language to be inserted is shown **underlined** and language to be deleted is shown in ~~line out~~):

In order to correct an inadvertent typographical error in Special Condition Three (3) Subpart a.1 on page four of the report; the following revision is made:

1) *Restoration of disturbed riparian habitat (at a ratio of 3:1 or greater) as mitigation for all areas permanently displaced by the proposed development (the approximately* ~~*1,645*~~ ***280*** *sq. ft. area where rocks will be placed at the base of the slope).*

In addition, to correct an inadvertent typographical error in the findings, the last full sentence on page seven (7) of the report is revised as follows:

> *The project includes base rock at the toe of the slope which creates permanent impacts to* ~~*187*~~ ***280*** *sq. ft. of former riparian vegetation that was eroded as a result of storm damage.*

In addition, the third sentence of the second paragraph on page 11 is revised as follows:

> *The majority of the proposed project is situated on the existing road and disturbed roadside slope, however, the two rock energy-dissipating drainage outlets will be located within the creek's riparian corridor and will result in permanent impacts to* ~~*187*~~ ***280*** *sq. ft. of riparian vegetation.*

B. Letter in Opposition

One letter in opposition to the proposed project has been received from Heal the Bay dated June 4, 2010, which has been included as an attachment to this addendum. The

letter requests the Commission deny the proposed road repair project and asserts that closure of Tuna Canyon Road be considered as a feasible alternative to repair of the damage roadway. The letter states, in part:

> *We appreciate Los Angeles County's efforts to mitigate environmental degradation at the site; however, we are concerned that riparian habitat will continue to suffer from the placement of Tuna Canyon Road. Taxpayer dollars should not be spent on expensive temporary fixes to a road that is unnecessary, and ultimately failing and unsafe. Instead, we recommend denial of this project and that the road be closed when it becomes impassable.*

In response, staff notes that this issue has already been fully discussed in the findings of the staff report, including in the Project Design Alternatives Section beginning on page 16 of the report. As discussed more fully report, staff does not believe that closure and abandonment of Tuna Canyon Road, is a feasible alternative. Moreover, this issue was previously raised by Heal the Bay at the Commission's December 2007 hearing when the Commission denied Coastal Development Permit (CDP) Application 4-06-118 for the installation of approximately 18,810 cu. yds. grading and 7,300 sq. ft. of rip rap along the creek banks on the subject site at Tuna Canyon Road at Mile Markers 4.97, 4.98, and 5.04. The Commission denied CDP Application 4-06-118 finding that it would result in significant impacts to stream ESHA and alternatives to avoid or minimize such impacts while also repairing the road condition were not adequately explored. The Commission directed staff to evaluate alternative methods of slope repair. In response, Commission staff has coordinated with County staff to develop the now proposed bio-engineered solution which would meet the project objective of stabilizing the failing roadway at M.M. 5.04 while avoiding the use of extensive rip rap within the down slope creek channel within the creek channel. In addition, the Commission also recently approved the related CDP 4-09-54 at its December 2009 hearing for the construction of a 150 ft. tie-back retaining wall to stabilize the road shoulder at the adjacent M.M. 4.97 and 4.98 locations.

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Heal the Bay

June 4, 2010

California Coastal Commission
South Central Coast Area Office
89 South California St., Suite 200
Ventura, CA 93001

Submitted via FAX: (805) 641-1732

Re: Agenda item Th11c; Application No. 4-09-087 (Los Angeles County Department of Public Works)

Dear Coastal Commissioners:

On behalf of Heal the Bay, a non-profit environmental organization with over 13,000 members dedicated to making the Santa Monica Bay and Southern California coastal waters and watersheds safe and healthy for people and local ecosystems, we have reviewed the staff report regarding the Los Angeles County Department of Public Works proposal to repair a section of roadway and regrade and revegetate adjacent riparian slope along a 70 linear foot long stretch of Tuna Canyon Road. As mentioned in the staff report, this site has been subject to previous action by the Commission, Application No. 4-06-118, which it denied in December 2007, finding that "it would result in significant impacts to stream ESHA and alternatives to avoid or minimize such impacts while also repairing the road condition were not adequately explored."[1] Heal the Bay's comment letter issued on December 11, 2007 on Application 4-06-118 is provided in Attachment A.

Areas adjacent to this site on Tuna Canyon Road have also been subject to previous action by the Commission. A similar project, Application 4-09-054, proposed to repair a 150 linear foot long section of Tuna Canyon Road and revegetate adjacent riparian slope was approved by the Commission in December 2009. Although the Los Angeles County Department of Public Works addressed some of our concerns about the previous project's impacts on instream and riparian habitats, we continue to be concerned that the repair proposals along Tuna Canyon Road will cause ongoing environmental degradation without addressing the larger issue of the poorly planned placement of Tuna Canyon Road along this stretch. The entire length of this one-way stretch of road is prone to failing and closures, and it is causing unabated environmental degradation of Tuna Canyon Creek. We are concerned that examining each stretch of failed road independently does not reflect the cumulative impacts of these failures on stream and riparian habitat in Tuna Canyon Creek. We are writing this letter to comment on the proposed project and the larger problem of continued environmental degradation along this stretch of stream.

[1] Coastal Commission Staff Report filed May 19, 2010 on Application 4-09-087, available at: http://documents.coastal.ca.gov/reports/2010/6/Th11c-6-2010.pdf.

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1. **We are concerned that failures along Tuna Canyon Road are contributing to riparian habitat degradation**

Section 30231 of the Coastal Act requires that biological productivity and stream water quality be maintained and, where feasible, restored through means such as 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. We are concerned that the proposed project is inconsistent with this section of the Coastal Act, and instead will likely cause further degradation of water quality in Tuna Canyon Creek and the associated riparian habitat due to the placement of Tuna Canyon Road.

We urge the Commission to recognize that, due to the placement of Tuna Canyon Road in and adjacent to the stream bed along this entire stretch, it is not possible to maintain this road and simultaneously mitigate the harm being caused to this vulnerable perennial stream habitat and adjacent riparian corridor. Through onsite visits, we have observed that much of the described length of road is causing direct harm to Tuna Canyon Creek and its riparian corridor. In a recent site visit, we documented riprap and hardened cement structures along almost the entire stretch of the creek adjacent to Tuna Canyon Road. These structures were placed in attempts to stabilize this ill placed and poorly planned road. These structures cause negative impacts to the stream bed by hardening the stream bank, and in many locations they are undercut and failing. Additionally, directly across the stream and/or downstream from almost every concrete structure there are severe erosion problems (photos of these erosion problems and failed revetments along Tuna Canyon Road and creek are documented in Attachment B). As an organization that works to protect our sensitive coastal water resources, we are very concerned by the habitat degradation occurring along this stream, especially because it is habitat to a diverse array of flora and fauna that include one of the healthiest populations of the coast range newt, a California Species of Concern.

We appreciate Los Angeles County's efforts to mitigate environmental degradation at this site; however, we are concerned that riparian habitat will continue to suffer from the placement of Tuna Canyon Road. Taxpayer dollars should not be spent on expensive temporary fixes to a road that is unnecessary, and ultimately failing and unsafe. Instead, we recommend denial of this project and that the road be closed when it becomes impassable. After such time, Heal the Bay would be happy to support and collaborate on a restoration plan to conserve and improve the natural resources of the Tuna Canyon Creek corridor.

2. **Road decommissioning is not adequately addressed as an alternative**

The staff report and recommendations does not adequately review road closure as an option for addressing the erosion issues along the banks of Tuna Canyon Creek. It reports that the County Geotechnical Division submitted engineering alternatives for this location, including "No Project or Road Closure," and concluded that this option is not viable because "Tuna Canyon road is a

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Public Roadway that must be maintained for vehicular and emergency access;"[2] however, no independent Coastal Commission staff evaluation is provided for this option. A road is not exempt from closure simply because it is a public roadway.

We also believe that the road's use as an emergency access route is overstated. As organizations with large member bases, we are especially sensitive to the fire safety issue; however, we have yet to hear that the fire department depends upon this road for emergency services. We believe that Tuna Canyon Road, as a road used for emergency access, is not the best option for the community that it serves. There are no residential properties along this one-way stretch of road, and the residents who live in neighborhoods that the road services have many other viable options for evacuation. During discussions with the County, concerns were raised about the necessity of Tuna Canyon Road for escape during a fire, especially for the Fernwood area of Topanga Canyon and residents in upper Tuna Canyon. We have researched this potential problem and found that these areas have several alternative escape routes in close proximity that are accessible from Tuna Canyon Road, without using Tuna Canyon Road as an escape to Pacific Coast Highway. Fernwood residents can easily and quickly access Topanga Canyon Road to the valley or to the coast. Additionally, Fernwood residents could access Big Rock Mountainway to Big Rock Drive, which is the same distance as taking Tuna Canyon Road to the coast. This route is also available to residents in upper Tuna Canyon. Tuna Canyon and Fernwood residents also have the option of taking Saddle Peak Road to Stunt Road to Mulholland Highway to Malibu Canyon Road or Mulholland Highway to Piuma Rd to Malibu Canyon Road and then can either travel to the valley or to the coast or Mulholland Highway to Rambla Pacifica to Las Flores Canyon Road to Pacific Coast Highway. These routes offer an additional 5 escape routes and are only 3.16 additional miles from the intersection of Tuna Canyon towards the coast and Saddle Peak Road (See Map in Attachment C).

Furthermore, we believe that a one-way road that has eroded down to one lane in many locations, with many active slides and erosion features, does not serve as a safe evacuation route. In fact, the section that is being addressed in this report is only one of many sections along the road that is actively failing. We counted at least 12 active slide locations further up the road, which, given the right conditions, could potentially make this road impassible. Repairing this one section of the road is a stop gap solution for a road that has many chronic problems. We therefore recommend what we see as the most viable option, which was not addressed in the staff report: a road closure followed by an effective road decommissioning process to address further erosion and instability problems.

[2] Coastal Commission Staff Report filed May 19, 2010 on Application 4-09-087, available at: http://documents.coastal.ca.gov/reports/2010/6/Th11c-6-2010.pdf.

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3. **Illegal dumping in this area is extensive and would likely discontinue with a road closure**

Another issue we encountered while visiting the proposed project site is an extensive amount of illegal dumping that is occurring along this stretch of road. The remoteness and isolation of this location provides a perfect opportunity for illegal dumping, and there was evidence that dumping has occurred on multiple occasions. Because of the road's unfortunate close proximity to the creek, dumping that occurs on the road has a direct negative impact on the creek. Eventual closing of this road to through traffic would thus have the added benefit of stopping illegal dumping along this stretch.

Conclusion

In conclusion, we urge the Commission to choose a long-term solution for Tuna Canyon Road and creek. We recommend stopping short-term, stop-gap improvements to a road that is failing, unsafe to use as an escape route in emergencies, and causing environmental destruction along a large portion of the creek and riparian habitats. We recommend eventual decommissioning of the one way stretch of Tuna Canyon Road and subsequent conservation measures to improve the natural resources unique to this section of the Santa Monica Bay watershed. We appreciate the opportunity to comment on this application. Please contact us if you have any questions regarding our comments or recommendations.

Sincerely,

Sarah Abramson Sikich
Coastal Resources Director

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Attachment A

December 11, 2007
California Coastal Commission
89 South California Street Suite 200
Ventura, CA 93001

Re: Agenda Item W9b, Application No. 4-06-118

Dear Coastal Commissioners:

On behalf of Heal the Bay, a non-profit environmental group with over 12,000 members dedicated to making Santa Monica Bay and Southern California coastal waters safe and healthy for people and marine life, we have reviewed the staff report regarding the Los Angeles County Department of Public Works proposal to realign a section of Tuna Canyon Road and place rip rap and boulders in an approximately 7,300 square foot area of Tuna Canyon Creek. We urge the Commission to deny this application, unless amended, as it will likely cause further stream bank instability and degrade water quality and riparian habitat downstream.

Section 30231 of the Coastal Act requires that biological productivity and stream water quality be maintained and, where feasible, restored through means such as 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. As proposed, this project is inconsistent with this section of the Coastal Act, and instead will likely cause further degradation of water quality in Tuna Canyon Creek and the associated riparian habitat.

In the proposed project, the County plans to install new boulder rip-rap armoring to repair existing eroded rip-rap bank armoring. Rip-rap is an outdated technology that repeatedly causes problems due to failure. In 2005, Heal the Bay's Stream Team conducted detailed surveys and mapping on more than 70 linear miles of streams in the Malibu Creek Watershed, documenting in-stream habitat, as well as impacts associated with stream armoring throughout the Santa Monica Mountains. Of the 70 miles mapped, 20.9 miles or 30.3% of all mapped streams had armored, or hardened, stream banks. Of the 987 bank armoring projects that were documented and surveyed, 62% had failed or were in severe disrepair. Notably, rip-rap failed at an alarming rate of more than 60%. As demonstrated by the track record of armored solutions at this and other sites, approval of this project will likely contribute to continued environmental degradation.

The County currently operates and maintains numerous undersized hard bottom culverts and roads in close proximity to stream channels throughout the Santa Monica Mountains. These structures and hardened stream banks cause stream channel and bank erosion, thereby contributing to instream sediment loading. The County proposes in this application to replace an area where hardened structures

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have been eroded by the stream, with additional armored structures. Instead, a more sustainable alternative should be considered at this site. Relying on armoring will neither accomplish the goal of keeping roads safe and accessible, nor meet the intent of the Coastal Act. Instead, we urge the Commission to require the County to find a solution at this site that will benefit the environment and the long-term sustainability of the Santa Monica Mountains, such as an elevated roadway that affords Tuna Canyon Creek the ability to recapture some floodplain and dissipate the erosive forces of large storm events. This alternative is environmentally and economically responsible, as well as a sustainable solution that will permanently address stream bank and channel erosion in the Santa Monica Mountains.

We appreciate the opportunity to comment on this permit application. Please contact us if you have any questions regarding our comments.

Sincerely,

Sarah Abramson
Director of Coastal Resources

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Attachment B

Photo 1. Failed rip-rap & associated erosion in Tuna Canyon

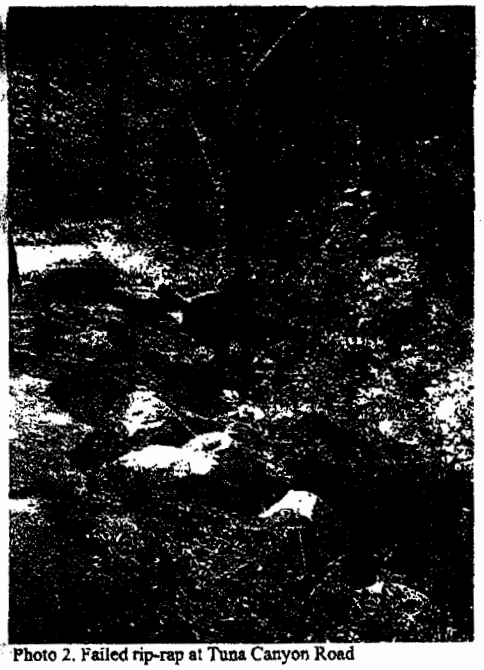

Photo 2. Failed rip-rap at Tuna Canyon Road

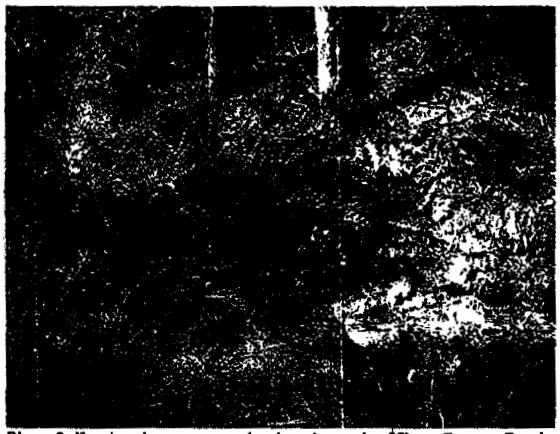

Photo 3. Erosion downstream a hardened stretch of Tuna Canyon Road

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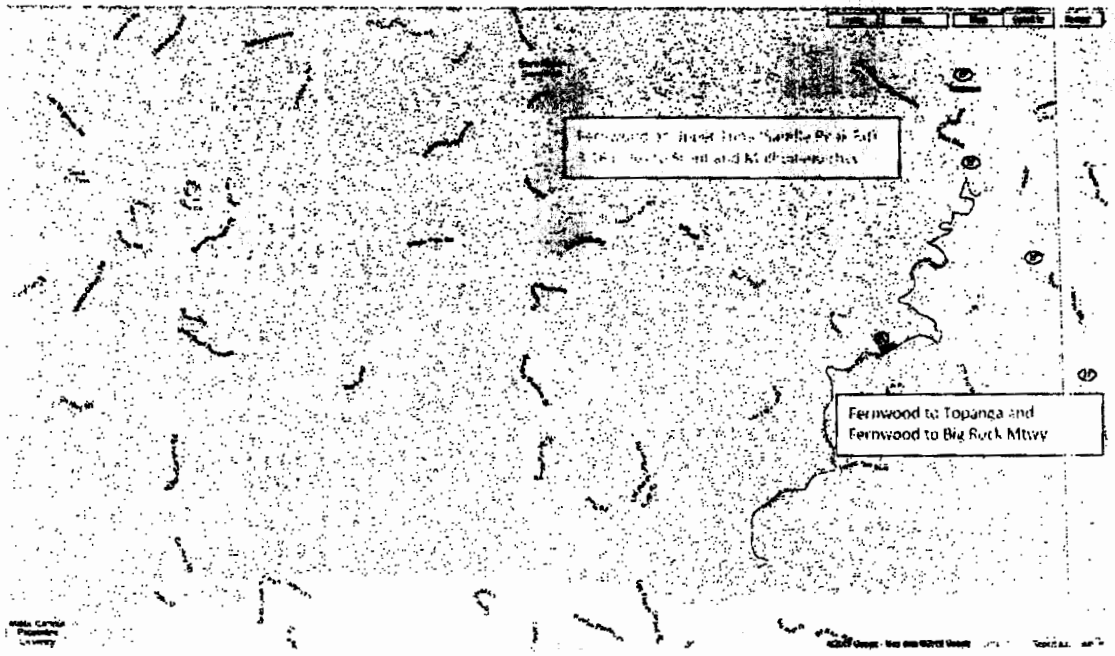
Attachment C



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Filed:	1/28/2010
180th Day:	7/27/2010
Staff:	J Johnson
Staff Report:	5/19/2010
Hearing Date:	6/10/2010

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-09-087

APPLICANT: Los Angeles County Department of Public Works

PROJECT LOCATION: Tuna Canyon Road at Mile Marker 5.04, Santa Monica Mountains, Los Angeles County

PROJECT DESCRIPTION: The applicant proposes to repair 70 linear ft. of roadway and construct a bioengineered slope protection over a 3,900 sq. ft. area with 15 to 48 inch diameter rocks at the toe of slope along Tuna Canyon Creek with willows planted in cardboard tubes within the bioengineered slope. The project is located along an approximate 70 foot long section of Tuna Canyon Road, at Mile Marker 5.04, Santa Monica Mountains, Los Angeles County.

LOCAL APPROVALS RECEIVED: N/A

SUBSTANTIVE FILE DOCUMENTS: LACDPW Geotechnical Investigation, dated October 20, 2009; Biological Reconnaissance Survey prepared by URS Corp., dated August 7, 2007; LACDPW Tuna Canyon @MM 5.04, Design Alternatives; Tuna Canyon Road at Mile Marker 5.04 Project ID No. RDC0014679 Engineers Report, prepared by Farhad Agahi, LACDPW, dated October 20, 2009; CDP Application No. 4-09-054; CDP Application No. 4-06-118.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with five (5) special conditions regarding project responsibilities and timing, assumption of risk, riparian habitat mitigation and restoration, nesting bird protection measures, and required approvals. The standard of review for the proposed project is the Chapter Three policies of the Coastal Act. In addition, the policies of the certified Malibu – Santa Monica Mountains Land Use Plan (LUP) serve as guidance.

I. STAFF RECOMMENDATION

MOTION: ***I move that the Commission approve Coastal Development Permit No. 4-09-087 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. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. 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.

5. 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. Project Responsibilities and Timing

The permittee shall comply with the following work-related requirements:

(a) Excavation and grading shall take place only during the dry season (April 1 – October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director.

(b) Prior to commencement of any work approved by this permit, the work area shall be flagged to identify limits of construction and identify natural areas off limits to construction traffic. All temporary flagging, staking, and fencing shall be removed upon completion of the project.

(c) No construction materials, debris, or waste shall be placed or stored where it may be subject to erosion and dispersion or encroach into a habitat area or drainage.

(d) Construction materials, chemicals, debris, and sediment shall be properly contained and secured on-site to prevent the unintended transport of material, chemicals, debris, and sediment into habitat areas and coastal waters by wind, rain, or tracking. Best Management Practices and Good Housekeeping Practices, designed to prevent spillage and/or runoff of construction-related materials and to contain sediment and contaminants associated with the construction activity, shall be implemented prior to the on-set of such activity. All proposed BMPs, as well as those required by DFG, RWQCB, and USACE, shall be implemented and shall be maintained in a functional condition throughout the duration of the project.

(e) Debris and excavated material shall be appropriately disposed at a legal disposal site. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit, shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is required.

(f) Debris and excavated material shall be removed from the project area as necessary to prevent the accumulation of sediment and other debris which may be discharged into habitat areas and coastal waters.

(g) Any and all debris resulting from construction activities shall be removed from the project site within 7 days of completion of construction.

2. Assumption of Risk, Waiver of Liability and Indemnity Agreement

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from landslide, erosion, 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.

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.

3. Riparian Habitat Mitigation and Restoration Plan

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Riparian Habitat Mitigation and Restoration Plan, 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 rocks at the toe of the slope Within 60 days of completion of the project approved pursuant to this permit, the applicant shall commence implementation of the approved riparian habitat restoration and mitigation 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. Technical Specifications

The Restoration Plan shall provide for the following:

1) Restoration of disturbed riparian habitat (at a ratio of 3:1 or greater) as mitigation for all areas permanently displaced by the proposed development (the approximately 1,645 sq. ft. area where rocks will be placed at the base of the slope). The mitigation shall be implemented in a suitable location off-site, subject to the review and approval of the Executive Director that is restricted in perpetuity from development or is public parkland. The mitigation area shall be delineated on a site plan and shall be located within the coastal zone of the Santa Monica Mountains and within the same watershed as the project site. All invasive and non-native plant species shall be removed from the mitigation area. The restoration plan for off-site mitigation may be prepared and implemented in consultation with the Mountains Restoration Trust (MRT).

2) Revegetation of all areas where riparian vegetation have been temporarily disturbed or removed due to construction activities using native plant species that are appropriate for a riparian habitat area. All invasive and non-native plant species shall be removed from the riparian vegetation corridor within the revegetation area.

The plan shall include detailed documentation of conditions 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 and revegetation areas. Only native plant species appropriate for a riparian environment 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 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. 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 riparian habitat restoration/revegetation 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 Riparian Habitat

Restoration Monitoring Report, prepared by a qualified biologist or Resource Specialist, that certifies the off-site restoration/mitigation and on-site revegetation 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. 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.

4. Nesting Bird Protection Measures

A qualified biologist, with experience in conducting bird surveys, shall conduct bird surveys 30 days prior to construction to detect any active bird nests in the vegetation to be removed and any other such habitat within 500 feet of the construction area. The last survey should be conducted 3 days prior to the initiation of clearance/construction. If an active songbird nest is located, clearing/construction within 300 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. If an active raptor, rare, threatened, endangered, or species of concern nest is found, clearing/construction within 500 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the sensitivity of the area. The project biologist shall record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to protection of nesting birds.

5. Required Approvals

By acceptance of this permit, the applicant agrees to obtain all other State or Federal permits that may be necessary for any aspect of the proposed project (including the California Department of Fish and Game, Regional Water Quality Control Board and the U.S. Army Corps of Engineers).

Any proposed changes to the approved final plan that may be required by any other agency shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Background

The applicant is proposing to repair 70 linear ft. of roadway and construct a bioengineered slope protection over a 3,900 sq. ft. area with 15 to 48 inch diameter rocks at the toe of slope along the outer edge of Tuna Canyon Creek with willows planted in cardboard tubes within the bioengineered slope. The proposed project is located along Tuna Canyon Road at Mile Marker 5.04 within Tuna Canyon in the eastern portion of the Santa Monica Mountains, approximately ¾ of a mile inland from the coast (**Exhibits 1-3**). Tuna Canyon Creek, a significant blue line stream, is located at the base of a switchback in the subject stretch of Tuna Canyon Road and is therefore flanked by steep roadside embankments. Tuna Canyon Creek and its associated riparian corridor are designated as an Environmentally Sensitive Habitat Area (ESHA) in the Malibu/Santa Monica Mountains Land Use Plan (LUP).

The January 2005 storm caused an outboard slope failure identified along Tuna Canyon Road in the vicinity of mile marker 5.04 (Exhibits 4-8). The slope failure caused visible damage to the embankment slope supporting the existing road. Tuna Canyon Road is a one-lane road approximately 12 feet in width with 1 to 4 feet wide shoulders. A temporary plastic cover was placed at the eroded area to prevent further erosion of the damaged slope. In order to improve the stability of the damaged roadway and the stability of the slope descending to the creek below, the County of Los Angeles Department of Public Works (County) is proposing to construct a bioengineered slope protection layer consisting of a mixture of rocks, geotextile, sand, a biodegradable coconut fiber mat (COIR mat) and planting of vegetation (Exhibits 4-6). The bioengineered slope protection consists of installing 15 to 48 inch diameter rocks placed at the toe of the slope along the stream over a sand layer, and over a nonwoven geotextile for a length of approximately 70 feet along the stream. The upper portion of the slope protection consists of a layer of COIR mat over unclassified fill over nonwoven geotextile. The height of the exposed bioengineered slope varies, with a maximum exposed height of approximately 20 feet. This layer will be planted with native willows spaced at 3 feet apart across the bioengineered slope. The project will require approximately 30 cu. yds. of cut and 80 cu. yds. of fill grading (80 cu. yds. import). An existing 'H' beam steel & wood retaining wall along the roadway will be retained on site within the existing slope.

According to the applicant's submitted biological reconnaissance surveys dated August 7, 2007 by URS Corporation, the stream corridor contains riparian vegetation and the subject road embankment contains ruderal vegetation as it has been significantly disturbed from storm damage. The majority of the proposed project is situated on the existing disturbed roadside slope. The project includes base rock at the toe of the slope which creates permanent impacts to 187 sq. ft. of former riparian vegetation that was eroded as a result of storm damage. No portion of the project will encroach into the stream channel as the rocks will be placed along the side of the stream channel at the

outer edge of the stream bank. The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel.

Prior Commission Action - CDP Application No. 4-06-118

The subject site has been subject to previous action by the Commission. In order to remediate the damaged roadway the applicant had previously applied for a Coastal Development Permit (No. 4-06-118) to: 1) realign a 350-ft. section of Tuna Canyon Road 15 feet southwest (into the hillside and further away from descending slope) of its current alignment, 2) bench, re-grade, and install a terrace drain system on the steep slope above the realigned road segment, and 3) place approximately 710 cu. yds. of half-ton rip rap and 284 tons of 48-inch boulders in an approximately 7,300 sq. ft. area of the downslope Tuna Canyon Creek. This project involved 18,810 cu. yds. of grading (18,700 cu. yds. cut, 110 cu. yds. fill, and 18,590 cu. yds. export) to realign the road and bench/re-grade the embankment to a 1.5:1 gradient. It was estimated that just over one acre (46,000 sq. ft.) of native mixed chaparral vegetation on the upland slope, 0.22-acres (9,600 sq. ft.) of riparian vegetation along Tuna Canyon Creek, and eleven oak trees would have been disturbed by the project.

The Commission denied this project at its December 12, 2007 hearing, finding that it would result in significant impacts to stream ESHA and alternatives to avoid or minimize such impacts while also repairing the road condition were not adequately explored. County staff has since coordinated with Commission staff to evaluate alternative methods of slope repair. As such, the County found that the currently proposed bio-engineered solution would meet the project objective of stabilizing the failing roadway while avoiding the use of extensive rip rap within the downslope creek channel within the creek channel.

1. Coastal Permit Required for Repair and Maintenance within ESHA

The proposed work is designed to repair a damaged public roadway. 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] 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. Environmentally Sensitive Habitat and Water Quality

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.***

Section 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.

In addition, the Malibu/Santa Monica Mountains LUP provides policy guidance regarding the protection of environmentally sensitive habitats. The Coastal Commission has applied the following relevant policies as guidance in the review of development proposals in the Santa Monica Mountains.

> P57 Designate the following areas as Environmentally Sensitive Habitat Areas (ESHAs): (a) those shown on the Sensitive Environmental Resources Map (Figure 6), and (b) any undesignated areas which meet the criteria and which are identified through the biotic review process or other means, including those oak woodlands and other areas identified by the Department of Fish and Game as being appropriate for ESHA designation.
>
> P68 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.
>
> P69 Development in areas adjacent to environmentally sensitive habitat areas (ESHAs) shall be subject to the review of the Environmental Review Board, 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.
>
> P82 Grading shall be minimized for all new development to ensure the potential negative effects of runoff and erosion on these resources are minimized.
>
> P94 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. …

1. Environmentally Sensitive Habitats

The proposed project is located along Tuna Canyon Road at Mile Marker 5.04 within the Tuna Canyon area in the eastern portion of the Santa Monica Mountains. The applicant proposes to construct a bioengineered slope protection layer consisting of a mixture of rocks, geotextile, sand, a biodegradable coconut fiber mat (COIR mat) and planting of vegetation (Exhibits 4-8). The bioengineered slope protection consists of installing 15 to 48 inch diameter rocks placed at the toe of the slope along the outer edge of the stream bank over a sand layer, and over a nonwoven geotextile for a length of approximately 70 feet along the outer edge of the stream bank. The upper portion of the slope protection consists of a layer of COIR mat over unclassified fill over nonwoven

geotextile. The height of the exposed bioengineered slope varies, with a maximum exposed height of approximately 20 feet. This layer will be planted with native willows spaced at 3 feet apart across the bioengineered slope. The project will require approximately 30 cu. yds. of cut and 80 cu. yds. of fill grading (80 cu. yds. import). The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel. The County has determined that the proposed project to stabilize the damaged road and roadside slope is necessary in order to ensure the continued stability of Tuna Canyon Road and to maintain the public's ability to use this road for vehicular access and emergency services/access for nearby developed residential communities.

According to the applicant's submitted biological reconnaissance surveys dated August 7, 2007 by URS Corporation, the stream corridor contains riparian vegetation and the subject road embankment contains ruderal vegetation as it has been significantly disturbed from storm damage. The majority of the proposed project is situated on the existing disturbed roadside slope. The project includes base rock at the toe of the slope which creates permanent impacts to approximately 187 sq. ft. of former riparian vegetation that was eroded as a result of storm damage. No portion of the project will encroach into the stream channel. The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel.

Pursuant to Coastal Act Section 30107.5, in order to determine whether an area constitutes an ESHA, and is therefore subject to the protections of Section 30240, the Commission must answer three questions:

1) Is there a rare species or habitat in the subject area?

2) Is there an especially valuable species or habitat in the area, which is determined based on:

a) whether any species or habitat that is present has a special nature, OR

b) whether any species or habitat that is present has a special role in the ecosystem;

3) Is any habitat or species that has met either test 1 or test 2 (i.e., that is rare or especially valuable) easily disturbed or degraded by human activities and developments?

If the answers to questions one or two and question three are "yes", the area is ESHA.

The project site is located within the Mediterranean Ecosystem of the Santa Monica Mountains. The Coastal Commission has found that the Mediterranean Ecosystem in the Santa Mountains is rare, and valuable because of its relatively pristine character, physical complexity, and resultant biological diversity. Large, contiguous, relatively pristine areas of native habitats, such as coastal sage scrub, chaparral, oak woodland, and riparian woodland have many special roles in the Mediterranean Ecosystem, including the provision of critical linkages between riparian corridors, the provision of

essential habitat for species that require several habitat types during the course of their life histories, the provision of essential habitat for local endemics, the support of rare species, and the reduction of erosion, thereby protecting the water quality of coastal streams. Additional discussion of the special roles of these habitats in the Santa Monica Mountains ecosystem are discussed in the March 25, 2003 memorandum prepared by the Commission's Ecologist, Dr. John Dixon[1] (hereinafter "Dr. Dixon Memorandum"), which is incorporated as if set forth in full herein.

Unfortunately, the native habitats of the Santa Monica Mountains, such as coastal sage scrub, chaparral, oak woodland and riparian woodlands are easily disturbed by human activities. As discussed in the Dr. Dixon Memorandum, development has many well-documented deleterious effects on natural communities of this sort. Thus, large, contiguous, relatively pristine areas of native habitats, such as coastal sage scrub, chaparral, oak woodland, and riparian woodlands are especially valuable because of their special roles in the Santa Monica Mountains ecosystem and are easily disturbed by human activity. Accordingly, these habitat types meet the definition of ESHA. This is consistent with the Commission's past findings in support of its actions on many permit applications and in adopting the Malibu LCP[2].

As described above, a portion of the project site contains native riparian habitat along Tuna Canyon Creek. Riparian woodlands occur along both perennial and intermittent streams in nutrient-rich soils. Partly because of its multi-layered vegetation, the riparian community contains the greatest overall biodiversity of all the plant communities in the area[3]. Because of their multi-layered vegetation, available water supply, vegetative cover and adjacency to shrubland habitats, they are attractive to many native wildlife species, and provide essential functions in their lifecycles[4]. During the long dry summers in this Mediterranean climate, these communities are an essential refuge and oasis for much of the areas' wildlife.

Riparian habitats and their associated streams form important connecting links in the Santa Monica Mountains. These habitats connect all of the biological communities from the highest elevation chaparral to the sea with a unidirectional flowing water system, one function of which is to carry nutrients through the ecosystem to the benefit of many different species along the way.

The streams themselves provide refuge for sensitive species including: the coast range newt, the Pacific pond turtle, and the steelhead trout. The coast range newt and the Pacific pond turtle are California Species of Special Concern and are proposed for

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[1] The March 25, 2003 Memorandum Regarding the Designation of ESHA in the Santa Monica Mountains, prepared by John Dixon, Ph. D, is available on the California Coastal Commission website at http://www.coastal.ca.gov/ventura/smm-esha-memo.pdf

[2] Revised Findings for the City of Malibu Local Coastal Program (as adopted on September 13, 2002) adopted on February 6, 2003.

[3] Ibid.

[4] Walter, Hartmut. Bird use of Mediterranean habitats in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

federal listing[5], and the steelhead trout is federally endangered. The health of the streams is dependent on the ecological functions provided by the associated riparian woodlands. These functions include the provision of large woody debris for habitat, shading that controls water temperature, and input of leaves that provide the foundation of the stream-based trophic structure.

The importance of the connectivity between riparian areas and adjacent habitats is illustrated by the Pacific pond turtle and the coast range newt, both of which are sensitive and both of which require this connectivity for their survival. The life history of the Pacific pond turtle demonstrates the importance of riparian areas and their associated watersheds for this species. These turtles require the stream habitat during the wet season. However, recent radio tracking work[6] has found that although the Pacific pond turtle spends the wet season in streams, it also requires upland habitat for refuge during the dry season. Thus, in coastal southern California, the Pacific pond turtle requires both streams and intact adjacent upland habitats such as coastal sage scrub, woodlands or chaparral as part of their normal life cycle. The turtles spend about four months of the year in upland refuge sites located an average distance of 50 m (but up to 280 m) from the edge of the creek bed. Similarly, nesting sites where the females lay eggs are also located in upland habitats an average of 30 m (but up to 170 m) from the creek. Occasionally, these turtles move up to 2 miles across upland habitat[7]. Like many species, the pond turtle requires both stream habitats and the upland habitats of the watershed to complete its normal annual cycle of behavior. Similarly, the coast range newt has been observed to travel hundreds of meters into upland habitat and spend about ten months of the year far from the riparian streambed[8]. They return to the stream to breed in the wet season, and they are therefore another species that requires both riparian habitat and adjacent uplands for their survival.

Riparian habitats in California have suffered serious losses and such habitats in southern California are currently very rare and seriously threatened. In 1989, Faber estimated that 95-97% of riparian habitat in southern California was already lost[9]. Writing at the same time as Faber, Bowler asserted that, *"[t]here is no question that riparian habitat in southern California is endangered."*[10] In the intervening 13 years, there have been continuing losses of the small amount of riparian woodlands that remain. Today these habitats are, along with native grasslands and wetlands, among the most threatened in California.

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[5] USFWS. 1989. Endangered and threatened wildlife and plants; animal notice of review. Fed. Reg. 54:554-579. USFWS. 1993. Endangered and threatened wildlife and plants; notice of 1-year petition finding on the western pond turtle. Fed. Reg. 58:42717-42718.

[6] Rathbun, G.B., N.J. Scott and T.G. Murphy. 2002. Terrestrial habitat use by Pacific pond turtle in a Mediterranean climate. Southwestern Naturalist. (*in Press*).

[7] Testimony by R. Dagit, Resource Conservation District of the Santa Monica Mountains at the CCC Habitat Workshop on June 13, 2002.

[8] Dr, Lee Kats, Pepperdine University, personal communication to Dr J. Allen, CCC.

[9] Faber, P.A., E, Keller, A. Sands and B.M. Massey. 1989. The ecology of riparian habitats of the southern California coastal region: a community profile. U.S. Fish and Wildlife Service Biological Report 85(7.27) 152pp.

[10] Bowler, P.A. 1989. Riparian woodland: An endangered habitat in southern California. Pp 80-97 *in* Schoenherr, A.A. (ed.) Endangered plant communities of southern California. Botanists Special Publication No. 3.

In addition to direct habitat loss, streams and riparian areas have been degraded by the effects of development. For example, the coast range newt, a California Species of Special Concern has suffered a variety of impacts from human-related disturbances[11]. Human-caused increased fire frequency has resulted in increased sedimentation rates, which exacerbates the cannibalistic predation of adult newts on the larval stages.[12] In addition impacts from non-native species of crayfish and mosquito fish have also been documented. When these non-native predators are introduced, native prey organisms are exposed to new mortality pressures for which they are not adapted. Coast range newts that breed in the Santa Monica Mountain streams do not appear to have adaptations that permit co-occurrence with introduced mosquito fish and crayfish[13]. These introduced predators have eliminated the newts from streams where they previously occurred by both direct predation and suppression of breeding.

Therefore, because of the essential role that riparian plant communities play in maintaining the biodiversity of the Santa Monica Mountains, because of the historical losses and current rarity of these habitats in southern California, and because of their extreme sensitivity to disturbance, the native riparian habitats in the Santa Monica Mountains meet the definition of ESHA under the Coastal Act. Accordingly, the Commission finds that the riparian habitat in the project area and vicinity meets the definition of ESHA under the Coastal Act.

Nonetheless, the proposed project is a necessary repair project partially located within a riparian plant community and will result in permanent adverse impacts to this habitat. The Commission finds that riparian habitat, such as the native vegetation located on the subject site, provide important habitat for riparian plant and animal species. The Coastal Act requires that environmentally sensitive habitat areas, such as the 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 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***

[11] Gamradt, S.C., L.B. Kats and C.B. Anzalone. 1997. Aggression by non-native crayfish deters breeding in California newts. Conservation Biology 11(3):793-796.
[12] Kerby, L.J., and L.B. Kats. 1998. Modified interactions between salamander life stages caused by wildfire-induced sedimentation. Ecology 79(2):740-745.
[13] Gamradt, S.C. and L.B. Kats. 1996. Effect of introduced crayfish and mosquito fish on California newts. Conservation Biology 10(4):1155-1162.

> ***allowed within such areas. Residential use shall not be considered a resource dependent use.***

Specifically, Policy 68 of the LUP, in concert with the policies of the Coastal Act, limits development within ESHA areas. In addition, Policy 82 of the LUP, in concert with the Coastal Act policies, provides that grading shall be minimized to ensure that the potential negative effects of runoff and erosion on watersheds and streams is minimized. Further, Policy 94 requires that cut and fill slopes are stabilized with plantings after completion of grading.

The proposed project is designed to repair the existing public road that has been undermined 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" Id. at § II.A., page 2. Therefore, a coastal development permit is required for this project.

The applicant's proposed repair strategy will involve constructing a bioengineered slope protection layer consisting of a mixture of rocks, geotextile, sand, a biodegradable coconut fiber mat (COIR mat) and planting of vegetation (Exhibits 4-8). The bioengineered slope protection consists of installing 15 to 48 inch diameter rocks placed at the toe of the slope along the outer edge of the stream bank over a sand layer, and over a nonwoven geotextile for a length of approximately 70 feet along the outer edge of the stream bank. The upper portion of the slope protection consists of a layer of COIR mat over unclassified fill over nonwoven geotextile. The height of the exposed bioengineered slope varies, with a maximum exposed height of approximately 20 feet. This layer will be planted with native willows spaced at 3 feet apart across the bioengineered slope. The project will require approximately 30 cu. yds. of cut and 80 cu. yds. of fill grading (80 cu. yds. import). The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel.

2. Project Design Alternatives

The Los Angeles County Department of Public Works Programs Development Division submitted an engineering and alternatives analysis for the project. The analysis submitted by the County's engineering staff identified several alternatives to the proposed project that were rejected by the County as either infeasible or having greater impacts than the proposed project. The report describes the four alternatives as follows:

1. Rip Rap Slope Protection: This alternative involves placing riprap at the project site located near Mile Marker 5.04 for approximately 100 feet along the south side of Tuna Canyon Creek. The riprap layer consists of one half ton rock, and a 12 inch layer of sand over geotextile fabric. The riprap, sand, and geotextile would be installed to restore the eroded slope and prevent further erosion of the slope. Further, planting of willows spaced at 3 feet on each direction would provide some habitat mitigation. The pros of this alternative include that riprap provides good slope protection and has been used by the County in the past with success. The cons of this alternative include that this alternative would result in a significantly larger area of riparian habitat that would be permanent displaced due to the placement of rip rap. Moreover, while riprap provides for good protection on the project site, other areas downstream and upstream may fail. As a result, additional riprap would need to be continually added along the creek slopes. In addition, the riprap generates turbulence as water flows through it, causing other areas to erode, fill material finds can escape at the edge of the riprap and erode into the creek. Lastly, the riprap will only address the local area of the slope where it is applied. Although this alternative is feasible, the riprap has the potential to increase erosion on either side of the riprap and would result in substantially greater adverse impacts to riparian habitat than the proposed bio-engineered solution.

2. Road Realignment: This alternative involves realigning a section of Tuna Canyon Road approximately 10 feet north (into the hillside) beyond the creek from its

current alignment. The road realignment would require grading of the opposing slopes at a rate of 1.5 horizontal to 1 vertical based on the geotechnical report for the same area. Because the existing slope is only 1.3 horizontal to 1 vertical, a retaining wall would be required to allow for a 1.5 horizontal to 1 vertical slope. The pros of this alternative include that the roadway would be realigned away from the slope and creek area and would not require any work in the creek area. The cons of this alternative is the creek slope would continue to erode, requires significant grading of a slope, is more invasive due to the required drilling and pile driving and would require the removal of 6 oak trees and other chaparral vegetation. Although this alternative is feasible, additional impacts on oaks trees and chaparral habitat would occur, and thus are not acceptable.

3. Soldier Beam Retaining Wall: This alternative would involve installing steel H piles and reinforced precast lagging panels. The work would require drilling 3 foot diameter holes at 8 feet spacing to a depth of 30 feet. This wall would extend approximately 100 feet along Tuna Canyon Creek. The pros of this alternative includes it will provide good protection to hold the roadway and require low maintenance after installation. The cons of this alternative include that the slope in front of the wall will continue to erode, vegetation growth will be limited, the project is more invasive with the required drilling and pile driving, and one oak tree within the project site along the road would be impacted. Although this alternative is feasible, additional erosion would occur, the project would create more impacts due to limited vegetation growth and potential impacts to one oak tree.

4. Bioengineered Slope Protection: The proposed project involves installing 15 to 48 inch diameter rocks placed at the toe of the slope and the outer edge of the stream bank of Tuna Canyon Creek over a sand layer over nonwoven geotextile for a length of approximately 70 feet along the stream. The upper portion of the slope protection consists of a layer of COIR (biodegradable coconut) mat over unclassified fill over nonwoven geotextile. This layer will be planted with willows spaced at 3 feet apart vertically and horizontally. The County has deemed this alternative the preferred alternative as the solution will restore the damaged slope to as close to its natural state prior to the erosion. The project is also a reasonable size that is suitable for this type of bioengineered slope protection method. This alternative is feasible and considered the environmentally preferred.

Staff has identified an additional alternative to consider: closing the roadway. The County offered this alterative in Coastal Permit 4-09-054 for a similar road repair near the subject site and also along Tuna Canyon Road.

5. No Project or Road Closure: According to the County, this alternative is not viable in this case because Tuna Canyon Road is a public roadway that must be maintained for vehicular and emergency access. If the road is not repaired and is closed permanently, residents in the area would be required to drive north

approximately three miles to Topanga Canyon Blvd or north along Saddle Peak Road for five miles to then be able to drive south to Pacific Coast Highway. As such, drive times to Pacific Coast Highway would increase significantly. In addition, this alternative would result in continued slope failure and erosion into Tuna Canyon Creek. For these reasons, this alternative is not considered feasible.

Thus, the Commission finds that the applicant and staff have investigated all feasible alternative projects and that there are no other feasible alternatives to the proposed project that would avoid or further reduce impacts to sensitive coastal resources. Based on a review of the proposed project and the alternative repair projects, the Commission concludes that the alternative repair strategies and the alternative road closure proposal are not viable for implementation because they are either infeasible or not environmentally preferable to the proposed project because they would result in greater adverse impacts to sensitive habitat than the proposed project itself.

Although the proposed project is the environmentally preferred alternative, it will still result in some unavoidable adverse impacts to ESHA on site, which includes the placement of rock along the base of the bioengineered slope along the creek over a 280 sq. ft. area. 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 riparian habitat areas on site that will be displaced as a result of proposed development should be mitigated. Therefore, the Commission finds that a Riparian Mitigation and Restoration Plan is necessary to ensure that adverse effects to the riparian woodland habitat from increased erosion and sedimentation are minimized and that the revegetation plan is successful. Specifically, the Commission requires the applicant to submit, for the review and approval of the Executive Director, a Riparian Habitat Mitigation and Restoration Plan, 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 construction activities and/or permanently displaced. The plan shall provide for: 1) revegetation for areas of the project site temporarily disturbed by grading and construction activities with native plant species of local genetic stock appropriate for riparian habitat; and 2) the restoration of riparian habitat (at a ratio of 3:1 or greater) as mitigation for all areas permanently displaced by the proposed project. The restoration may be implemented on the project site if appropriate area exists, or alternatively, the restoration may be implemented off-site on property owned by the Mountains Restoration Trust (MRT), or other appropriate entity, subject to the review and approval of the Executive Director. The restoration area shall be delineated on a site plan and shall be located in the same vicinity of the project site within the coastal zone of the Santa Monica Mountains. All invasive and non-native plant species shall be removed from the restoration area. The restoration plan for off-site mitigation shall be prepared in consultation with the MRT. In addition, the Commission also requires the applicant implement an annual monitoring program for a period of five years to ensure the success of the replanting. 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.

The project area is adjacent to Tuna Canyon Creek and the potential exists for impacts to the water quality, particularly from erosion of sediment from the site. There is potential for temporary adverse impacts to water quality and biological productivity of the drainage through the release of sediment. Soil disturbance and vegetation removal adjacent to the creek could result in the discharge of sediment, causing increased turbidity and adversely affecting fish and other sensitive aquatic species in downstream waters. Sediment is considered a pollutant that affects visibility through the water, and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. Sediments may physically alter or reduce the amount of habitat available in a watercourse by replacing the pre-existing habitat structure with a stream-bottom habitat composed of substrate materials unsuitable for the pre-existing aquatic community. In addition, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles. Conducting the proposed work when water flows are absent or minimal during the dry season will minimize erosion into the creek, associated turbidity, and will minimize the potential for disturbing local amphibians and fishes. Including best management practices that control construction debris and sediments during construction will also minimize impacts to water quality. As such, the Commission requires the applicant to implement construction timing and best management practices during all approved work activities.

Construction activities could disturb raptors or other sensitive bird species if they are nesting in or close to the project site. In order to minimize any construction impacts to raptors and other native birds, the Commission finds it necessary to require the applicant to survey the area within 500 feet of the construction zone to detect the nests of any raptor or sensitive bird species, 30 days prior to the commencement of construction. If any such nests are found, measures must be taken to avoid impacts.

In addition, the project may require review by other regulatory agencies such as RWQCB, U.S. Army Corps of Engineers, or California Dept. of Fish & Game. The applicant shall obtain all other permits that may be necessary for the approved project.

The following special conditions are required to assure the project's consistency with Section 30231 and 30240 of the Coastal Act:

Special Condition 1: Project Responsibilities and Timing
Special Condition 3: Riparian Habitat Mitigation and Restoration Plan
Special Condition 4: Nesting Bird Protection Measures

Special Condition 5: Required Approvals

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 30231 and 30240 of the Coastal Act and the guidance policies of the LUP.

C. Hazards and Geologic Stability

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. 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 proposes to construct a bioengineered slope protection layer consisting of a mixture of rocks, geotextile, sand, a biodegradable coconut fiber mat (COIR mat) and planting of vegetation along an approximately 70-ft. long stretch of Tuna Canyon Road, at Mile Marker 5.04 in the Santa Monica Mountains. The bioengineered slope protection consists of installing 15 to 48 inch diameter rocks placed at the toe of the slope along the outer edge of the stream bank over a sand layer, and over a nonwoven geotextile for a length of approximately 70 feet along the outer edge of the stream bank. The upper portion of the slope protection consists of a layer of COIR mat over unclassified fill over nonwoven geotextile. The height of the exposed bioengineered slope varies, with a maximum exposed height of approximately 20 feet. This layer will be planted with native willows spaced at 3 feet apart across the bioengineered slope. The project will require approximately 30 cu. yds. of cut and 80 cu. yds. of fill grading (80 cu. yds. import). An existing 'H' beam steel & wood retaining wall located along the roadway will be retained on site within the slope. The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel.

The January 2005 storm caused an outboard slope failure identified along Tuna Canyon Road in the vicinity of mile marker 5.04. The slope failure caused visible damage to the embankment slope supporting the existing road. The County has determined that the

proposed project to stabilize the roadside slope is necessary in order to ensure the continued stability of Tuna Canyon Road and to maintain the public's ability to use this road for vehicular access and emergency services/access for nearby developed residential communities.

The Commission notes that the proposed development, although necessary to remediate a damaged road 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 mixed chaparral habitat. The project, as proposed, has been designed to ensure that the disturbed slopes on the site are held in place with a bioengineered slope repair and revegetated with native vegetation and that Best Management Practices are implemented to ensure slope stability 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, landslide, and slope failure, the applicant shall assume these risks as a condition of approval. Therefore, the Commission 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. The following special condition is required to assure the project's consistency with Section 30253 of the Coastal Act:

Special Condition 2: Assumption of Risk

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. Local Coastal Program

Section **30604(a)** 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 coastal 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 to Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed projects will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the projects and are accepted by the applicant. As conditioned, the proposed development will avoid or minimize adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. The following special conditions are required to assure the project's consistency with Section 30604 of the Coastal Act:

Special Conditions 1 through 5

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).

F. California Environmental Quality Act

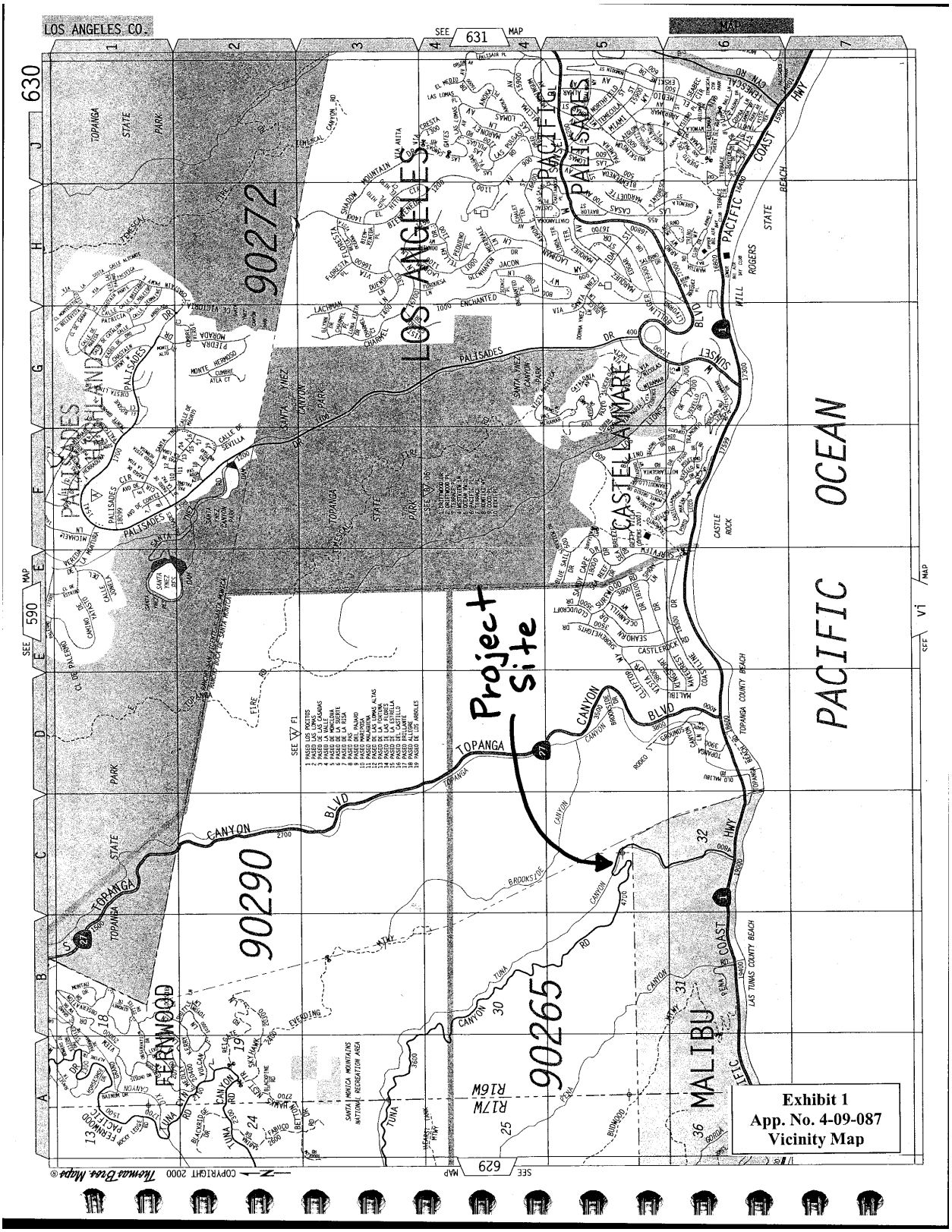
Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California 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 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 in detail above, project alternatives and mitigation measures have been considered and incorporated into the project. Five types of mitigation actions include those that are intended to avoid, minimize, rectify, reduce, or compensate for significant impacts of development. Mitigation measures required to avoid impacts include, removal of excavated material (ESHA and water quality). Mitigation measures required to minimize impacts include requiring best management practices and construction timing during the dry season (ESHA and water quality). Finally, the riparian habitat mitigation condition is a measure required to compensate for impacts to ESHA.

The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through **5**

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.


Project Site
PACIFIC OCEAN
LOS ANGELES
PACIFIC PALISADES
MALIBU
TOPANGA
CANYON BLVD
PALISADES
SUNSET BLVD
PACIFIC COAST HWY
90272
90290
90265
Exhibit 1
App. No. 4-09-087
Vicinity Map


Tuna Canyon Road
Project Location
Topanga Beach
(BM 29)
LAS TUNAS
STATE BEACH
Parker Mesa
Tuna Canyon
Topanga Canyon
Brookside
Water Tank
Gaging Sta
FIREBREAK
LOS ANGELES
19
30
31
32
S A N T A
1000 0 1000 Feet
1:24,000
USGS 7.5' Quad Map
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
PROJECT NO.: 29870464
PROJECT: Tuna Canyon Road Repair
DATE: July
Exhibit 2
App. No. 4-09-087
Topographic Map

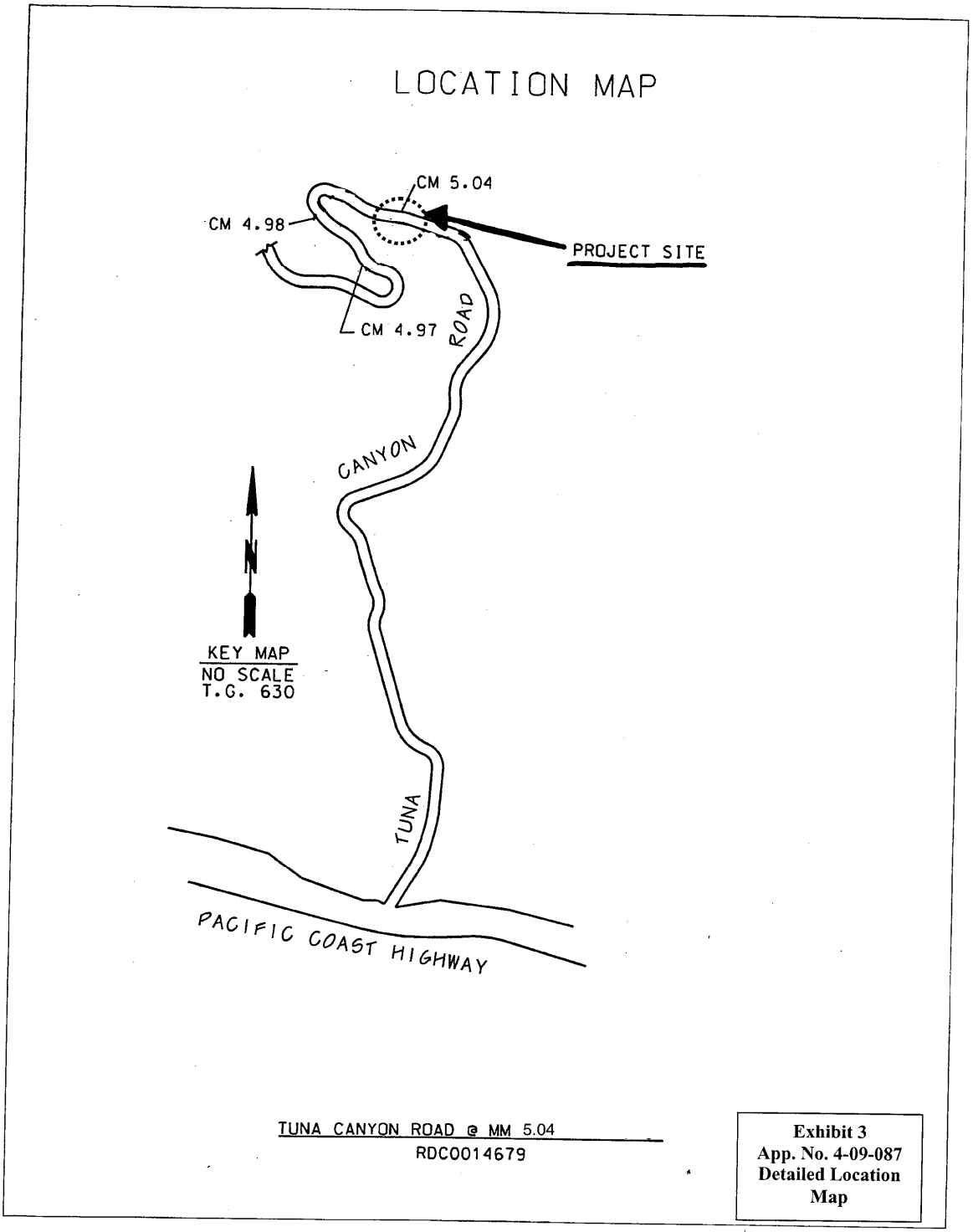
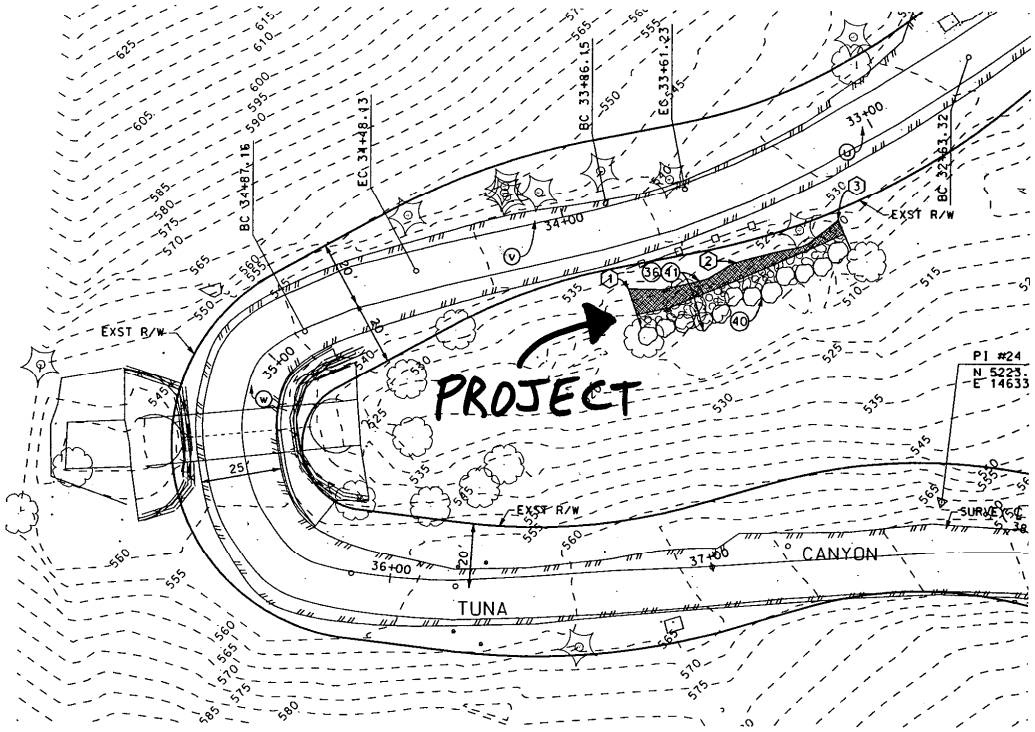
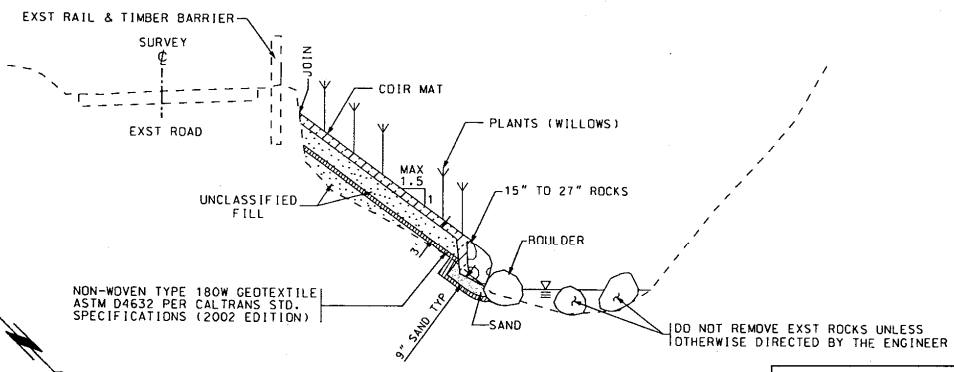


Exhibit 3
App. No. 4-09-087
Detailed Location Map



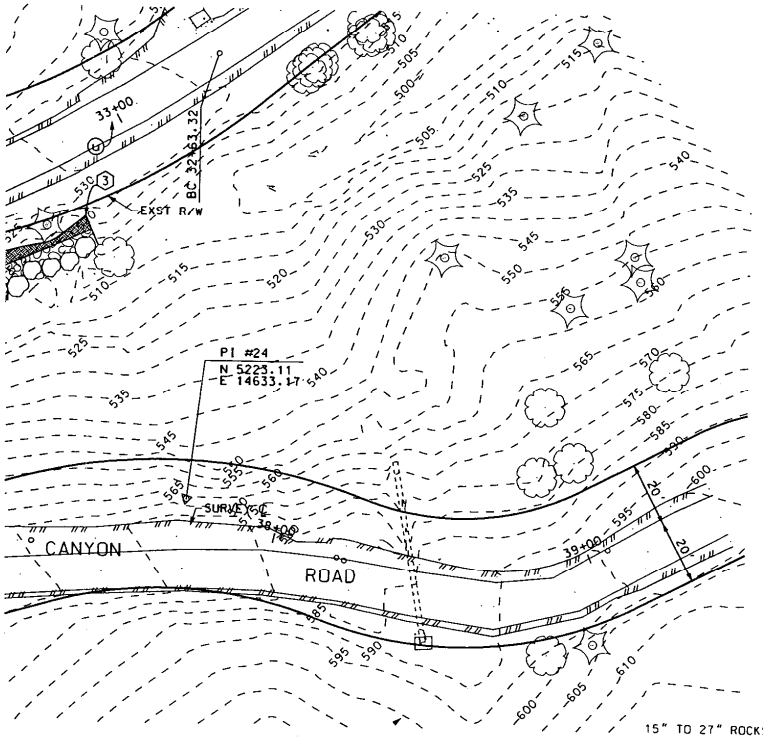


TYPICAL BIOENGINEERED SLOPE PROTECTION SECTION
NO SCALE

PLAN
SCALE: 1" = 20'
20 0 20 40

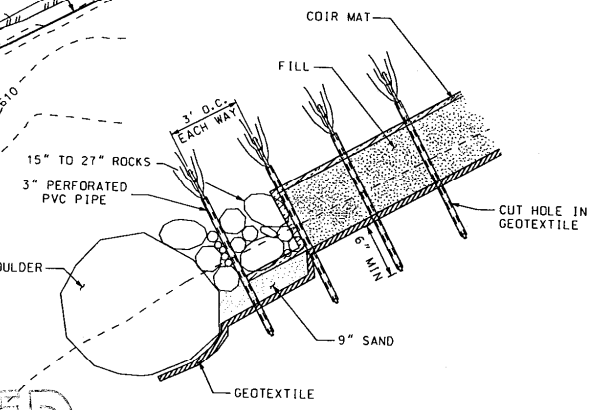
DRAFTER K. FAHEY
DESIGNER K. FAHEY
CHECKER M. ORELLANA
CADD PROJECT FILE NAME RDC0014679.dgn SHEET 6
REVIEWED BY
DATE

Exhibit 4
App. No. 4-09-087
Bioengineered Slope Protection Site Plan & Section



POINT DATA TABLE			
POINT	STATION	OFFSET	ELEVATION
①	33+84.18	26.96' LT	530.00'
②	33+51.19	25.57' LT	525.75'
③	33+20.65	23.03' LT	522.50'

SURVEY ℄ CURVE DATA				
CURVE	CENTRAL ANGLE	RADIUS	LENGTH	TANGENT
ⓤ	28°03'00"	200'	97.91'	49.96'
ⓥ	17°45'20"	200'	61.98'	31.24'
ⓦ	144°26'15"	40'	100.84'	124.73'



WILLOW PLANTING DETAIL
NO SCALE

PLANTING NOTES

1. WILLOW CUTTINGS SHALL BE 1/2 TO 1&1/2 INCHES IN DIAMETER.
2. DRIVE WILLOW STAKE INTO PERFORATED PVC PIPE, THROUGH SAND, GEOTEXTILE, AND 6 INCHES INTO NATIVE GRADE. ACCORDING TO SPEC.
3. USE WILLOW COLLECTED NEAR WORK SITE ACCORDING TO SPEC.

CST ROCKS UNLESS
TED BY THE ENGINEER

IMARK PT #57
1210. PAGE 111
& DPW WASHER. N. EDGE OF TRAVEL
= 551.43 DATUM ASSUMED

DATE	MK	DESCRIPTION
		REVISIONS

MANUEL ORELLANA, No. C62045, Exp. 9/30/11, CIVIL, REGISTERED PROFESSIONAL ENGINEER, STATE OF CALIFORNIA
PROJECT ENGINEER — DATE

PLAN RD
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
TUNA CANYON RD. @ MM 5.04
SLOPE PROTECTION PLAN
PROJECT ID N
PCA | DWG

Exhibit 5
App. No. 4-09-087
Willow Planting Section

4-09-087

STANDARD PLANS

NON-STANDARD ABBREVIATIONS

LACDPW	LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
PWFB	PUBLIC WORKS FIELD BOOK
PWLB	PUBLIC WORKS LEVEL BOOK
ES	EDGE OF SHOULDER

REFERENCES

1. PWFB 1210 PAGES 300-309
2. PWLB 1210 PAGES 111-113

CONVENTIONAL SYMBOLS

	EXISTING TOPOGRAPHY	PROPOSED IMPROVEMENTS
CURB		
CURB AND GUTTER		
GUTTER		
PAVEMENT CONCRETE		
AC		
CURB RAMP		
BUILDING		
BARRICADE		
FENCE		
GUY POLE		
DRIVEWAY		
FIRE HYDRANT		
GUARDRAIL		
GUY WIRE		
MANHOLE		
PIPE CONNECTOR PIPE		
PIPE MAIN LINE		
POLE		
PROPERTY LINE		
R/W LINE		
PULL BOX		
RAILROAD		
RR XING PROTECTION		
SHRUB		
SIDEWALK		SHADED IF NOT CONTINUOUS
SIGNAL CONTROL BOX		
SIGNAL FLASHING		
SIGNAL TRAFFIC		
SIGNAL LOOP		
STREET LIGHT		
PALM TREE		
OAK TREE		
OTHER TREE		
VALVE		
VAULT		
BRICK (BLOCK) WALL		
CONCRETE WALL		
STONE WALL		
TOP OF SLOPE		
TOE OF SLOPE		
STAND PIPE		

ASPHALT CONCRETE PAVEMENT LEGEND

P1	SURFACE COURSE C2-AR-4000 BASE COURSE B-AR-4000	P4 C2-AR-4000
P2	SURFACE COURSE C2-AR-2000 BASE COURSE B-AR-4000	P5 D1-AR-4000
P3	C1-AR-4000	P6 D2-AR-4000
		P7 D2-AR-2000

PLAN RD

DATE	MK	DESCRIPTION

REVISIONS

MANUEL ORELLANA
NO. C62045
EXP. 9/30/11
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

PROJECT ENGINEER DATE

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

TUNA CANYON RD. @ MM 5.04

CONSTRUCTION NOTES AND SYMBOLS

PROJECT ID NO. RDC0014679

PCA DWG

Exhibit 6
App. No. 4-09-087
Plan Symbols

4-09-087

Tuna Canyon Road Project
General Layout

Exhibit 7
App. No. 4-09-087
Tuna Canyon Road
Aerial Photo

Los Angeles County Department of Public Works Sheet __1__ of __1__

RDC0014679
Tuna Canyon Rd. @ MM 5.04

Aerial view @ MM 5.04 of slope failure

SW Aerial view @ MM 5.04 of slope failure.

Exhibit 8
App. No. 4-09-087
Slope Failure
Photos