

CALIFORNIA COASTAL COMMISSION

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Staff: D. Christensen
Staff Report: 11/19/09
Hearing Date: 12/9/09



STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-09-054

APPLICANT: Los Angeles County Department of Public Works

PROJECT LOCATION: Tuna Canyon Road at Mile Markers 4.97, 4.98, Santa Monica Mountains, Los Angeles County

PROJECT DESCRIPTION: The applicant proposes to repair the roadway and construct a soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long stretch of Tuna Canyon Road, at Mile Markers 4.97, 4.98, Santa Monica Mountains, Los Angeles County. The project includes regrading and revegetating the slope below the wall.

LOCAL APPROVALS RECEIVED: N/A

SUBSTANTIVE FILE DOCUMENTS: LACDPW Geotechnical Investigation, dated August 17, 2009; LACDPW Slope Stability Analysis, dated 9/25/07; LACDPW Engineering Report, dated September 14, 2009; Preliminary Jurisdictional Determination Report, prepared by URS Corp., dated August 11, 2009; Biological Reconnaissance Survey prepared by URS Corp., dated August 7, 2007; CDP Application No. 4-06-118.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with seven (7) special conditions regarding project responsibilities and timing, assumption of risk, riparian habitat mitigation and restoration, removal of excavated material, nesting bird protection measures, required approvals, and wall material/design specifications. 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. 4-09-054 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 rip rap. 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 187 sq. ft. area where rock energy dissipating drainage outlets will be placed). 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. Removal of Excavated Material

Prior to issuance of the Coastal Development Permit, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excess excavated material from the site. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

5. 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.

6. 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.

7. Material/Design Specifications

By acceptance of this permit, the applicant agrees that all exposed surfaces of the approved soldier pile retaining wall shall be designed to include, or mimic, the native materials and appearance (including color and texture) of the natural environment (such as the appearance of rock facing).

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Background

The proposed project is located along Tuna Canyon Road at Mile Markers 4.97 and 4.98 within Tuna Canyon in the eastern portion of the Santa Monica Mountains, approximately $\frac{3}{4}$ of a mile inland from the coast (**Exhibits 1-2**). 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).

After the winter 2005 storm season the hillside slope below the subject stretch of road eroded down to Tuna Canyon Creek and resulted in a damaged road and embankment (**Exhibits 3-4**). In order to improve the stability of the damaged roadway, the applicant proposes to construct a soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long stretch of Tuna Canyon Road, at Mile Markers 4.97, 4.98 (**Exhibits 5-10**). The height of the exposed wall varies, with a maximum exposed height of 27 feet. The exposed wall fascia will be of an earth-tone color and stone block texture (similar to the example shown on **Exhibit 11**). The project also includes constructing a new concrete barrier with cable railing along the repaired road reach, metal beam guardrails at the approaches, and regrading and revegetating the slope below the wall. There are two existing 18-inch metal pipe culverts, situated on either side of the proposed retaining wall that will be extended down the embankment to two, approximately 93 sq. ft. energy dissipating outlets using 10-12"-diameter stone to be notched into the slope above the southern bank of Tuna Canyon Creek. To prevent further erosion the applicant proposes to place coir matting

and to hydroseed the embankment slope above the drainage outlets and the creek bank below the drainage outlets with native plant species.

The project will require approximately 2,420 cu. yds. of cut and 300 cu. yds. of fill grading (2,120 cu. yds. export). Of the 2,420 cu. yds. of cut grading, 1,400 cu. yds. is required for regrading the slope and 1,020 cu. yds. for wall excavation and pilings.

According to the applicant's submitted biological reconnaissance surveys conducted in July 2007 and April 2009 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 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 sq. ft. of riparian vegetation. 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.

Los Angeles County Department of Public Works has been authorized and granted an easement to complete the portion of the proposed project that is located outside of the public road right-of-way.

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

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.

Prior to the Commission's action on the application the County had provided Commission staff with an analysis of project alternatives to repair the damaged roadway. The County had indicated that the project site was located within a large ancient landslide, parts of which are active and unstable. One of the alternatives analyzed was to construct a retaining wall along the entire length of the slope failure

road embankment in order to stabilize the existing road configuration, however, it was determined that the geologic site conditions were unsuitable for wall foundations because no competent materials were found in the borings drilled at the site.

Additional Alternatives Analysis and Geologic Testing Conducted

After the Commission's denial of the previous permit application, the County reexamined possible alternatives and completed additional geologic testing in August 2009. The testing found that the depth to competent bedrock along the subject stretch of road failure ranges from 37 to 48 feet below the existing road surface. The County then reconsidered the alternative of stabilizing the road with a retaining wall and performed slope stability analyses for two types of retaining structures: a cantilevered soldier pile retaining wall and a tieback soldier pile retaining wall. Cantilevered soldier pile wall was determined to be an ineffective option because without lateral support the wall would not improve the stability of the slope below the road. The tieback soldier pile wall, however, would provide the lateral support required to significantly improve the stability of the road and the slope below the wall. As such, the County found that the proposed tieback soldier pile retaining wall and associated drainage improvements would meet the project objective of stabilizing the failing roadway while also not necessitating the use of rip rap within the downslope creek channel or the grading and removal of chaparral vegetation and oak trees upslope of the subject stretch of road.

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. ...

The proposed project is located along Tuna Canyon Road at Mile Markers 4.97, 4.98 within the Tuna Canyon area in the eastern portion of the Santa Monica Mountains. The applicant proposes to construct a soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long stretch of Tuna Canyon Road. The height of the exposed wall varies, with a maximum exposed height of 27 feet. The exposed wall fascia will be of an earth-tone color and stone block texture. The project also includes constructing a new concrete barrier with cable railing along the repaired road reach, metal beam guardrails at the approaches, and regrading and revegetating the slope below the wall. There are two existing 18-inch metal pipe culverts, situated on either side of the proposed retaining wall that will be extended down the embankment to two, approximately 100 sq. ft. energy dissipating outlets using 10-12"-diameter stone to be notched into the slope above the southern bank of Tuna Canyon Creek. To prevent further erosion the applicant proposes to place coir matting and hydroseed the embankment slope above the drainage outlets and the creek bank below the drainage outlets with native plant species. The project will require approximately 2,420 cu. yds. of cut and 300 cu. yds. of fill grading (2,120 cu. yds. export). Of the 2,420 cu. yds. of cut grading, 1,400 cu. yds. is required for regrading the slope and 1,020 cu. yds. for wall excavation and pilings. 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 conducted in July 2007 and April 2009 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 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 sq. ft. of riparian vegetation. No portion of the project will encroach into 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 Dixon¹ (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 LCP².

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 area³. 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 lifecycles⁴. 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 federal listing⁵, 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,

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-asha-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.

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.

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 work⁶ 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 habitat⁷. 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 streambed⁸. 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 lost⁹. 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.

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 disturbances¹¹. Human-caused increased fire frequency has resulted in increased sedimentation rates,

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.

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.

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 crayfish¹³. 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 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

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 mosquitofish on California newts. *Conservation Biology* 10(4):1155-1162.

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 soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long stretch of Tuna Canyon Road. The height of the exposed wall varies, with a maximum exposed height of 27 feet. The project also includes regrading and revegetating the slope below the wall with native plants. There are two existing 18-inch metal pipe culverts, situated on either side of the proposed retaining wall that will

be extended down the embankment to two energy dissipating outlets that are each approximately 100 sq. ft. and use 10-12"-diameter stone to be notched into the slope above the southern bank of Tuna Canyon Creek. To prevent further erosion the applicant proposes to place coir matting and to hydroseed the embankment slope above the drainage outlets and the creek bank below the drainage outlets with native plants. The project will require approximately 2,420 cu. yds. of cut and 300 cu. yds. of fill grading (2,120 cu. yds. export). Of the 2,420 cu. yds. of cut grading, 1,400 cu. yds. is required for regrading the slope and 1,020 cu. yds. for wall excavation and pilings. 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 Geotechnical and Materials Engineering Division has 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 alternatives as follows:

1. Slope Stabilization: This alternative would involve reconstructing and regrading the embankment slope below the road. The project footprint would be increased significantly under this alternative because in order to achieve the necessary slope to stabilize the road, the slope would need to extend into and beyond the streambed. Due to the existing topography, this cannot be practically implemented without significant streambed alteration.
2. Re-align Road Section: This alternative involves realigning a 350-ft. section of Tuna Canyon Road 15 feet southwest (into the hillside) of its current alignment. The road realignment would require 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. In order to stabilize the slope and help support the realigned roadway, approximately 710 cu. yds. of half-ton rip rap and 284 tons of 48-inch boulders would need to be placed in an approximately 7,300 sq. ft. area of the downslope Tuna Canyon Creek. The steep slope above the realigned road segment would also be benched, re-graded, and a terrace drain system installed. This alternative would result in permanent impacts to approximately 7,000 sq. ft. of riparian/stream ESHA, 46,000 sq. ft. of native mixed chaparral vegetation, and the removal of eleven Coast Live oak trees. The alternative was previously rejected by the Commission given the extent of modification to the stream channel and lack of adequate justification for the impacts.
3. Cantilevered Soldier Pile Wall: This alternative would involve installing a cantilevered soldier pile retaining wall along the crest of the failed roadway section. It was determined that without adequate lateral support, the piles may experience movement and the stability of the roadway is not expected to improve over the existing condition.

4. Elevated Roadway: This alternative would involve reconstructing over 500 feet of roadway on piles, which would require significant grading, and significantly increase the project footprint and construction costs. The County has deemed this alternative infeasible.
5. No Project or Road Closure: 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.

Staff could not identify any other project alternatives. Thus, the Commission finds that the applicant has investigated all potential 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 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 energy-dissipating drain outlets within a portion of the site's riparian 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.

Further, the proposed 2,420 cu. yds. of cut and 300 cu. yds. of fill grading will result in excess cut material. In order to ensure that this excess material is disposed of in a manner that avoids impacts to ESHA and minimizes erosion and sedimentation, the Commission requires the applicant to provide evidence of the location where the excess cut material will be placed. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

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: Removal of Excavated Material**
- Special Condition 5: Nesting Bird Protection Measures**
- Special Condition 6: 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 soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long

stretch of Tuna Canyon Road, at Mile Markers 4.97, 4.98 in the Santa Monica Mountains. The project also includes constructing a new concrete barrier with cable railing along the repaired road reach, metal beam guardrails at the approaches, and regrading and revegetating the slope below the wall. There are two existing 18-inch metal pipe culverts, situated on either side of the proposed retaining wall that will be extended down the embankment to two energy dissipating outlets that are each approximately 100 sq. ft. and use 10-12"-diameter stone to be notched into the slope above the southern bank of Tuna Canyon Creek. To prevent further erosion the applicant proposes to place coir matting and hydroseed the embankment slope above the drainage outlets and the creek bank below the drainage outlets with native plants. The project will require approximately 2,420 cu. yds. of cut and 300 cu. yds. of fill grading (2,120 cu. yds. export). Of the 2,420 cu. yds. of cut grading, 1,400 cu. yds. is required for regrading the slope and 1,020 cu. yds. for wall excavation and pilings. The applicant proposes to implement Best Management Practices (BMPs) for erosion, pollution, and sediment control to avoid adverse impacts to the stream channel.

After the winter 2005 storm season the hillside slope below the subject stretch of road eroded down to Tuna Canyon Creek and resulted in a damaged road and embankment. 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.

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 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. Visual Resources

Section 30251 of the Coastal Act states that:

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

In order to improve the stability of the damaged roadway, the applicant proposes to construct a soldier pile retaining wall with tie-back system, concrete wall fascia, and drainage improvements along an approximately 150-ft. long stretch of Tuna Canyon Road, at Mile Markers 4.97, 4.98. The exposed wall fascia will be of an earth-tone color and stone block texture. The project also includes constructing a new concrete barrier with cable railing along the repaired road reach, metal beam guardrails at the approaches, and regrading and revegetating the slope below the wall. There are two existing 18-inch metal pipe culverts, situated on either side of the proposed retaining wall that will be extended down the embankment to two energy dissipating outlets that are each approximately 100 sq. ft. and use 10-12"-diameter stone to be notched into the slope above the southern bank of Tuna Canyon Creek. To prevent further erosion the applicant proposes to place coir matting and hydroseed the embankment slope above the drainage outlets and the creek bank below the drainage outlets with native plants.

The Commission notes that the soldier pile retaining wall, road reconstruction, and slope recontouring will serve to increase the structural stability of the roadway on the subject site and ensure public safety. The height of the exposed wall varies, with a maximum exposed height of 27 feet. As such, the wall will be visible from portions of the road as well as adjacent parkland in the vicinity (Tuna Canyon Park and Topanga State Park). As described above, project alternatives have been considered, but the Commission concludes that the proposed project is the preferred alternative with regard to minimizing impacts to ESHA. Nonetheless, the project will involve the construction of a large wall that will be visible from public viewing areas.

Therefore, in order to ensure that any adverse effects to public views resulting from the proposed development are minimized and that the applicant's proposal for the exposed wall fascia be of an earth-tone color and stone block texture is implemented, requires that the surface of the proposed soldier pile retaining wall be designed to include, or mimic, the color and texture of native materials and appearance of the natural environment (such as the appearance of rock facing). The following special condition is required to assure the project's consistency with Section 30251 of the Coastal Act:

Special Condition 7: Material/Design Specifications

Therefore, for the reasons discussed above, the Commission finds that the proposed development, as proposed, will not result in any adverse effects to public views and is consistent with Section 30251 of the Coastal Act.

E. Local Coastal Program

Section **30604(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 7

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

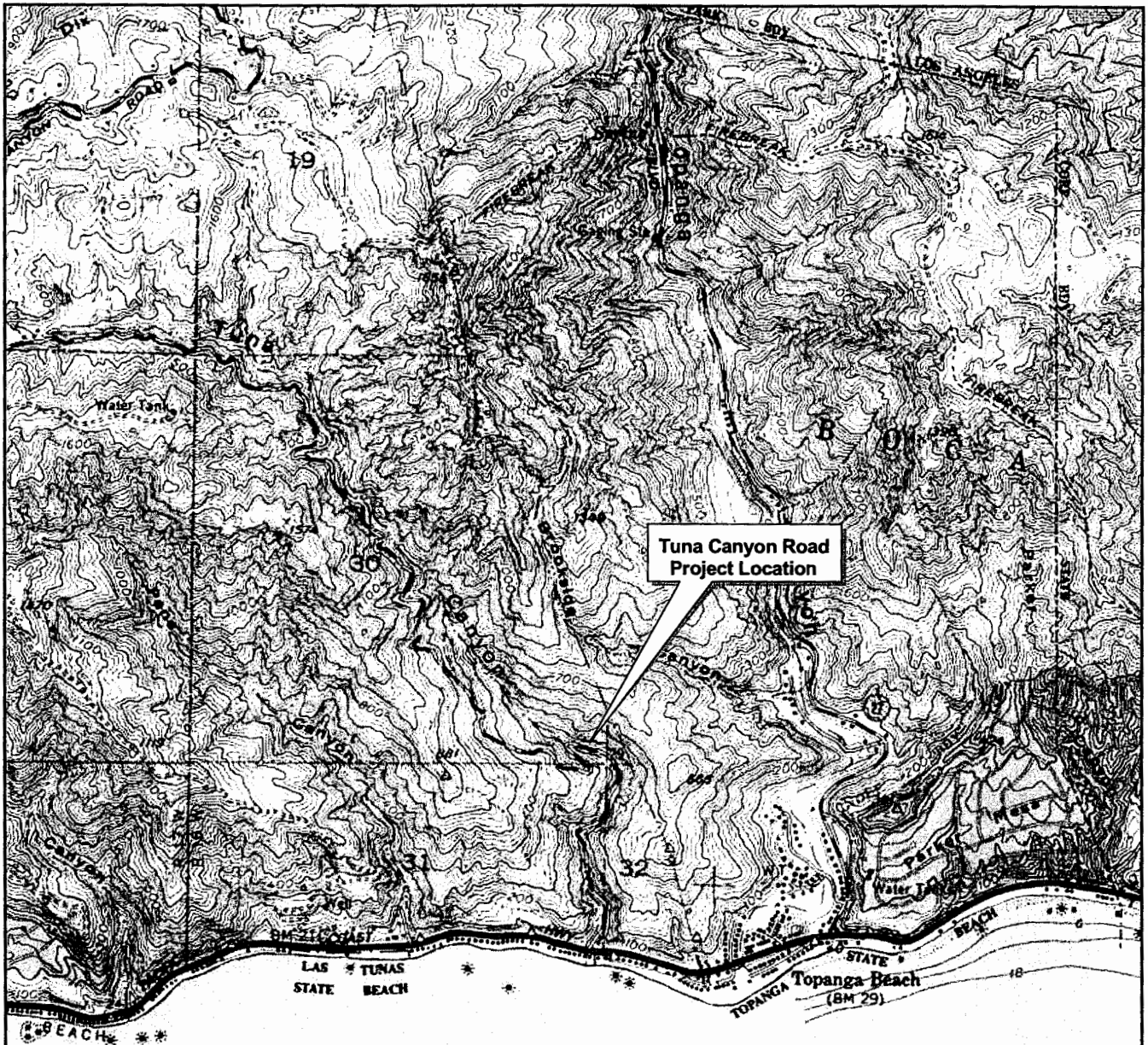
Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California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

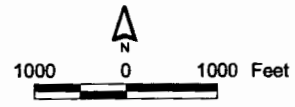
The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 7

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.



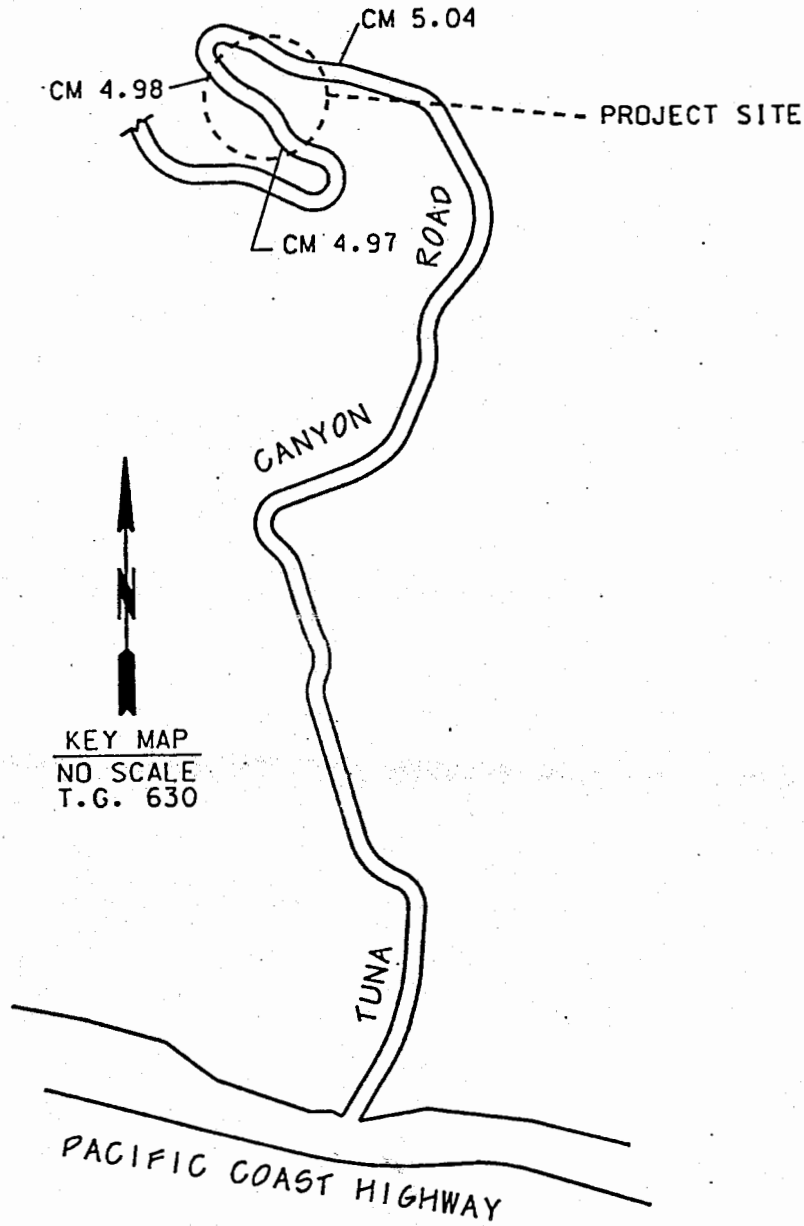
S A N T A



USGS 7.5' Quad Map

| | | | |
|--|----------------------------------|----------------|---|
| LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS | | | Exhibit 1 4-09-054 (LACDPW) Vicinity Map |
| PROJECT NO.: 29870464 | PROJECT: Tuna Canyon Road Repair | DATE: July 200 | |

LOCATION MAP



TUNA CANYON ROAD @ MM4.97/4.98/5.04
RDC0014679

| |
|-------------------|
| Exhibit 2 |
| 4-09-054 (LACDPW) |
| Project Location |

Tuna Canyon Road Project



RDC0014679
Tuna Canyon Rd. @ MM 4.97/4.98/5.04



@ MM 4.98 slope sliding



@ MM 4.98 close view of the slope sliding

| |
|--------------------------|
| Exhibit 4 |
| 4-09-054 (LACDPW) |
| Site Photos |

SURVEY CURVE DATA

| CURVE | CENTRAL ANGLE | RADIUS | LENGTH | TANGENT | BC | EC |
|-------|---------------|--------|---------|---------|----------|----------|
| 1 | 287°00'00" | 200' | 97.97' | 48.98' | 38+43.32 | 38+41.32 |
| 2 | 17°45'00" | 200' | 61.48' | 31.24' | 38+43.15 | 38+48.13 |
| 3 | 144°25'15" | 40' | 100.34' | 124.17' | 38+47.18 | 38+48.00 |
| 4 | 22°01'00" | 200' | 79.17' | 40.42' | 38+50.25 | 37+50.01 |
| 5 | 36°31'30" | 100' | 65.88' | 48.48' | 37+54.25 | 38+50.25 |
| 6 | 47°00'00" | 100' | 63.87' | 44.38' | 38+52.78 | 38+48.25 |

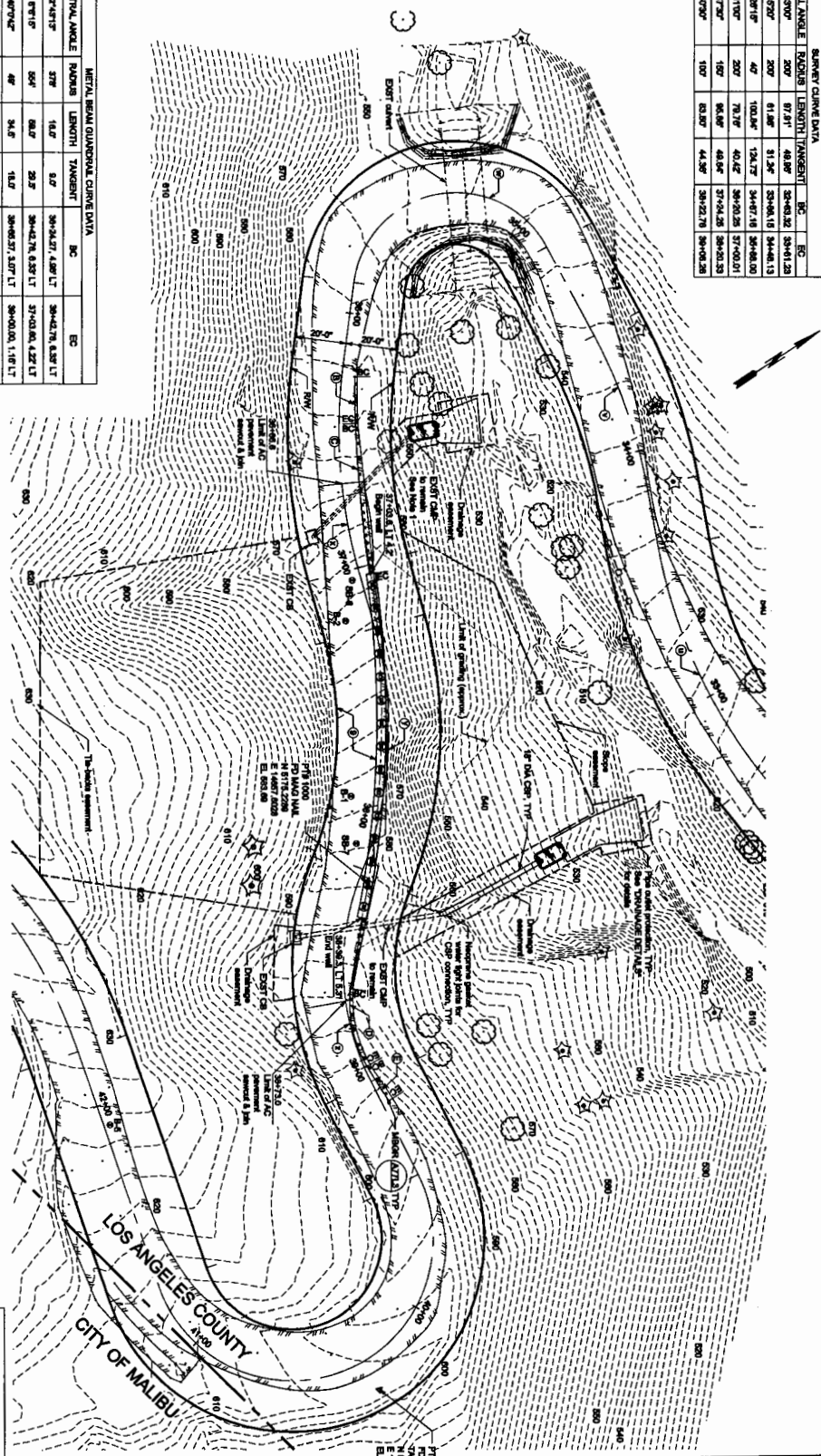
METAL BEAM QUADRANTAL CURVE DATA

| CURVE | CENTRAL ANGLE | RADIUS | LENGTH | TANGENT | BC | EC |
|-------|---------------|--------|--------|---------|----------|----------|
| 1 | 274°15' | 378' | 16.87' | 8.7' | 38+34.27 | 38+42.78 |
| 2 | 8°15' | 594' | 88.7' | 23.5' | 38+42.78 | 37+42.88 |
| 3 | 40°07'42" | 48' | 34.5' | 18.8' | 38+48.57 | 38+50.01 |
| 4 | 44°44' | 225' | 18.87' | 8.7' | 38+50.01 | 38+48.08 |

- Notes:
1. Consider steel ball verify the location of the pipe.
 2. Bearings B-2 and B-4 (not shown) are beyond station 42+00.

BENCHMARKS

FTM 88
 FTM 89
 FTM 90
 FTM 91
 FTM 92
 FTM 93
 FTM 94
 FTM 95
 FTM 96
 FTM 97
 FTM 98
 FTM 99
 FTM 100



PLAN

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE CONSTRUCTION OR FABRICATING ANY MATERIAL.

| DATE | BY | REVISIONS |
|------|----|-----------|
| | | |
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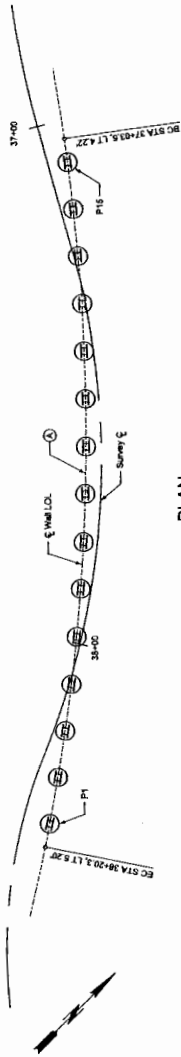


COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
TUNA CANYON ROAD
 MILE MARKER 4.871 / 4.88
 PROJECT ID NO. R000014679
 GENERAL PLAN

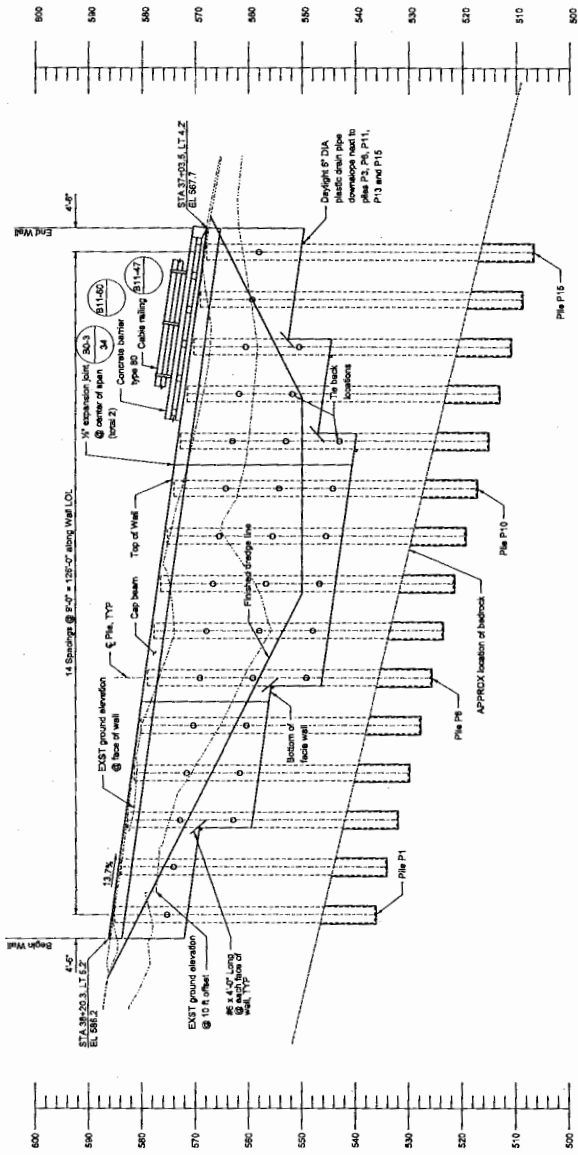
Los Angeles County
 Department of Public Works
90% PLAN DISTRIBUTION
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 Unofficial and Subject to Change
 Date: 07/15/2025

Exhibit 5
4-09-054 (LACDPW)
Site Plan

| CURVE | RADIUS (FT) | CENTRAL ANGLE | | | LENGTH (FT) | TANGENT (FT) |
|-------|-------------|---------------|-----|-----|-------------|--------------|
| | | DEG | MIN | SEC | | |
| (A) | 387.0 | 19 | 31 | 30 | 133.3 | 86.30 |



PLAN
1" = 10'



WALL ELEVATION
1" = 10'

| PILE NO | PILE LOCATION | | F ₁ (ft) |
|---------|----------------|--------------|---------------------|
| | HOLES DIA (in) | TYPE OF PILE | |
| P1 | 42 | 2.1.W14S90 | 50 |
| P2 | 42 | 2.1.W14S90 | 50 |
| P3 | 42 | 2.1.W14S90 | 50 |
| P4 | 42 | 2.1.W14S90 | 50 |
| P5 | 42 | 2.1.W14S90 | 50 |
| P6 | 42 | 2.1.W14S90 | 50 |
| P7 | 42 | 2.1.W14S90 | 50 |
| P8 | 42 | 2.1.W14S90 | 50 |
| P9 | 42 | 2.1.W14S90 | 50 |
| P10 | 42 | 2.1.W14S90 | 50 |
| P11 | 42 | 2.1.W14S90 | 50 |
| P12 | 42 | 2.1.W14S90 | 50 |
| P13 | 42 | 2.1.W14S90 | 50 |
| P14 | 42 | 2.1.W14S90 | 50 |
| P15 | 42 | 2.1.W14S90 | 50 |

Los Angeles County
Department of Public Works
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COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
TUNA CANYON ROAD
MILE MARKER 4.971-4.981 5.04
PROJECT ID NO. RD00014879
ELEVATION

DATE: _____ DESIGNED BY: _____
CHECKED BY: _____ DRAWN BY: _____
REVISIONS: _____

Scale: 1" = 10' (PLAN)
Scale: 1" = 10' (ELEVATION)

Sheet: 4 OF 8

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Exhibit 6
4-09-054 (LACDPW)
Elevation

| PILE DATA | | | | | TIEBACK DATA | | | | | |
|-----------|------------------|--------------------|-----------------|--|---------------------|----------------------|---------------------|---------------------|----------------------|---------------------|
| PILE NO. | PILE HEIGHT (FT) | PILE TIP ELEV (FT) | MIN BARRED (FT) | HEIGHT OF UPPPER ROW/MIDDLE ROW/LOWER ROW (FT) | UPPER ROW ELEV (FT) | MIDDLE ROW ELEV (FT) | LOWER ROW ELEV (FT) | UPPER ROW ELEV (FT) | MIDDLE ROW ELEV (FT) | LOWER ROW ELEV (FT) |
| P1 | 39.0 | 555.2 | 10 | 13.0 | 578.1 | | | | | |
| P2 | 36.8 | 554.2 | 10 | 13.0 | 574.0 | | | | | |
| P3 | 40.7 | 532.1 | 10 | 23.4 | 572.8 | | | | | |
| P4 | 41.5 | 530.2 | 10 | 23.4 | 570.7 | | | | | |
| P5 | 42.5 | 527.9 | 10 | 23.4 | 568.5 | | | | | |
| P6 | 43.3 | 526.8 | 10 | 23.8 | 573.5 | | | | | |
| P7 | 44.2 | 533.7 | 10 | 32.9 | 571.4 | | | | | |
| P8 | 45.1 | 531.5 | 10 | 33.9 | 569.3 | | | | | |
| P9 | 46.0 | 518.5 | 10 | 32.9 | 567.2 | | | | | |
| P10 | 46.8 | 517.4 | 10 | 32.8 | 565.1 | | | | | |
| P11 | 47.7 | 515.3 | 10 | 32.9 | 563.0 | | | | | |
| P12 | 48.5 | 513.2 | 10 | 26.9 | 560.9 | | | | | |
| P13 | 46.5 | 512.0 | 10 | 26.6 | 561.4 | | | | | |
| P14 | 50.3 | 508.2 | 10 | 17.6 | 562.1 | | | | | |
| P15 | 51.2 | 506.3 | 10 | 17.6 | 559.0 | | | | | |

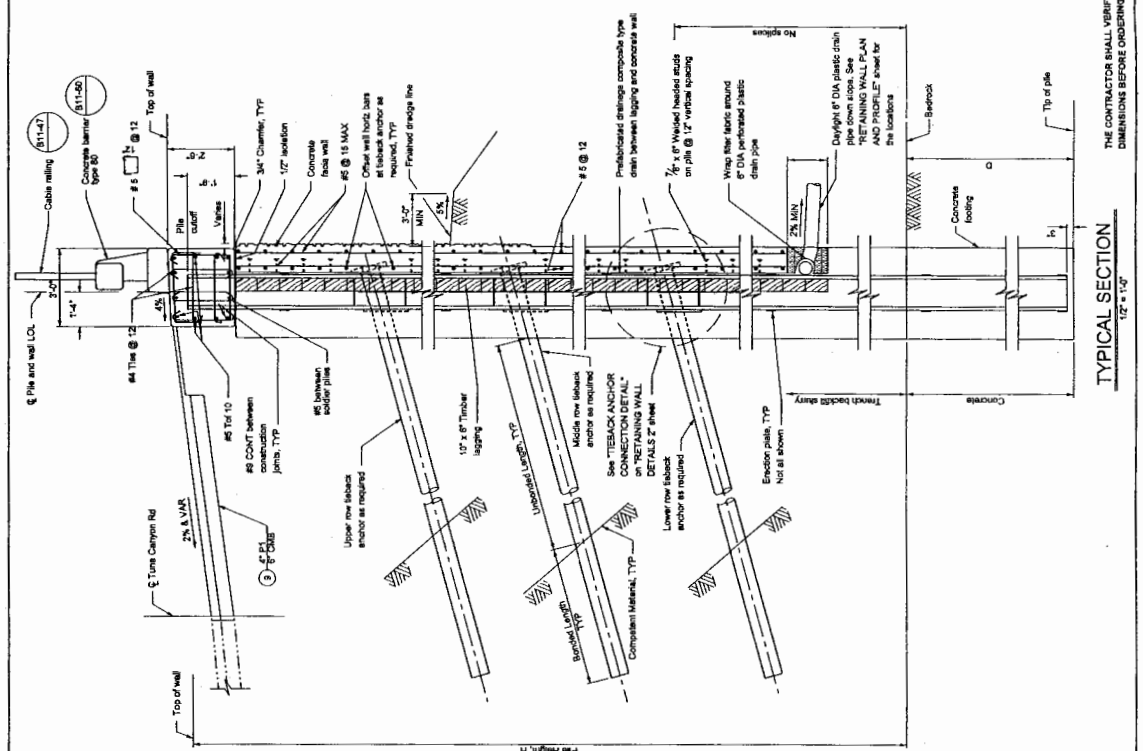
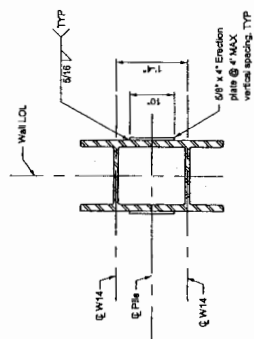
Los Angeles County
Department of Public Works
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Date 02/7/09

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

TUNA CANYON ROAD
MILE MARKER 4.97/4.88 AND 5.04
PROJECT ID NO. RDC0014879
RETAINING WALL DETAILS 1

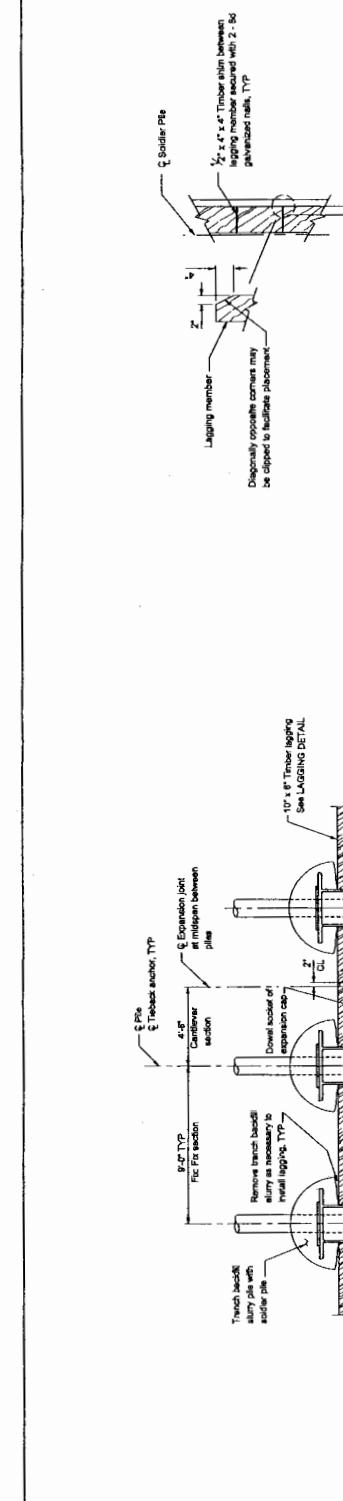
| DATE | BY | REVISIONS |
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BR. NO. 4251 PCA X SHIP PREC000000 SHEET 5 OF 8

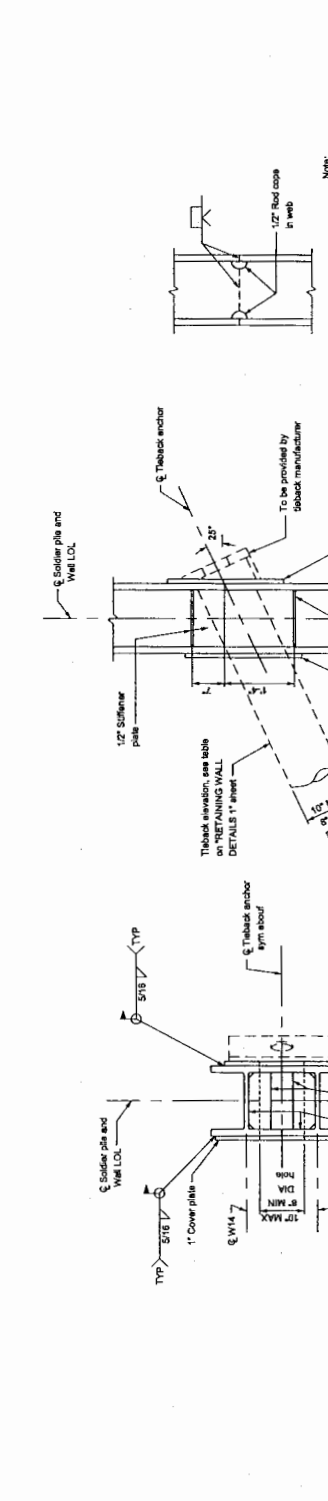


DATE: 02/07/09
DRAWN BY: B. FAIKHALLAH
CHECKED BY: B. FAIKHALLAH
DESIGNED BY: B. FAIKHALLAH
PROJECT: 000014879-TUNA CRTN RD 4.97/5.04

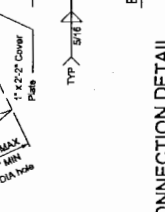
Exhibit 7
4-09-054 (LACDPW)
Retaining Wall
Details



PART ELEVATION LAGGING DETAIL
1/4" = 1'-0"



TIEBACK ANCHOR CONNECTION DETAIL
1/4" = 1'-0"



SOLDIER PILE SPLICE DETAIL
1/4" = 1'-0"

TIEBACK ANCHOR NOTES:

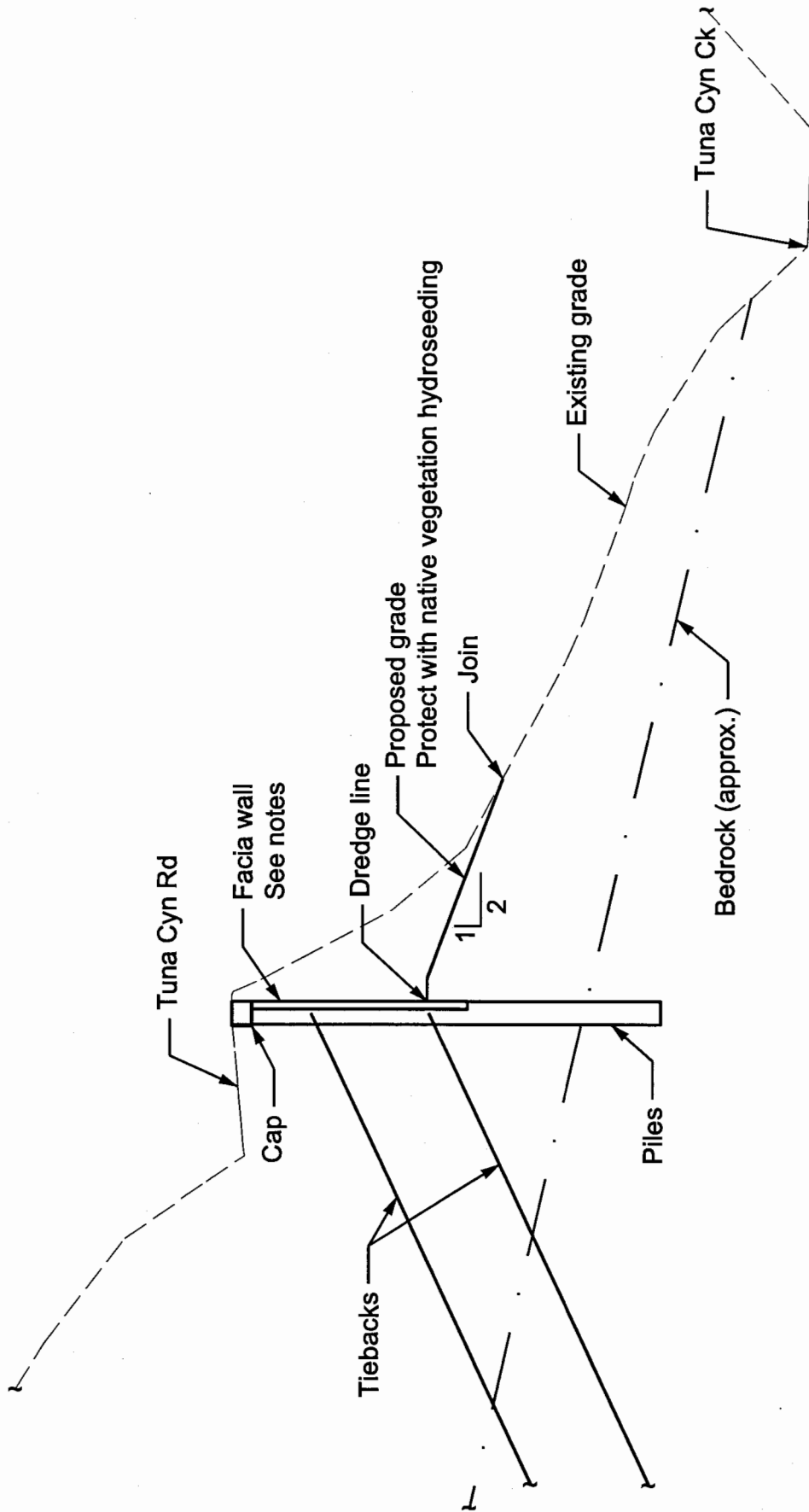
1. Bolted length and diameter of drilled piles are to be determined by Contractor.
2. Final bearing pile capacity and details shall be determined by Contractor and subject to the approval of the Engineer.

Note: Offset soldier pile splice 2 feet.

60% PLAN DISTRIBUTION
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Unaudited and Subject to Change
Date 02/27/09

| | | | |
|--|------|--|--------|
| CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS | | COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS | |
| TUNA CANYON ROAD MILE MARKER 4.97/4.98 AND 5.04 | | PROJECT ID NO. RDC0014879 | |
| RETAINING WALL DETAILS 2 | | SHEET 6 OF 6 | |
| DATE | BY | CHK. NO. 4281 | PSD. X |
| REVISIONS | | | |
| NO. | DATE | DESCRIPTION | BY |

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

TIEBACK RETAINING WALL SECTION

1" = 20'

Notes:

1. Exposed height of facia wall varies. MAX = 27 feet
2. Depth of facia wall below dredge line varies between 11 feet and 3 feet

| |
|-------------------|
| Exhibit 8 |
| 4-09-054 (LACDPW) |
| Cross Section |

Tuna Cyn Rd

Existing 18" pipe
Approximate

Pipe extension

Existing ground level

Outlet protection

Coir mat with
native vegetation

Tuna
Cyn Ck

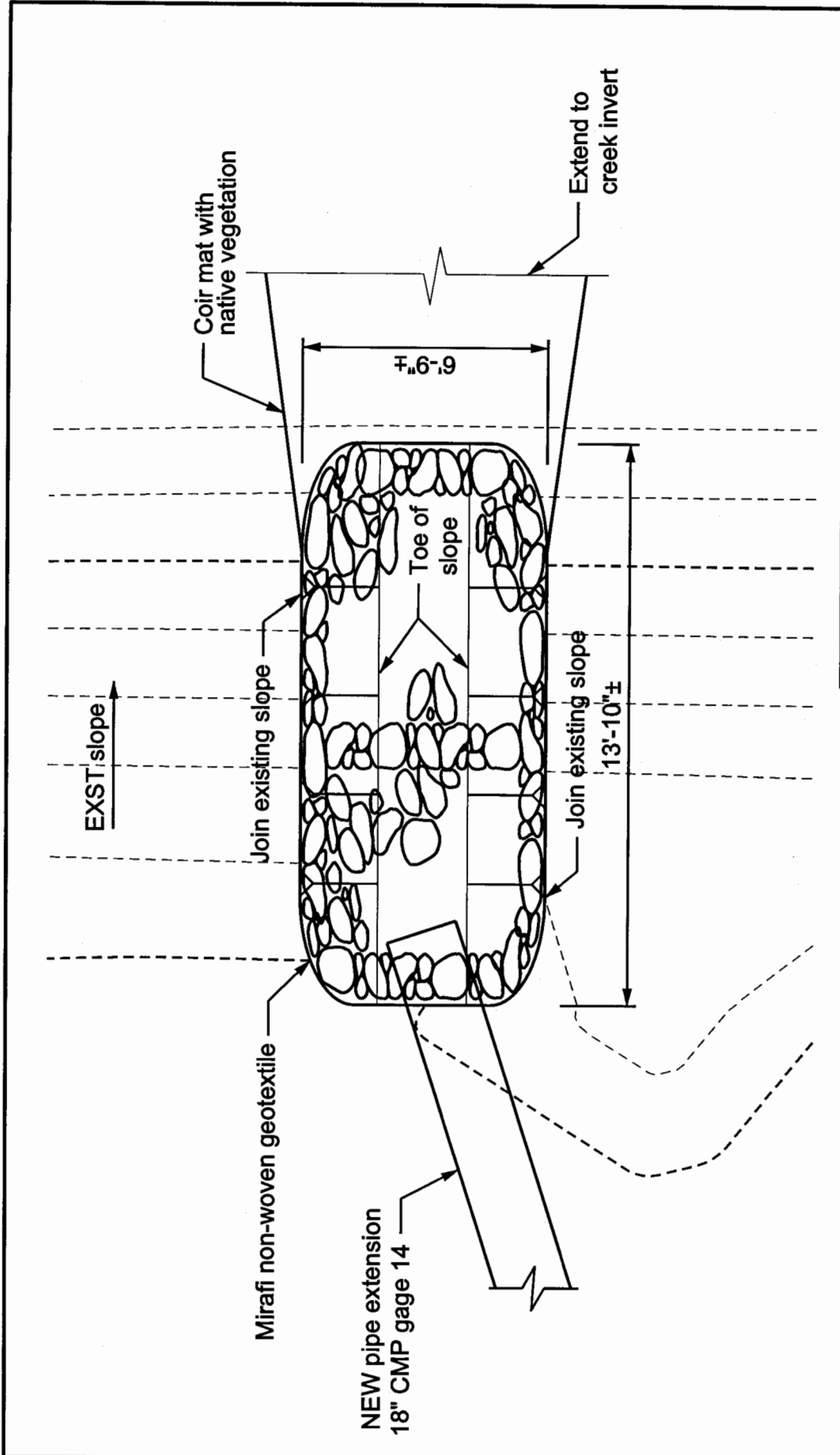
Tuna Cyn Rd

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

PIPE EXTENSION PROFILE ALONG CL

1" = 20'

Exhibit 9
4-09-054 (LACDPW)
Drainage Outlet
Profile

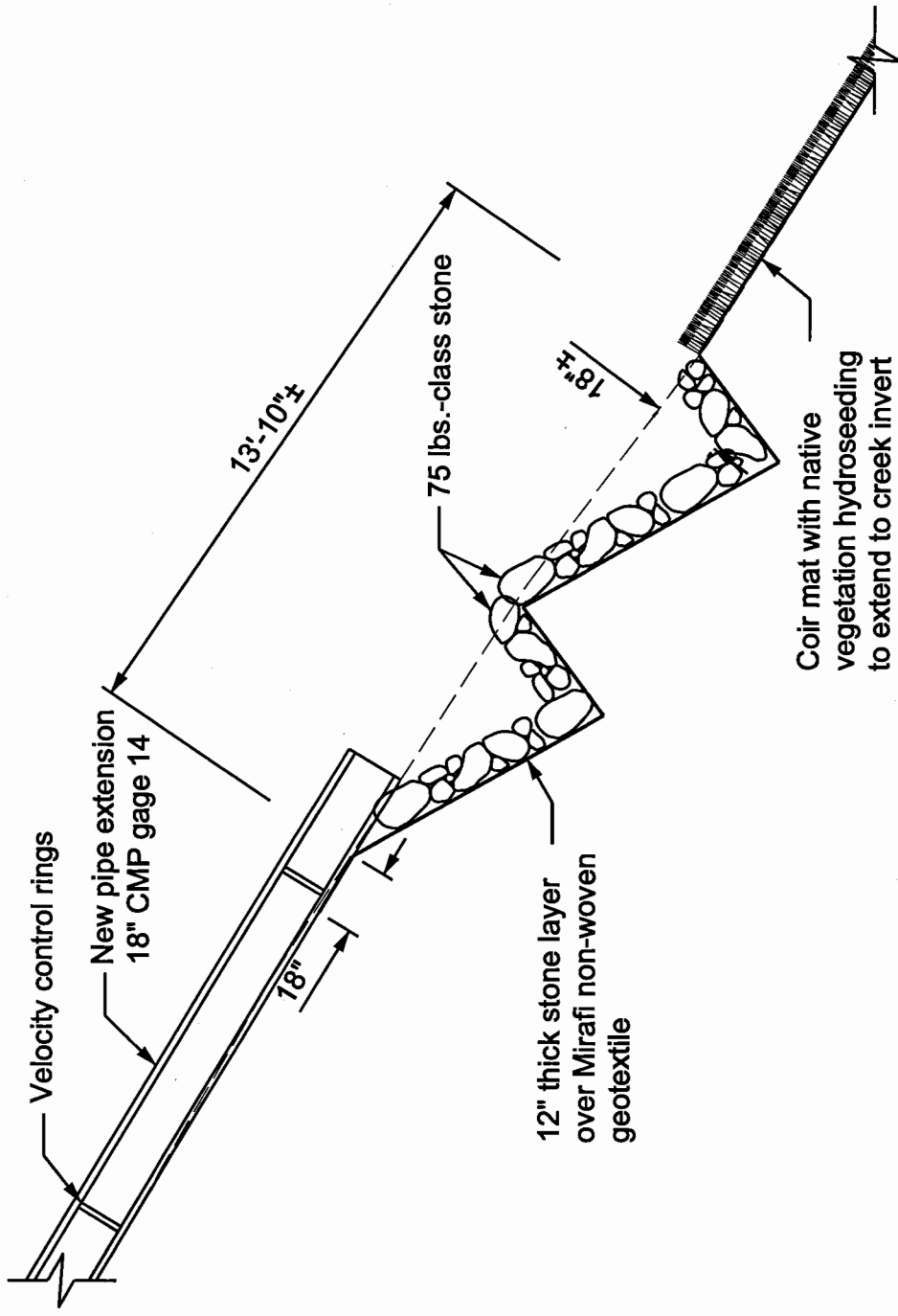


LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC WORKS

PIPE OUTLET PROTECTION PLAN

1/4" = 1'

| |
|-------------------------|
| Exhibit 10 |
| 4-09-054 (LACDPW) |
| Drainage Outlet Details |



LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

PIPE OUTLET PROTECTION TYPICAL SECTION

1/4" = 1'

Notes:

1. 75 lbs.-class stone is a mix of rocks ranging between 12" and 10" in diameter (approx).

DRAFTER: C. PADILLA



| |
|---------------------|
| Exhibit 11 |
| 4-09-054 (LACDPW) |
| Wall Façade Example |