CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W16a

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to the original staff report.

ADDENDUM

DATE: October 4, 2011

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item 16a, Wednesday, October 5, 2011, Coastal Development Permit Application No. 4-10-055 (Los Angeles County Department of Public Works)

The purpose of this addendum is to attach two letters of interest regarding Coastal Development Permit Application No. 4-10-055 (Los Angeles County Department of Public Works), received on September 30, 2011, from Heal the Bay and the Resource Conservation District of the Santa Monica Mountains.

Heal the Bay

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September 30, 2011

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001
Via fax: (805) 641-1732

Re: Agenda Item W16a - Los Angeles County CDP Application No. 4-10-055 to place 382 cubic yards of rock rip-rap on Lower Topanga Creek

Dear Coastal Commissioners:

On behalf of Heal the Bay, a non-profit environmental group with over 13,000 members, dedicated to protecting water quality and coastal resources in southern California, we submit the following comments regarding the Los Angeles County Department of Public Works Coastal Development Permit application (No. 4-10-055) to place 382 cubic yards of rip-rap on the western bank of lower Topanga Creek. We appreciate the outreach from Los Angeles County Department of Public Works regarding this project, and conducted a site visit in 2010 with County staff and other stakeholders at the proposed project location. However, we are concerned about the long-term ecological impacts associated with hardening the western bank of lower Topanga Creek, and in the watersheds along the northern stretch of Santa Monica Bay.

The Topanga Creek Watershed covers approximately 18 square miles, 75% of which are undeveloped, and is the third largest watershed draining to Santa Monica Bay. A variety of plants and animals, including federally-endangered Steelhead Trout and Tidewater Goby, live in the watershed. Historically, Topanga Lagoon covered more than 30 acres. In the 1930s, over 800,000 cubic feet of fill was placed directly in the lagoon, reducing its surface area by over 90%. Significant efforts have been underway over the past decade to develop and implement a plan to restore lower Topanga Creek and Lagoon, with the ultimate goal of restoring the historical wetland function and size closer to its historic acreage. This restoration plan includes removal of the fill material that would be held in place by the proposed project.

Generally, Heal the Bay is opposed to hardened solutions for streambank stabilization. The presence of concrete rip-rap in stream and riparian ecosystems negatively impacts and changes a stream's natural morphology, hydrologic balance, sediment regime, habitat provision, species composition, and natural chemical and biological processes. Unfortunately, since hardened streambanks are usually proposed on a case-by-case basis, the cumulative impacts of hardening throughout a watershed are typically

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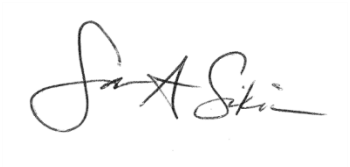
overlooked by permitting agencies. Through our Stream Team mapping efforts in the Malibu Creek Watershed, we have identified armored stream banks as one of three major causes of downstream bank erosion and sedimentation. A total of 20.9 linear miles or 31% of all mapped stream banks in the Malibu Creek Watershed were engineered with hardened materials. Directly across and/or downstream from almost every concrete structure we have mapped in Malibu Creek Watershed, there are severe erosion problems, contributing to the sediment-impaired streams throughout the watershed. Additionally, many of the hardened structures (especially rip-rap) we mapped were failing - over 65% of the modifications made of loose boulders/riprap, concreted boulders and gabion were unstable or failing, which contributes to additional habitat degradation. We are concerned that the installation of rip-rap at this location could lead to further habitat degradation and sediment-loading in the Topanga Lagoon.

While we understand Los Angeles County's concern associated with possible slope failure at this site, we urge the Coastal Commission to add a condition that the placement of rip-rap on the western bank of lower Topanga Creek be a ***temporary*** "fix", to last no longer than 10 years (if the proposed permit is approved). Additionally, if approved, the permit should state that in no way should the rip-rap in lower Topanga Creek impede the eventual restoration of the lagoon. The presence of rip-rap as a permanent measure to stabilize the stream bank for protection of filled land west of Topanga Creek is not a workable long-term solution.

Thank you for the opportunity to comment on this proposed project. As an organization that works to protect our sensitive coastal water resources, we are very concerned by the habitat degradation caused by streambank armoring. We appreciate your assistance in specifying this project as a ***temporary*** fix and direction towards eventual restoration of a functional, self-sustaining lagoon to support the continued survival of our local native fish and wildlife. Please contact me at 310.451.1500 x163 if you have any questions.

Sincerely,



Sarah Sikich
Coastal Resources Director

RESOURCE
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29 September 2011

Commissioners
California coastal Commission
South Central Coast Area
89 south California St. Suite 200
Ventura, CA 93001

Re: Application No 4-10-055 Topanga Lagoon Slope Repair

Dear Commissioners,

The Resource Conservation District of the Santa Monica Mountains has been monitoring Topanga Lagoon monthly as part of our long term southern steelhead trout study since June 2001. Documentary photos show that there has been no substantial additional slope erosion since 2005. We met with the County engineers and staff to discuss our concerns with this proposed project and share our photos documenting that the slope has remained fairly stable since the big rain year of 2005.

Historically, Topanga Lagoon covered almost 30 acres. The original Pacific Coast Highway Bridge spanned approximately 250 feet and maintained much of the original footprint of the lagoon. In the 1930's the lagoon was filled in, and PCH realigned to its current location leaving a 1.8 acre lagoon remnant and an 82' wide bridge. Topanga Creek is one of the few creeks left in the Santa Monica Bay where steelhead are found. The Draft Southern Steelhead Recovery Plan (NMFS 2009) identifies Topanga as a core population critical to the recovery of this species. In 2008, we removed the fish passage barrier of Rodeo Grounds Road, and restored summer surfaces flows to that reach. The restoration of Topanga Lagoon would eliminate the last remaining keystone passage barrier in this system.

Significant watershed planning and public process has established that the ultimate goal in this location is to restore Topanga Lagoon by removing the fill material that will otherwise be held in place by the proposed project. A coalition of many stakeholders has been working on developing that strategy since 2004, when Caltrans, State Parks and Los Angeles County Department of Beaches and Harbors approved the required PDS/PSR report outlining the possible restoration design and PCH bridge replacement. Since that

time, we have been involved with the revision of the Topanga State Park General Plan, which is the next required document needed before moving forward towards restoration.

While we appreciate the concern of the County for present liability associated with possible slope failure, we wish to emphasize that our discussion with the county focused on this being a ***temporary*** hardening "fix", that in no way will impede the eventual restoration of the lagoon. It is with this understanding, supported by conversations with current staff, that the RCDSMM has evaluated the impacts of the proposed project, which we consider to be short-term. We are satisfied that the County is generally supportive of the eventual removal of this proposed project once the design, approval and funding process has been completed to allow for complete restoration of the lagoon. However, if this project is allowed to become permanent, then we have significant concerns about its impacts.

Additionally, we appreciated the opportunity provided by the county to review the planting palette and plans. Due to the nature of the slope fill material; it will be extremely difficult to establish any vegetation on this slope without supplemental irrigation, which in turn could potentially cause slope failure. While we appreciate the effort to replace the existing non-native vegetation with natives, we would like to suggest that since this is a ***temporary*** fix, that native re-vegetation efforts might best be focused in areas that are intended to persist over the long term, rather than on a slope that is would eventually be removed when the Cal Trans PSR project and lagoon restoration are completed. Off site re-vegetation would be most appropriate in this instance. Directing this effort towards the on-going revegetation of the former Rodeo Grounds Road in Lower Topanga State Park is recommended.

We will be continuing our monthly surveys of the lagoon to monitor fish populations, and appreciate the projects plan to keep all equipment and materials out of the lagoon. In addition to the listed southern steelhead trout that primarily use the lagoon for migration, there are year round resident endangered tidewater gobies found throughout the lagoon. Ensuring that no spills, sediment or other materials enter the lagoon is critical.

Thank you for the opportunity to comment on this proposed project. We appreciate your assistance in identifying this as a ***temporary*** fix and directing efforts towards eventual restoration of a functional, self-sustaining lagoon to support the continued survival of our local native fishes.

Sincerely,

Rosi Dagit
Senior Conservation Biologist

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W16a

Filed:	8/16/11
49th Day:	10/4/11
180th Day:	2/12/11
Staff:	Kanani Brown
Staff Report:	9/22/11
Hearing Date:	10/5/11

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-10-055

APPLICANT: Los Angeles County Department of Public Works

AGENT: GeoKinetics, Inc.

PROJECT LOCATION: 18700 Pacific Coast Highway, western stream bank of Topanga Creek, downstream of Pacific Coast Highway overpass, Los Angeles County

APN: 4448-001-900

PROJECT DESCRIPTION: Repair eroding slope and implement habitat restoration of 120 linear ft. segment of the western stream bank of lower Topanga Creek, including laying slope of western creek bank back to a less steep gradient of 1.5:1; widening creek by removing and relocating toe of existing rip rap five feet further landward of its existing location; revegetation and restoration of approximately 30,000 sq. ft. of slope with native vegetation; installation of a fence along the top of the repaired slope; addition of 382 cu. yds. of rip rap to repair existing rock slope area; and 2,144 cu. yds. of grading (1,276 cu. yds. cut, 868 cu. yds. fill).

MOTION & RESOLUTION: Page 4

SUMMARY OF STAFF RECOMMENDATION: Staff recommends **approval** of the proposed development with **eight (8) special conditions** regarding (1) plans conforming to engineer's recommendations, (2) assumption of risk, (3) required agency permits and approvals, (4) sensitive species surveys and construction monitoring, (5) timing, operations and maintenance responsibilities, (6) erosion control plans, (7) removal of excess excavated material, and (8) restoration and revegetation management and monitoring program.

The Los Angeles County Department of Public Works is proposing to repair an eroding slope and implement habitat restoration of a 120 linear ft. segment of the western stream bank of lower Topanga Creek, immediately downstream of the Pacific Coast

Highway overpass in the Malibu area of Los Angeles County. Partial slope failure of the stream bank occurred during the 2004/2005 winter storm season. Repair and restoration activities would involve laying the western creek bank slope back from approximately 1:1 (H:V; horizontal, vertical) to a less steep gradient of 1.5:1 (H:V); widening the creek channel by removing and relocating toe of existing riprap five feet further landward of its existing location; revegetation and restoration of approximately 30,000 sq. ft. of slope with native vegetation; addition of 382 cu. yds. of riprap to repair existing rock slope area; installation of a fence along the top of restored slope; and 2,144 cu. yds. of grading (1,276 cu. yds. cut, 868 cu. yds. fill).

Although this portion of the Topanga Creek estuary constitutes wetlands, this project will result in the minor widening of the creek/estuary by approximately five feet and will not result in any fill or placement of riprap in any existing wetland areas. Although the creek bank on site was previously covered with riprap from the toe to the top of the creek bank prior to the effective date of the California Coastal Act, the majority of the riprap was washed out in the winter storm season of 2004/2005 and the slope has been subject to substantial slope erosion. The damaged slope will be reconstructed at a less steep angle, riprap will only be utilized on the lower portion of the slope, and more than 30,000 sq. ft. of the reconstructed slope will be revegetated and restored with native vegetation as part of this project.

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. As conditioned, the proposed project is consistent with all applicable Chapter Three policies of the Coastal Act.

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EXHIBITS

LOCAL APPROVALS RECEIVED: California Regional Water Quality Control Board, Clean Water Act Section 401 Water Quality Certification, dated August 18, 2010; Approval in Concept by Los Angeles County Department of Public Works, dated June 29, 2010;

SUBSTANTIVE FILE DOCUMENTS: Biological Assessment prepared by Forde Biological Consultants, dated March 5, 2010; Revised Biological Assessment prepared by Forde Biological Consultants, dated October 19, 2010; Jurisdictional Delineation prepared by Forde Biological Consultants, dated February 26, 2010; Revegetation Plan for Streambank Stabilization prepared by Edith Read, Ph.D., dated September 27, 2010; Jurisdictional Delineation prepared by Forde Biological Consultants, dated February 26, 2010; Cultural Resource Survey of the Topanga Creek Slope Repair Site prepared by Laguna Mountain Environmental, Inc., dated September 2010; Certified Malibu/Santa Monica Mountains Land Use Plan; and The March 25, 2003 Memorandum Regarding the Designation of ESHA in the Santa Monica Mountains, prepared by John Dixon, Ph. D.

I. STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

MOTION: ***I move that the Commission approve Coastal Development Permit No 4-10-055 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. Plans Conforming to Engineer's Recommendations

All recommendations contained in the applicable geotechnical engineer's reports and analyses submitted for Coastal Development Permit 4-10-055, shall be incorporated into all final design and construction plans, including grading and drainage. All final plans must be reviewed and approved by the County's engineer and verified as incorporating the applicable recommendations of the geotechnical engineer's reports and analyses. Prior to the commencement of development the County shall submit, for review and approval by the Executive Director, evidence of the County engineer's review and approval of all final project plans.

2. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wave action, flooding, erosion, and sea-level rise; (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. Required Agency Permits and Approvals

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, all other necessary State and/or Federal permits that may be necessary for all aspects of the proposed project (including California State Lands Commission, U.S. Army Corps of Engineers, California Regional Water Quality Control Board, California Department of Fish and Game, U.S Fish and Wildlife Service, and the National Marine Fisheries Service) or evidence that no such approvals are required.

4. Sensitive Species Surveys and Construction Monitoring

For any construction activities, the applicant shall retain the services of a qualified biologist or environmental resource specialist (hereinafter, "environmental resources specialist") to conduct sensitive species surveys (including birds and other terrestrial species) and monitor project operations associated with all construction activities. At least 30 calendar days prior to commencement of any construction activities, the applicant shall submit the name and qualifications of the environmental resources specialist, for the review and approval of the Executive Director. The applicant shall have the environmental resources specialist ensure that all project construction and operations are carried out consistent with the following:

A. The environmental resources specialist shall conduct surveys 30 calendar days prior to the listed activities to detect any active sensitive species, reproductive behavior, and active nests within and near the project site. Follow-up surveys must be conducted 3 calendar days prior to the initiation of construction and nest surveys must continue on a monthly basis throughout the nesting season or until the project is completed, whichever comes first.

B. In the event that any sensitive species are present in the project area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the qualified biologist shall either: (1) initiate a salvage and relocation program prior to any excavation/construction activities to move sensitive species by hand to safe locations elsewhere along the project reach or (2) as appropriate, implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided. The applicant shall also immediately notify the Executive Director of the presence of such species and which of the above actions is being taken. If the presence of any such sensitive species requires review by the United States Fish and Wildlife Service and/or the California Department of Fish and Game, then no development activities shall be allowed or continued until any such review and authorizations to proceed are received, subject to the approval of the Executive Director.

C. If an active nest of a federally or state-listed threatened or endangered species, bird species of special concern, or any species of raptor or heron is found, the applicant shall notify the appropriate State and Federal agencies within 24 hours, and shall develop an appropriate action specific to each incident. The applicant shall notify the California Coastal Commission in writing by facsimile or e-mail within 24 hours and consult with the Commission regarding determinations of State and Federal agencies.

D. The environmental resources specialist shall be present during all construction, grading, excavation, vegetation eradication and removal, hauling, and maintenance activities within the lagoon and on the stream bank. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to sensitive habitats or to wildlife species, the applicants shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be submitted to the Executive Director, for review and approval.

5. <u>Timing, Operations and Maintenance Responsibilities</u>

It shall be the applicant's responsibility to ensure that the following occurs during all project operations:

(a) Project activities including plant restoration and revegetation, shall not occur during the period from November 1 through May 31, unless authorized by the Executive Director for good cause.

(b) The work area shall be flagged and/or fenced to identify limits of construction and identify natural areas that are off limits to construction traffic.

(c) Flagging and/or fencing shall be installed a minimum of 1 ft landward of the Lagoon Low Flow High Water Elevation line (7.6 ft.) to ensure that no work shall occur stream ward of the 7.6 elevation line or within 1 ft of the edge of water. In no event, shall work occur stream ward of this flagging and/or fencing.

(d) No construction materials, debris, or waste shall be stored on the beach or where it may be subject to erosion and dispersion. Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris that may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.

(e) No equipment shall be stored in the project area, including designated staging and/or stockpile areas, except during active project operations.

(f) Only areas essential for construction shall be cleared.

(g) Construction equipment shall not be cleaned on the beach or in the beach parking lots.

(h) Stockpiled materials shall be located as far from stream areas on the designated site(s) as feasible and in no event shall materials be stockpiled closer than 30 ft. in distance from the top edge of a stream bank.

(i) All debris and other construction materials shall be cleared from Topanga Creek prior to removal of the temporary shoring.

6. Erosion Control Plans

Prior to commencement of development, the County shall submit two (2) sets of final erosion control plans, prepared by a qualified engineer, for review and approval by the Executive Director. The plans shall be consistent with all measures required pursuant to Special Condition No. Five (5) and shall also incorporate the following criteria:

(1) The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas and stockpile areas. The natural areas on the site shall be clearly delineated on the project site with fencing or survey flags.

(2) The final erosion control plans shall specify the location and design of erosion control measures to be implemented during the rainy season (November 1 – May 1), in the event that any work is authorized by the Executive Director during the rainy season. The County shall install or construct temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, silt fencing, stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes and close and stabilize open trenches as soon as possible. Straw bales shall not be approved. These erosion measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment shall be retained on-site unless removed to an appropriate approved dumping location either outside the coastal zone or to a site within the coastal zone permitted to receive fill.

(3) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species

and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

(4) Storm drain inlets shall be protected from sediment-laden waters by the use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps.

7. Removal of Excess Excavated Material

A. Permanent stockpiling of material on site shall not be allowed. Sediment shall be retained at the designated temporary stockpile areas, up to approximately three months, until removed to an appropriate approved disposal location either outside the coastal zone or to a site within the coastal zone permitted to receive such fill.

B. ***Prior to the 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.

8. Riparian Habitat Restoration and Revegetation Program

A. ***Prior to the issuance of the Coastal Development Permit***, the County shall submit, for the review and approval of the Executive Director, a final Riparian Habitat Restoration and Revegetation Program for the management and monitoring of restoration/revegation of the creek bank of lower Topanga Creek. This program shall be prepared by a qualified biologist or environmental resource specialist and shall include, but not be limited to, the following:

1. Onsite habitat enhancement shall include, at a minimum, the removal of any and all invasive plant species on the site and revegetation of all disturbed areas with appropriate native riparian species of local genetic stock, including areas where invasive and non-native plants were removed. Plans must indicate that invasive plant species shall be removed from all development and restoration areas for the life of the project.

2. Indication as to the location, type, and height of any temporary fencing that will be used for restoration. The plans shall also indicate when this fencing is to be removed.

3. Non-native or invasive species shall be removed by hand where feasible and an herbicide use shall be minimized. If the applicant's environmental specialist or habitat restoration consultant determined that herbicide use is necessary to ensure successful re-establishment of native plant species on site, then herbicide use shall be restricted to the use of Glyphosate Aquamaster (previously Rodeo) herbicide for the elimination of non-native and invasive vegetation only.

4. Indication on plans that rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) shall not be used.
5. A baseline assessment, including photographs, of the current physical and ecological condition of the proposed restoration site, including, a biological survey, a description and map showing the area and distribution of existing vegetation types, and a map showing the distribution and abundance of any sensitive species.
6. A description of the goals of the restoration plan, including, as appropriate, topography, hydrology, vegetation types, sensitive species, and wildlife usage.
7. Documentation of performance standards, which provide a mechanism for making adjustments to the mitigation site when it is determined, through monitoring, or other means that the restoration techniques are not working.
8. Documentation of the necessary management and maintenance requirements, and provisions for timely remediation should the need arise.
9. A planting palette (seed mix and container plants), planting design, source of plant material, and plant installation. The planting palette shall be made up exclusively of native plants that are appropriate to the habitat and region and that are grown from seeds or vegetative materials obtained from local natural habitats so as to protect the genetic makeup of natural populations. Horticultural varieties shall not be used. Plantings shall be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the revegetation requirements. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic Pest 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.
10. Sufficient technical detail on the restoration design including, at a minimum, a planting program including a description of planned site preparation, method and location of exotic species removal, timing of planting, plant locations and elevations on the baseline map, and maintenance timing and techniques.
11. A plan for documenting and reporting the physical and biological "as built" condition of the site within 30 days of completion of the initial restoration activities. The report shall describe the field implementation of the approved restoration program in narrative and photographs, and report any problems in the implementation and their resolution.
12. Documentation that the project will continue to function as viable native habitats, as applicable, over the long term.

B. Monitoring Program to monitor the restoration. Said monitoring program shall set forth the guidelines, criteria and performance standards by which the

success of the enhancement and restoration shall be determined. The monitoring program shall include but not be limited to the following:

1. Interim and Final Success Criteria. Interim and final success criteria shall include, as appropriate: species diversity, total ground cover of vegetation, vegetative cover of dominant species and definition of dominants, wildlife usage, hydrology, and presence and abundance of sensitive species or other individual "target" species.

2. Interim Monitoring Reports. The County shall submit, for the review and approval of the Executive Director, on an annual basis, for a period of five (5) years, a written monitoring report, prepared by a monitoring resource specialist indicating the progress and relative success or failure of the enhancement on the site. This report shall also include further recommendations and requirements for additional enhancement/ restoration activities in order for the project to meet the criteria and performance standards. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) indicating the progress of recovery at each of the sites. Each report shall be cumulative and shall summarize all previous results. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the enhancement/restoration project in relation to the interim performance standards and final success criteria.

3. Final Report. At the end of the five-year period, a final detailed report on the restoration shall be submitted for the review and approval of the Executive Director. If this report indicates that the enhancement/ restoration project has, in part, or in whole, been unsuccessful, based on the performance standards specified in the restoration plan, the applicant(s) shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program which did not meet the approved success criteria. The revised or supplemental program shall be submitted to the Executive Director, for review and approval.

(a) Monitoring Period and Mid-Course Corrections. During the five-year monitoring period, all artificial inputs (e.g., irrigation, soil amendments, plantings) shall be removed except for the purposes of providing mid-course corrections or maintenance to insure the survival of the enhancement/restoration site. If these inputs are required beyond the first two years, then the monitoring program shall be extended for every additional year that such inputs are required, so that the success and sustainability of the enhancement/restoration is insured. The enhancement/restoration site shall not be considered successful until it is able to survive without artificial inputs.

C. The County shall undertake development in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Coastal Commission approved amendment to this coastal development permit or a new coastal development permit, unless the Executive Director determines that no new amendment or permit is legally required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION

Repair and Restoration of Topanga Creek Stream Bank

The Los Angeles County Department of Public Works proposes to repair and restore a 120 linear ft. segment of the western stream bank of lower Topanga Creek, including laying the slope of the creek bank back from approximately 1:1 (H:V; horizontal, vertical) to a less steep gradient of 1.5:1 (H:V); widening creek by approximately five feet and removing/relocating toe of existing riprap further landward of its existing location; revegetate and restore slope with native vegetation; installation of fence along the top of the reconstructed stream bank; addition of 382 cu. yds. of riprap to repair existing rock slope area; and 2,144 cu. yds. of grading (1,276 cu. yds. cut, 868 cu. yds. fill).

The sequencing of repair and restoration activities to the stream bank would be implemented as follows: 1) remove existing collapsed slope material and debris above the Lagoon Low Flow High Water Elevation (approximately 7.6 ft. elevation) while the creek/lagoon mouth is in a closed condition, hereinafter referred to as "water line"; 2) excavate benches for riprap; 3) place geotextile on benches beneath riprap; 4) place temporary 5 ft. x 10 ft. by 5 ft. deep shoring at toe of slope, a minimum of one lateral ft. from water line; 5) remove sediment within shoring and temporarily stockpile excavated soil/sediment onsite; 6) place riprap in keyway at a minimum of one lateral ft. setback from water line; 7) remove shoring; 8) place 382 cu. yds. of riprap along the lower portion of the stream bank; 9) as the rock riprap is being installed, interstitial spaces in riprap will be partially filled with a combination of fine gravel, sand, and soil; 10) place geotextile across top of riprap and beneath soil on benches; and 11) place excavated soil/sediment with geogrid as compacted fill and plant slope with native vegetation per the final approved planting plan (Exhibit 7). Cofferdams will not be necessary; however, temporary shoring will be installed one foot landward of the high water line for stability and to reduce the incursion of groundwater into the riprap keyway. The water level within the temporary shoring is to be maintained below the water level outside of the shoring during excavation and riprap placement activities.

An existing unimproved dirt public beach access road/path is located immediately up-coast (west) of the eroding creek bank and provides pedestrian access and emergency vehicle access to the sandy beach from Pacific Coast Highway. In addition, an existing dirt surface parking area is also located immediately up-coast and adjacent to the parking site on a parcel owned by the Los Angeles County Department of Beaches and Harbors. Commission staff has reviewed historical aerial photographs and confirmed that portions of the dirt parking area were previously used for parking for public beach access. The County currently maintains the improved parking lot on the opposite (eastern) side of Topanga Creek for public beach use; however, the unimproved dirt parking area on the western side of the creek is closed to use. An aerial photograph

taken in 1975, when the property belonged to California State Parks, indicates that a building was located on the east side of the subject parking area and that the parking area was partially paved. In addition, several parking spaces for public beach access were available on the west side of this parking area. On November 9, 1981, CDP No. 5-81-312 was approved to demolish the structure and convert the property to a "line dirt parking lot" with "telephone poles" in order to create entrances and exits. However, an aerial photograph taken in 1986 shows that the building had been demolished and access to the subject parking area had been closed through the installation of numerous poles bordering the entire length of the site along Pacific Coast Highway, including entrances and exits. Commission staff is investigating the history of this access closure further and will evaluate further action to ensure that this public parking area is reopened to public use. Commission staff has discussed this issue with County staff, who has indicated that although reopening the lot would require additional improvements that are not proposed as part of this project, the proposed slope work will facilitate the future reopening of the parking area and is necessary to ensure its geologic and engineering stability. In addition, the proposed project is necessary to ensure the continued stability of the existing public beach access path/road to the beach which is necessary emergency access for lifeguards and the LA County Fire Department and is the only emergency vehicle access point north of Topanga Creek for this portion of coastline.

Construction Timing

Construction is anticipated to last three months and will occur between June 1 and October 31, which is after steelhead trout have entered Topanga Creek when the creek's mouth is typically closed and after the peak spawning and hatching period of tidewater goby.

Water Quality and Biological Protection Measures

As originally proposed by the County, the project involved the placement of rip rap in submerged portions of the creek channel itself (below the water line), extending from an elevation of 4 feet above mean sea level (MSL) to 15 feet MSL, resulting in fill of coastal wetlands. However, at the request of Commission staff, the applicant has revised the proposed project to reduce the amount of rip rap and relocate the toe approximately further inland to an elevation of 6-15 feet MSL. Additionally, all proposed work will occur above the normal water line of Topanga Creek and no irrigation is planned; therefore, rainfall would be the restoration area's only water source. As described above, the lower slope, from 6-15 feet MSL, will consist of riprap (Exhibit 7). Interstitial spaces in the riprap will be partially filled with a combination of fine gravel, sand, and soil. The rest of the slope, from 15-36 feet MSL, will consist of a series of narrow terraces about 6 ft. wide that are reinforced with non-biodegradable geotextile and then covered in soil to produce a relatively smooth slope (Exhibit 7). The planting substrate will consist of compacted soil stockpiled from excavation of the trench that supports the base of the riprap. The soil will likely be alkaline due to its origin near the estuarine mouth of Topanga Creek. The planting of saltbush, ashyleaf buckwheat, golden yarrow, toyon, and coast goldenbush is proposed in the Revegetation Plan prepared by Edith Read on September 27, 2010.

Additionally, at the request of Commission staff, the applicant has revised the originally proposed project to widen Topanga Creek by approximately 5 ft. by removing and relocating the toe of existing riprap further landward of its existing location. The original plans proposed the riprap to extend to and below the water line. Upon collaboration with staff and an updated survey of the Lagoon Low Flow High Water Elevation (approximately 7.6 ft MSL with outflow channel closed at beach), the applicant has proposed the toe of the slope to be located a minimum of one foot from the water's edge. Thus, as now proposed, the project will not result in the fill or placement of rip rap within any wetland areas.

B. PROJECT AREA AND BACKGROUND

Project Area

The site is the western stream bank of Topanga Creek near its mouth, located at 18700 Pacific Coast Highway in the Malibu area of Los Angeles County (APN 4448-001-900) (Exhibits 1-2). The subject site is approximately ¼ of a mile southwest of the intersection of Pacific Coast Highway and Topanga Canyon Road, immediately south or down-coast of the Pacific Coast Highway overpass/bridge. This segment of Topanga Creek is also referred to as Topanga Lagoon and the outflow channel at Topanga State Beach may be closed (summer/fall) or open (winter/spring) depending on the time of year. Surrounding development includes Pacific Coast Highway to the north, Topanga State Beach and the Pacific Ocean to the south, a closed parking lot and public access path/emergency access road to the west, and an open beach parking lot to the east.

The project area is less than one acre in size and consists of an approximately 120-foot long segment of the western bank of Topanga Creek extending south from the Pacific Coast Highway overpass. Riprap occupied the western bank of Topanga Creek until the winter storm season of 2004/2005, when it collapsed. One set of concrete bridge abutments supports the PCH overcrossing. The second set of abutments is associated with an older bridge which was removed. The existing up-coast wing-wall at PCH is proposed to remain as is. A public beach access path that also provides emergency vehicle access is immediately up-coast of the stream bank and is devoid of vegetation. There is a willow located on the northern portion of the site adjacent to the PCH wing-wall, which is proposed to be avoided. If avoidance is not possible, the tree will be salvaged and replanted as part of the restoration and revegetation plan. Additionally, an existing dirt surface parking area is also located immediately up-coast and adjacent to the parking site on a parcel owned by the Los Angeles County Department of Beaches and Harbors. Commission staff has reviewed historical aerial photographs and confirmed that portions of the dirt parking area were previously used for parking for public beach access. Commission staff have discussed the issue of reopening the lot to public use with County staff, who have indicated that although reopening the lot would require additional improvements that are not proposed as part of this project, the proposed slope work will facilitate the future reopening of the parking area and is necessary to ensure its geologic and engineering stability.

Topanga Creek drains an 18 square mile (12,400 acres) watershed on the southeastern side of the Santa Monica Mountains. It is the third largest of the 28 watersheds draining into the Santa Monica Bay. The watershed is characterized by steep-sided canyons and narrow creek channels, and is crisscrossed by several small faults. Year-round flows have been consistently reported in the lover five-mile reach of Topanga Creek for almost 40 years. Topanga Creek is under the jurisdiction of the California Coastal Commission, California Department of Fish and Game (CDFG), U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board (RWQCB).

This portion of the Topanga Creek estuary constitutes wetlands and provides habitat for sensitive species, including southern steelhead trout and tidewater goby. Construction of the proposed project has the potential to impact steelhead and goby populations due to the noise and vibrations associated with grading and other construction activities. However, in order to minimize these potential impacts, construction activities will occur during the dry season from June 1 through October 31, which is after steelhead trout have entered Topanga Creek when its mouth is typically closed and after the peak spawning and hatching period of tidewater goby. Special Condition No. Five (5), therefore, prohibits any construction activities from November 1 through May 31, unless authorized by the Executive Director for good cause.

Past Permit History

On March 18, 2010, the Los Angeles County Department of Public Works applied for an emergency permit (4-10-024-G) for the repair of a short section of the slope along Topanga Creek; however, this application was denied. Again, on May 10, 2010 the applicant applied for an emergency permit (4-10-035-G); however, this application was also denied. Based on the information submitted, the proposed emergency projects did not meet the definition of an emergency permit where immediate action is required in response to an unexpected occurrence to protect life, property, or to maintain public services. The applicant was directed to submit a full CDP application.

Archaeological Resources

An archaeological literature and records search for the proposed project was conducted in September 2010 and the entire project area was also surveyed by Laguna Mountain Environmental, Inc. The survey concluded that no cultural resources were identified within the project area of potential effects (APE) and the project would not affect any cultural resources eligible for the California Register of Historical Resources. Therefore, the project is not expected to adversely impact any significant archaeological resources.

C. ALTERATION OF COASTAL WATERS AND SENSITIVE HABITATS

Section **30230** of the Coastal Act states:

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

Section **30231** of the Coastal Act 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 waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section **30233** of the Coastal Act states:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures,

nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where the improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section **30236** of the Coastal Act states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section **30240** of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those 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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30230 requires that marine resources be maintained, enhanced, and where feasible, restored. Section 30231 requires that the biological productivity and quality of coastal waters be maintained. Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. Section 30236 allows for alterations to streambeds when required for flood control projects where no other less damaging alternative is feasible and when necessary to protect public safety or existing development. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

The Los Angeles County Department of Public Works is proposing to repair an eroding slope and implement habitat restoration of a 120 linear ft. segment of the western stream bank of lower Topanga Creek, immediately downstream of the Pacific Coast

Highway overpass in the Malibu area of Los Angeles County. Partial slope failure of the stream bank occurred during the 2004/2005 winter storm season. Repair and restoration activities would involve laying the western creek bank slope back from approximately 1:1 (H:V; horizontal, vertical) to a less steep gradient of 1:5:1 (H:V); widening the creek channel by removing and relocating toe of existing riprap five feet further landward of its existing location; revegetation and restoration of approximately 30,000 sq. ft. of slope with native vegetation; addition of 382 cu. yds. of riprap to repair existing rock slope area; installation of a fence along the top of restored slope; and 2,144 cu. yds. of grading (1,276 cu. yds. cut, 868 cu. yds. fill).

Topanga Creek drains an 18 square mile (12,400 acres) watershed on the southeastern side of the Santa Monica Mountains. It is the third largest of the 28 watersheds draining into the Santa Monica Bay. The watershed is characterized by steep-sided canyons and narrow creek channels, and is crisscrossed by several small faults. Year-round flows have been consistently reported in the lover five-mile reach of Topanga Creek for almost 40 years. The conditions of lower Topanga Creek vary considerably depending on the flows originating from upper Topanga Creek and the conditions of the sand spit forming the southern boundary of the estuary. If the sand spit is closed, tidal action into the estuary is blocked and estuary is filled with freshwater from Topanga Creek. If the sand spit is open, the ocean provides tidal and wave influence into the estuary. Generally, the mouth of Topanga Creek is closed to the ocean during summer/fall and open to the ocean during winter/spring. Topanga Creek is under the jurisdiction of the California Coastal Commission, California Department of Fish and Game (CDFG), U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board (RWQCB).

The proposed project is located within the Topanga Creek corridor, designated in the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) as environmentally sensitive habitat area (ESHA). Further, 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.

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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

The project site contains wetland, riparian, and upland areas associated with riparian habitat along Topanga Creek. 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. 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[2]. Writing at the same time as Faber, Bowler asserted that, *"[t]here is no question that riparian habitat in southern California is endangered."*[3] 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.

Therefore, because of the essential role that riparian and upland 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.

The project area is less than one acre in size and consists of an approximately 120-foot long segment of the western bank of Topanga Creek, extending south from the Pacific Coast Highway overpass. The western bank of Topanga Creek within the project reach was previously developed with extensive rip rap slope protection which was installed prior to the effective date of the California Coastal Act. However, the existing rip rap slope protection was substantially damaged during the winter storm season of 2004/2005 and the western creek bank was subject to significant erosion. In addition, the remnants of an existing footing/abutment associated with a previously existing bridge that historically existed on site but which was demolished/destroyed prior to the effective date of the Coastal Act is also located on the western bank of creek approximately 110 ft. downstream from the highway. All proposed rip rap/slope repair will occur between the existing wing-wall for the Pacific Coast Highway overcrossing and the abandoned remnant of the old bridge footing located approximately 110 ft. downstream from the highway.

Although the project site constitutes ESHA, it has been subject to substantial disturbance in the past that has degraded the value of habitat on site. The applicant has submitted a biological analysis of the subject site which confirmed that there are no

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[2] 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.
[3] 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.

rare, endangered, or special status plant species on site. Moreover, the analysis found that based on geographic location, elevation, substrate type, substrate pH, available habitat, habitat quality, and surrounding land use, the majority of the 35 special-status plant species that have been recorded in the area are not expected to occur or have low potential to occur on the project site. Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *Maritimus*), a federal and state endangered species, and southern tarplant (*Centromadia parryi* ssp. *Australis*), a California Native Plant Society (CNPS) list 1B species, have low potential to occur due to the absence of natural conditions.

The stream bank slope on site is predominantly vegetated with non-native plant species. Non-native species occurring on the west bank include common mallow (*Malva parviflora)*, common sow thistle (*Sonchus oleraceus*), giant reed (*Arundo donax),* iceplant (*Coarpobrotus* sp.), mustard (*Hirschfeldia incana*), myoporum (*Myoporum* sp.), ripgut brome (*Bromus diandrus*), Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), and wild oat (*Avena* sp.). Native species such as buckwheat (*Eriogonum* sp.), California aster (*Lessingia filaginifolia*), California encelia (*Encelia californica*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), nightshade (*Solanum* sp.) phacelia (*Phacelia* sp.), and wild cucumber (*Marah macrocarpus*) also occur, but are limited to a small number of individuals.

The creek channel and estuary contain open water estuarine habitat that supports fish, water-dependent birds, and other wildlife. Although the Topanga Creek watershed is not pristine, the drainage as a whole provides habitat for important sensitive aquatic resources and qualifies as an environmentally sensitive habitat area. Southwestern pond turtle (*emys marmorata pallida*), California newt (*Taricha torosa*), San Diego mountain kingsnake (*Lampropheltis zonata pulchra*), and two-striped garter snake (*Thamnophis hammondii*), all CDFG species of special concern, are freshwater species known to occur in Topanga Creek. These species could occur at and within the immediate vicinity of the site during storm events when the sand bar at the mouth of the creek is breached; however, they are not expected to occur when the mouth of the creek is closed when brackish water is likely present.

Greater bonneted bat (*Eumops perotis californicus*), hoary bat (*Lasiurus cinereus*), and spotted bat (*Euderma maculatum*) have moderate potential to forage at the site and pallid bat (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*) Townsend's big-eared bat (*Corynorbinus townsendii*), and western red bat (*Lasiurus blossevillii*) have a high potential to forage at the site, particularly during spring and fall migration; however, other than the bridge at PCH, potential roost, maternal, and hibernation sites are lacking.

California brown pelican (*pelecanus occidentalis californicus*), a CDFG species of special concern, California least tern (*Sterna antillarum browni*), a federal and state endangered species, and western snowy plover (*Charadrius alexandrinus nivosus*), a federal threatened species, all frequent the California coastline. Western snowy plovers have been observed foraging within the surf zone of Topanga State Beach, approximately 200 feet south of the project site. California brown pelicans and California least terns have also been observed flying along the shoreline in this area. Although these species occur in the area and may use the mouth of Topanga Creek for

foraging and resting, they are not expected to forage or rest specifically at the site due to depth of water and proximity to PCH. These species nest in only a handful of locations, none of which occur near the site. The nearest known breeding location for any of these species is at Point Mugu.

Arroyo chub (*Gila orcutti*), a CDFG species of concern, is a freshwater species known to occur in Topanga creek. It could occur at and within the immediate vicinity of the site during storm events when the sand bar at the mouth of the creek is breached; however, it is not expected to occur when the mouth of the creek is closed, when brackish water is likely present. Steelhead trout (*onchorhynchus mykiss irideus*) and tidewater goby (*Eucyclogobius newberryi*), which are federal endangered species, also occur in Topanga Creek. These species can be expected to occur at the site.

Birds are not expected to nest at the site and potential roost, maternal, and hibernation sites for bats are absent; however, birds and bats could use the bridge over PCH for these activities. The bridge at PCH is located immediately north of the site, within 100 feet. Noise and vibration typically associated with construction could affect nesting birds and bats, if present; however, traffic noise and vibration is consistent at the bridge during typical construction hours (7 AM to 5 PM). If birds or bats use the bridge at PCH for the aforementioned activities, it is unlikely that construction noise and vibrations would affect them.

In Topanga Creek a winter-run population of steelhead trout exists, entering the creek between December and April, after spending one to three years in the ocean. In Topanga Creek, steelhead trout are found more often in pools than any other habitat type. The County's biological consultant conducted surveys of the subject site but did not observe any trench, mid-channel, or step pools at the site that would be expected to provide habitat for steelhead trout. Additionally, no gravel is at or adjacent to the site, which is necessary for the females to cover the nest with to incubate the embryos. Riffles, runs, and pools which are used by juveniles do not occur at the site. The site also lacks vegetation canopy and water is fairly still, therefore, water temperature is likely not suitable through much of the year. Although steelhead trout occur in Topanga Creek and are expected to periodically occur at the site, individuals are only expected to pass through the site and are not expected to spawn at the site or anywhere else within the project reach of the creek, located south of the bridge at PCH.

In addition, the USFWS identified critical habitat for tidewater goby at the mouth of Topanga Creek and goby were present during biological surveys conducted in 2002. According to the USFWS, presence of goby at Topanga Creek is intermittent. Tidewater goby has strong preference for brackish water and requires coarse sandy substrates for spawning. Both occur at the site; however, the substrate within the site is mixed with soil from the eroded bank, making it less than favorable for spawning. The biological assessment submitted by the County's biological consultant found that it is highly unlikely that the proposed slope stabilization work would result in adverse impacts to adult and juvenile steelhead tout and tidewater goby during construction phase.

As discussed in detail in Section IV-A above, the Los Angeles County Department of Public Works is proposing to repair and restore the slope on the western stream bank of lower Topanga Creek. The pre-existing riprap would be replaced; however, the toe would be moved five feet further landward than its existing location and would maintain a one foot minimum setback from the lagoon low flow high water elevation line in order to ensure that no placement of fill will occur in any wetland area. Moreover, this would result in a wider creek channel and an expansion of wetland habitat on site by approximately 600 sq. ft. within the project reach. The project would also involve revegetation and restoration of the reconstructed slope with native riparian vegetation to improve cover over the creek. In addition, the existing damaged slope is steep with slopes in several areas of 1:1 (H:V) or greater. The County has proposed to reconstruct the slope at a less steep angle of approximately 1.5:1 in order to create conditions more conducive to successful revegetation and the establishment of a functioning riparian habitat area. In total, the project will result in the restoration of approximately 30,000 sq. ft. of wetland and upland riparian areas on the project site. Additionally, there will be a net increase in open estuarine water habitat by approximately 600 sq. ft. due to the shift of the toe of the slope five feet further landward.

While the project will result in an increase in coastal wetlands and estuarine habitat, construction of the project will temporarily impact a 120-foot section of channel from the Pacific Coast Highway overpass south to the existing remnant of the historic concrete bridge abutment. As described in Section IV-A, the project has been revised by the applicant to avoid any wetland fill. Accordingly, cofferdams will not be necessary; however, temporary shoring will be installed one ft. inland of the high water line for stability and to reduce the incursion of groundwater into the riprap keyway. The water level within the temporary shoring is to be maintained below the water level outside of the shoring during excavation and riprap placement activities. However, construction activities such as grading could result in temporary lead to disruption of habitat for aquatic species such as tidewater goby, steelhead trout, and for avian species that could be present within the project area.

The proposed project is designed to repair the eroded stream bank and existing rip rap slope protection that were previously damaged due to storm activity and which threaten to eventually undermine Pacific Coast Highway and an existing emergency vehicle access road to the sand beach. Thus, 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 to 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) 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.

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.

To assist in the determination of whether a project is consistent with Section 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 has 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 potential negative effects of runoff and erosion on watersheds and streams are minimized. Further, Policy 94 requires that cut and fill slopes are stabilized with plantings after completion of grading.

Although Section 30240 provides that new development may not be allowed within an environmentally sensitive habitat area unless the use is dependent on the sensitive resource. In this case, the proposed project will serve to restore and enhance wetland and riparian upland habitat on site; although the repair and reconstruction of the rip rap slope protection on site is not "dependent" on the sensitive resource. However, Section

30236 of the Coastal Act specifically allows for stream bank alteration, such as the proposed rip rap, for the purpose of necessary flood control project such as the proposed project. Thus, the proposed development is considered an allowable use within ESHA and riparian areas consistent with the provisions of both Sections 30236 and 30240.

Moreover, Section 30233 of the Coastal Act identifies seven allowable uses for the dredging diking and filling of coastal waters. According to Section 30233(a) filling of coastal waters can be allowed for, among other purposes, incidental public service and restoration purposes. As originally proposed, this project included the placement of new rip rap within the active channel of Topanga Creek and would have resulted in the fill of coastal waters in conflict with the policies of Section 30233. However, at the request of Commission staff, the applicant has revised the project to eliminate the need for any fill of coastal waters/wetland areas by widening the creek/estuary and relocating the proposed rip rap slope protection further landward. Specifically, the project, as now proposed, involves the repair/reconstruction of the existing rip rap slope protection device by relocating the toe of the rip rap further landward, reconstruction of an eroded stream bank, revegetation/restoration of upland/riparian habitat, and excavation/dredging of the lower portion of the creek bank to allow for expansion of the creek/estuary on site in order to expand wetland habitat. The reconstructed slope will not be expanded or encroach further into the creek channel and, in fact, the project would remove the previous fill of the Topanga Creek that has resulted from the installation of the existing rip rap slope protection by removing the existing toe of the rip rap, widening the creek channel by five feet on its western bank, and reconstructing the rip rap slope further landward than its existing location on a portion of the site that is currently not subject to inundation. The excavation of the lower creek bank will not encroach into any areas of the channel that are currently inundated or which constitute open coastal waters; regardless, the Commission finds that the excavation/dredging is necessary for the purpose of habitat restoration/enhancement and is consistent with the uses allowed under Section 30233. The project would also involve the restoration of approximately 30,000 square feet of upland riparian habitat area on the western bank of Topanga Creek as discussed above Thus, as now proposed, the project will not result in any fill of coastal waters as defined by Section 30233.

Potential Alternatives

As stated previously, there are two goals of the project: stabilize and repair the eroded slope and enhance and restore wetland and riparian habitat areas on site by replanting with native vegetation, laying the slope back at a less steep gradient of 1.5:1, and relocating the slope five feet further landward to widen the creek channel. The County has submitted an alternatives analysis prepared by the engineering consultants which explores the potential alternatives to the project while satisfying these two goals. The alternative analysis identified several alternatives including: (1) removal of all existing rip rap and re-contouring and planting of slope without use of any new rip rap, (2) combination of slope re-contouring and a reduction in the rip rap footprint, (3) removal of rip rap, re-contour slope at 2:1 angle, revegetate and utilize a raised causeway design for the public beach access pedestrian walkway/emergency vehicle road, and (4) the

"no project" alternative. The re-contouring and planting of the eroded slope without use of any riprap alternative would involve laying the existing slope back to a less steep elevation and planting the face of the slope with native vegetation appropriate to coastal/riparian areas; however, the County's engineers found that the use of plantings alone would not ensure slope stability and that rip rap along the western stream bank is critical to ensuring the geologic stability of the site since erosion due to stream action would continue to erode the slope on site eventually undermining both the existing beach path/emergency access road, unimproved parking lot area, and eventually Pacific Coast Highway. Thus, this alternative was not considered feasible. In addition, although the replacement of the existing public beach path/emergency vehicle access road with a new raised causeway or bridge (utilizing a caisson-grade beam foundation) would ensure the stability of the beach access way, this alternative would still not serve to stabilize the eroding slope on site or the potential undermining of Pacific Coast Highway and the adjacent unimproved parking lot area. Moreover, this alternative would be prohibitively costly and would likely result in significantly more adverse impacts to habitat on site as a result of the increased footprint of the road and the additional grading necessary to provide the necessary gradient on site for such a structure.

Finally, the "no-project" alternative was also found not to meet the goals of the project because the stream bank slope would continue to erode and deteriorate without the repair and restoration project. Thus, due to the relatively high flow velocities through the channel, and the vortices created along the slope where the flow exits the wing walls of the PCH overcrossing, significant undermining of the slope could occur rapidly during a single storm event. Continued slope erosion would eventually result in the undermining of the adjacent 30-in. diameter water line and adjacent high pressure gas line. Additionally, the erosion issues have extended to the adjacent emergency access road.

Thus, for these reasons, staff agrees with the conclusions of the alternatives analysis prepared by the County's engineering consultants. As originally proposed, the project included reconstruction of the damaged slope on site with installation of rip rap within coastal waters. Commission staff has worked with the County to revise the originally proposed project to focus on restoration of the slope, including revegetation of the slope with native riparian vegetation, widening of the creek channel, and shifting of the toe of the rock riprap five feet further landward. In conclusion, the Commission finds that the proposed project is the least damaging feasible alternative to repair and restore the lower Topanga Creek bank.

Mitigation Measures and Avoidance of Significant Disruption

Section 30240 of the Coastal Act requires that the project avoid significant disruption to sensitive resources. Additionally, Section 30233 requires that where fill or alterations of coastal waters is allowed, feasible mitigation measures should be implemented to minimize adverse environmental effects. The County has proposed several mitigation measures related to the protection of sensitive habitats, wetlands, and coastal waters. These measures include timing of construction activities to minimize disturbance to habitats, erosion control measures, and revegetation.

The project has been designed to avoid fill of wetland and open coastal waters and minimize impacts to riparian habitat. However, the project will still result in potential adverse impacts to ESHA and sensitive plant and animal species. As noted above, the proposed project involves the expansion of the Topanga Creek estuary and no net loss of wetland or riparian habitats. In past permit actions, the Commission has found that in order to ensure that repair work is consistent with the resource protection policies of both the Coastal Act and certified LUP, all sensitive riparian and upland habitat areas on a site that will be disturbed as a result of proposed development should be revegetated and restored to ensure that adverse effects to the riparian habitat are mitigated and that additional impacts from increased erosion and sedimentation are minimized. In this case, the County is proposing to restore approximately 30,000 square feet of wetland and riparian areas, remove non-native plants in the project area, and plant the banks of the creek and estuary in the project area with native riparian scrub, dune, and wetland plants appropriate to a coastal riparian/estuary upland area. Therefore, in order to ensure that the applicant's proposal to restore disturbed habitat on site is successfully implemented, **Special Condition No. Nine (9)** requires the County to submit a Riparian Habitat Restoration and Revegetation Program ensuring the successful management, monitoring, and completion of the aforementioned restoration. The conditions also require planting of native plant species of local genotype on all disturbed areas. Special Condition No. Nine (9) also requires monitoring of all restoration areas for five years, or until all areas have successfully been restored according to success criteria outlined in the plans.

In addition, the project will require review by other regulatory agencies such as RWQCB, U.S. Army Corps of Engineers, or California Dept. of Fish & Game. Therefore, **Special Condition No. Three (3)** has been required to ensure that the County obtains all necessary approvals from these agencies for all construction and restoration activities, or evidence that no such approvals are required.

Tidewater Goby, Southern Steelhead Trout, and Other Aquatic Resources

As noted above, the Topanga Creek estuary provides habitat for several invertebrate and fish species, including the tidewater goby (*Eucyclobius newberryi*) and southern steelhead trout (*Oncoryhynchus mykiss*). The tidewater goby is a federally listed endangered species and a state species of special concern. Tidewater gobies are typically found in the upper ends of lagoons in brackish water. Gobies have been found in waters with salinity that ranges from 0 to 40 parts per thousand. They are bottom dwellers and are typically found at depths of less than 3 feet. The USFWS identified critical habitat for tidewater goby at the mouth of Topanga Creek and goby were preset during surveys conducted in 2002. Gobies typically exhibit an extreme seasonal variation in population size that reflects the variation in salinity, temperature, and hydrologic conditions in a coastal lagoon. Tidewater gobies spawn throughout the year, but spawning typically peaks from May to July.

The southern steelhead trout is a federally listed endangered species and a state species of special concern. In Topanga Creek a winter-run population of steelhead trout exists, entering the creek between December and April. Steelhead typically

migrate to marine waters after spending one to two years in fresh water. They then spend two or three years in the ocean before returning to streams to spawn. Adult steelhead are stimulated to begin their upstream migration when there are high winter flows in the stream (December through March). In Topanga Creek, steelhead trout are found more often in pools than any other habitat type. The County's biological consultant did not observe any trench, mid-channel, or step pools at the site. Additionally, no gravel is at or adjacent to the site, which is necessary for the females to cover the nest with to incubate the embryos. Riffles, runs, and pools which are used by juveniles also do not occur at the site. The site lacks vegetation canopy and water is fairly still, therefore, water temperature is likely not suitable through much of the year. Although steelhead trout occur in Topanga Creek and are expected to occur at the site, individuals are only expected to pass through the site; they are not expected to spawn at the site or anywhere else within the creek south of the bridge at PCH.

Although no fill or development is proposed within the creek itself, construction of the proposed project and reconstruction of the western creek bank has the potential to impact goby and steelhead populations due to the noise and vibrations associated with grading and other construction activities or from increased turbidity and sedimentation from uncontrolled storm water runoff. Therefore, to ensure that potential increases in sedimentation and turbidity of Topanga Creek are avoided or minimized to the maximum extent feasible during construction operations, **Special Condition No. Six (6)** and **Seven (7)** require the applicant to submit an erosion control plan, for the review and approval of the Executive Director and implement all appropriate best management practices on site. Moreover, potential impacts to adult and juvenile steelhead trout and tidewater goby are still possible due to noise and vibrations from construction activities such as grading. Therefore, **Special Condition No. Five (5)** prohibits any work from November 1 through May 31, unless authorized by the Executive Director for good cause. To avoid or minimize potential adverse impacts, construction will occur between June 1 and October 31, which is after steelhead trout have entered Topanga Creek, when its mouth is typically closed, and after the peak spawning and hatching period of tidewater goby.

Further, to ensure that adverse impacts to adjacent sensitive habitat and wetland area are avoided, **Special Condition No. Four (4)** requires that an environmental resource specialist shall be present during all construction, grading, excavation, vegetation eradication and removal, hauling, and maintenance activities. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. The environmental resource specialist(s) shall immediately notify the Executive Director if activities outside of the scope of notice of coastal development permit 4-10-055 occur. If significant impacts or damage occur to sensitive habitats or to wildlife species, the applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be submitted to the Executive Director, for review and approval.

<u>Sensitive Bird Species</u>

The estuary and its margins are sometimes used for resting and feeding by various species of migratory and coastal birds. Bird use of the lagoon varies from month to month. California brown pelican (*pelecanus occidentalis californicus*), a CDFG species of special concern, California least tern (*Sterna antillarum browni*), a federal and state endangered species, and western snowy plover (*Charadrius alexandrinus nivosus*), a federal threatened species, all frequent the California coastline. Western snowy plovers have been observed foraging within the surf zone of Topanga State Beach, approximately 200 feet south of the project site. California brown pelicans and California least terns have also been observed flying along the shoreline in this area. Although these species occur in the area and may use the mouth of Topanga Creek for foraging and resting, they are not expected to forage or rest specifically at the site due to depth of water and proximity to PCH. These species nest in only a handful of locations, none of which occur near the site. The nearest known breeding location for any of these species is at Point Mugu.

The project has the potential to disturb sensitive bird species in and around the project area due to noise, vibration, dust, and disturbance associated with construction. Therefore, to ensure that potential adverse impacts to sensitive bird species are avoided, **Special Condition No. Four (4)** requires that the County retain the services of a qualified biologist(s) or environmental resource specialist(s) to conduct surveys for sensitive wildlife species and to monitor project operations. At least two (2) weeks prior to commencement of any project operations, the County shall submit the name and qualifications of the biologist or specialist, for the review and approval of the Executive Director. The environmental resource specialist shall conduct a survey of all areas within and near the project site to determine presence and behavior of sensitive wildlife species, no more than 7 days prior to any project operations including construction, grading, excavation, vegetation eradication and removal, hauling, and maintenance activities. In the event that any sensitive wildlife species exhibit reproductive or nesting behavior, the environmental specialist shall immediately notify the County, the Executive Director and local resource agencies in writing. The County shall immediately cease development activities upon receipt of such notice. Project activities shall resume only upon written approval of the Executive Director.

Due to the reasons discussed above, the Commission finds that the proposed project, as conditioned, is consistent with 30230, 30231, 30233, 30236 and 30240 of the Coastal Act.

D. HAZARDS AND GEOLOGIC STABILITY

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

> (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
>
> (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, 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.

Section 30253 of the Coastal Act mandates that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard. The project area is subject to several hazards, including earthquakes, erosion, flooding, tidal action, and storm surge. The purpose of the proposed improvements to lower Topanga Creek is to repair the slope failure and restore the stream bank. The project would, therefore, reduce the hazards currently experienced in the project area.

After the winter 2004/2005 storm season, the creek bank below the public beach access path/emergency vehicle access road was subject to significant erosion and the existing rip rap creek bank protection was largely washed out resulting in potential undermining of the access road. Failure to stabilize the slope would also result in the erosion of the slopes supporting Pacific Coast Highway. The County has determined that the proposed project to stabilize the damaged slope is necessary in order to ensure the continued stability of both the beach access path and to maintain emergency services/access for beach users.

The Commission notes that the proposed development is necessary to remediate an eroded slope that is threatening to undermine both a beach access way and Pacific Coast Highway. However, although the proposed development is intended as a repair and restoration project that will serve to reduce the potential for flooding and erosion of developed areas, there remains some inherent risk. In this case, the Commission finds that minimization of site erosion will add to the stability of the site. Moreover, the Commission finds that increased erosion on site would subsequently result in a potential increase in the sedimentation of the Topanga Creek. The Commission finds that the minimization of site erosion will minimize the project's potential individual and cumulative contribution to adversely affect the adjacent stream. Erosion can best be minimized by requiring the applicant to revegetate and restore all disturbed areas of the site with native plants, compatible with the surrounding riparian and upland environment. Therefore, to ensure that the revegetation of the reconstructed fill slope previously carried out by applicant is successful, **Special Condition No. Eight (8)** requires the applicant to implement a revegetation and erosion control monitoring program for the project site for a period of 5 years. Monitoring shall include the submittal of annual reports to the Executive Director which shall indicate the progress of the revegetation and erosion control program and shall include any recommendations for modifications to the project if the initial restoration effort fails. Therefore, **Special Condition No. Eight (8)** requires the applicant to implement a habitat restoration plan to revegetate all disturbed areas on site, including the reconstructed creek slope below the beach access path/emergency vehicle road.

The Commission also finds that additional landform alteration would result if the excavated material were to be retained on site. Therefore, in order to ensure that excavated material will not be permanently stockpiled on site and that erosion and re-sedimentation of the stream on site are minimized during any temporary stockpiling activities, **Special Condition No. Six (6)** also requires any stockpiled materials shall be located as far from the stream or wetland areas on site as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of the stream bank. Temporary erosion control measures (such as sand bag barriers, silt fencing; swales, etc.) shall be implemented in the event that temporary stockpiling of material is required.

These temporary erosion control measures shall be monitored and maintained until all stockpiled fill has been removed from the project site. Permanent stockpiling of material on site shall not be allowed. The applicant shall provide evidence to the Executive Director of the location of the permanent disposal site for all excavated material prior to removal of the material from the project site. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required.

Finally, the Commission notes that the proposed project is located in an area of the Coastal Zone that has been identified as subject to potential hazards from flooding, tidal action, high surf conditions, storm surge, and seismicity. Although the proposed development is intended as a repair and restoration project that will serve to reduce the potential for flooding and erosion of developed areas, there remains some inherent risk. The Coastal Act recognizes that certain types of development, such as the proposed project, may involve some risk. As such, the Commission finds that due to the unforeseen possibility of storm waves, surges, erosion, seismicity, and flooding, the applicant shall assume these risks as a condition of approval. Therefore, **Special Condition No. Two (2)** requires the applicant to waive any claim of liability against the Commission for damage to life or property that may occur as a result of the permitted development.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30253.

E. WATER QUALITY

Section **30230** of the Coastal Act states:

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

Section **30231** of the Coastal Act 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, minimizing alteration of natural streams.***

Erosion adjacent to surface waters can result in increased sedimentation, thereby reducing the biological productivity and quality of coastal waters. Sedimentation directly

affects wetland ecology by increasing water turbidity. Turbidity reduces the penetration of sunlight needed by aquatic vegetation, which translates to negative effects on plant establishment and overall productivity, which in turn impacts aquatic species that depend on such vegetation for food and cover. In addition, aquatic animals are affected by turbidity in the following ways: reduced visibility for visual predators such as birds and mammals; and inhibited feeding effectiveness for benthic filter feeding organisms.

Construction of the proposed project, which is described in detail in previous sections, is intended to reduce erosion and improve water quality. The proposed grading of the Topanga Creek estuary's western bank will eliminate the existing near vertical (approximately 1:1) slopes. The reduced slope would be planted with riparian, wetland, and dune vegetation and be subject to saturation, thus increasing the potential for percolation of the water into the groundwater table. The proposed bank of the creek mouth would be stabilized with geotextiles, thus providing both interim erosion control and long-term stabilization of the slope with a stand of native riparian vegetation. The applicant also proposes numerous other construction best management practices (BMPs) and erosion control measures to be employed during project construction. In order to ensure that the applicant's proposals for erosion control are implemented, **Special Condition No. Seven (7)** requires the applicant to submit erosion control plans designed to minimize potential impacts on coastal water quality.

The proposed project involves a significant amount of excavation. Stockpiling of excavated material at the project site could result in transport of sediments into the estuary. Therefore, in order to further reduce the potential for sedimentation of the estuary, **Special Condition No. Eight (8)** requires the applicant to provide evidence to the Executive Director of the location of the disposal site for all excess excavated material and debris. Should the disposal site be located in the Coastal Zone, a Coastal Development Permit shall be required.

The stream and estuarine environment of Topanga Creek could also be adversely impacted as a result of the implementation of project activities by unintentional introduction of sediment, debris, or chemicals with hazardous properties to the channel and lagoon. To ensure that construction material, debris, or other waste associated with project activities does not enter the water, the Commission finds **Special Condition No. Six (6)** is necessary to define the applicant's responsibility for proper disposal of solid debris and material unsuitable for placement into the marine environment. As provided under Special Condition 6, it is the applicant's responsibility to ensure that no construction materials, debris or other waste is placed or stored where it could be subject to wave erosion and dispersion. Furthermore, Special Condition 6 requires that all construction debris, sediment, or trash shall be properly contained and removed from construction areas within 24 hours. Debris shall be disposed of at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material by a coastal development permit or other authorization from the Commission. Further, construction equipment shall not be cleaned on the beach or in the beach parking lots. In order to protect water quality and biological resources in the project area, the Commission also requires **Special Condition No. Three (3),** which provides for the review and approval of the project by other relevant state and federal agencies.

As such, the Commission finds that, as conditioned, the proposed project is consistent with §30230 and §30231 of the Coastal Act.

F. PUBLIC ACCESS

Section **30210** of the Coastal Act states:

> ***In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.***

Section **30211** of the Coastal Act states:

> ***Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.***

Sections 30210 and 30211 of the Coastal Act mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast.

The proposed project involves the repair and restoration of the failed western stream bank of lower Topanga Creek. The project site is located in an area adjacent to Topanga State Beach that is used by the public and includes Pacific Coast Highway to the north, an open parking lot directly east of the project site, a public beach access path and access road and unpaved closed parking lot directly west of the project site, and Topanga State Beach to the south. Furthermore, there is street parking adjacent to the site along Pacific Coast Highway. Pacific Coast Highway is a main roadway in the County of Los Angeles and provides vehicular access to the beaches along the coastline.

In the long-term, the slope repair and habitat restoration project would result in improved public access including protection of the public beach access path/emergency vehicle road which is currently threatened by erosion of the west stream bank. Despite the fact that the project will ultimately result in public access improvements along Topanga Creek, there will be temporary impacts to public access associated with the repair and restoration. In order to minimize the impacts of the project on vehicular, bicyclist, and pedestrian access during construction, construction staging will occur in the unimproved parking lot immediately west of the project site which is not currently open for public use.

Public access along the public path to the beach on site will be closed during construction; however, access to Topanga State Beach will remain open by way of the east parking lot, down-coast of the project site. Closure of the on site beach access path is not expected to adversely impact coastal access due to the alternative beach

access point located close by on the east side of Topanga Creek. Moreover, the east beach parking lot provides beach access parking for a fee.

Based on the fact that the project would offset the temporary impacts associated with construction by providing alternative beach access via the east parking lot, the Commission finds that the proposed project is consistent with Coastal Act Sections 30210 and 30211.

G. VISUAL RESOURCES

Section **30251** of the Coastal Act states, in part:

> ***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 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.***

The Topanga Creek project site is located just inland of Topanga State Beach and is visible from the beach area and adjacent roadways. Specifically, the project site can be easily seen from traffic traveling westbound on the Pacific Coast Highway. During construction, impacts to visual resources associated with construction work and equipment would occur; however, these impacts would be temporary in nature and construction is anticipated to be completed within three months.

The stream bank slope repair and restoration work would occur in the same location as the existing stream bank and would not result in any additional impacts to views to and along the coast. Furthermore, the proposed project would improve the appearance of the existing stream bank by replacing the deteriorating railing/fence and replanting the slope with native riparian vegetation. Therefore, the project is not expected to adversely impact any visual resources.

For these reasons, the Commission finds that the proposed project, as conditioned, is consistent with 30251 of the Coastal Act.

H. LOCAL COASTAL PROGRAM PREPARATION

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 project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the project and are accepted by the applicant. As conditioned, the proposed project 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 **8**

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).

I. 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, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. 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.

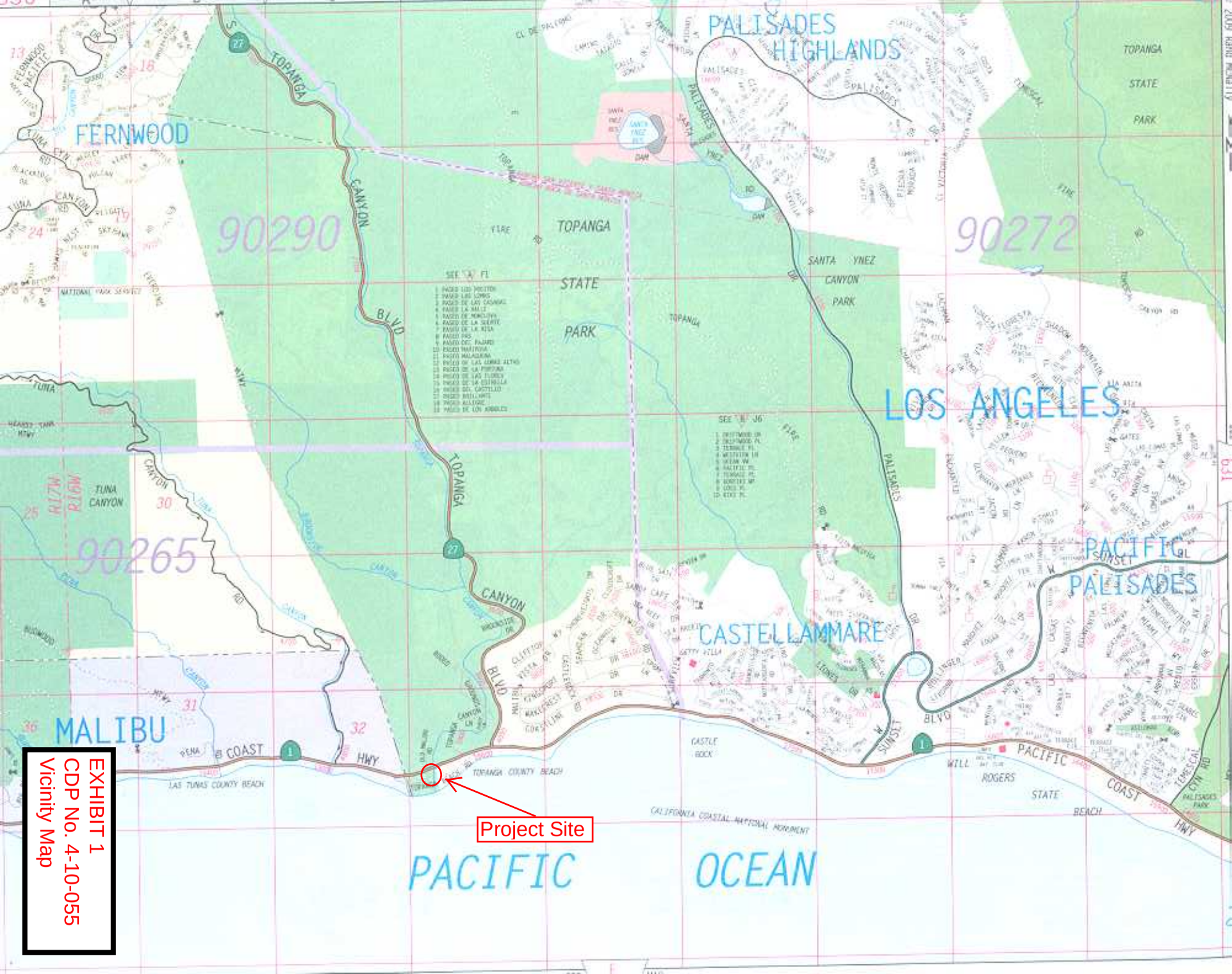


EXHIBIT 1
CDP No. 4-10-055
Vicinity Map

EXHIBIT 2
CDP No. 4-10-055
Aerial Photo

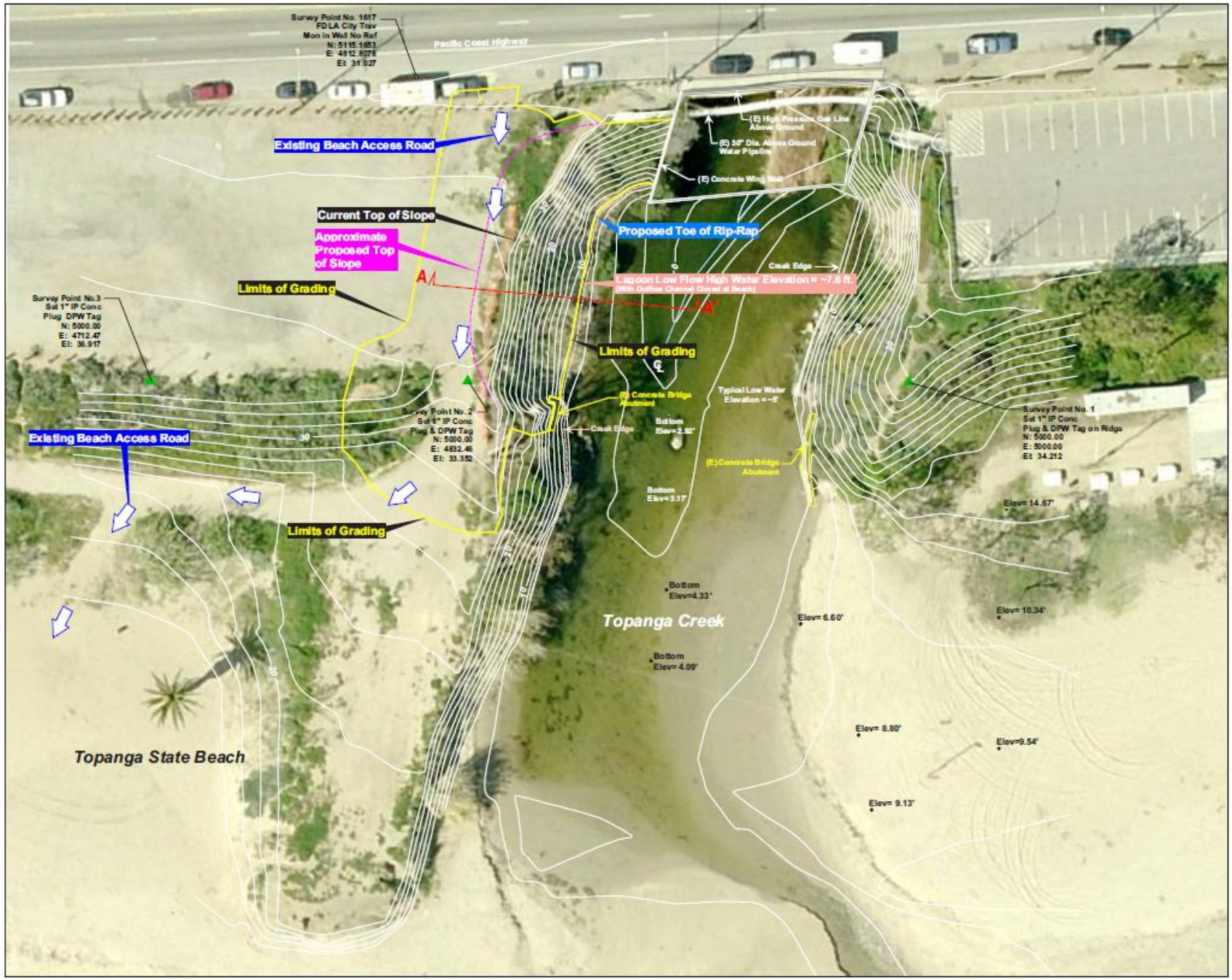


EXHIBIT 3
CDP No. 4-10-055
Aerial Site Plan

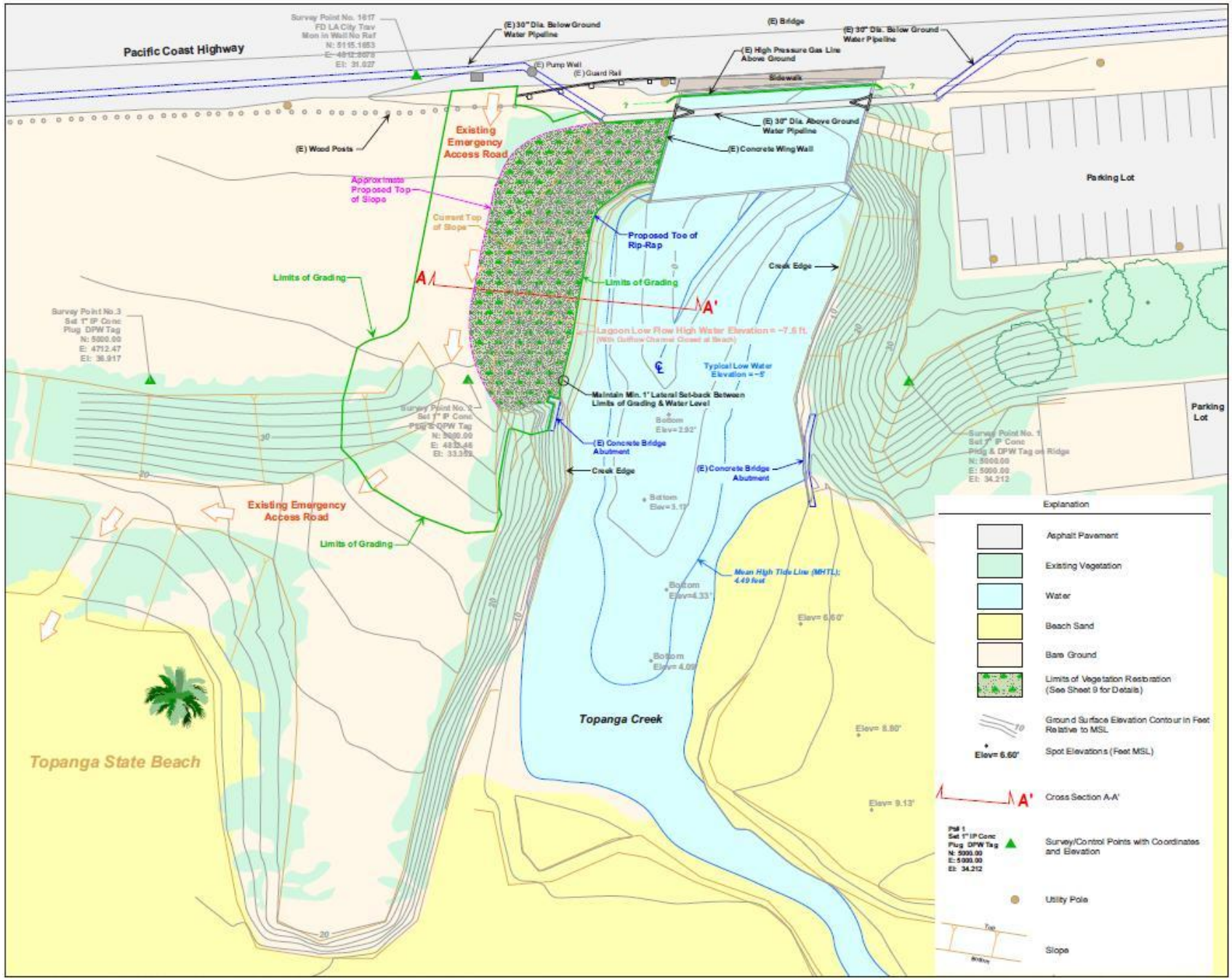


EXHIBIT 4
CDP No. 4-10-055
Site Plan

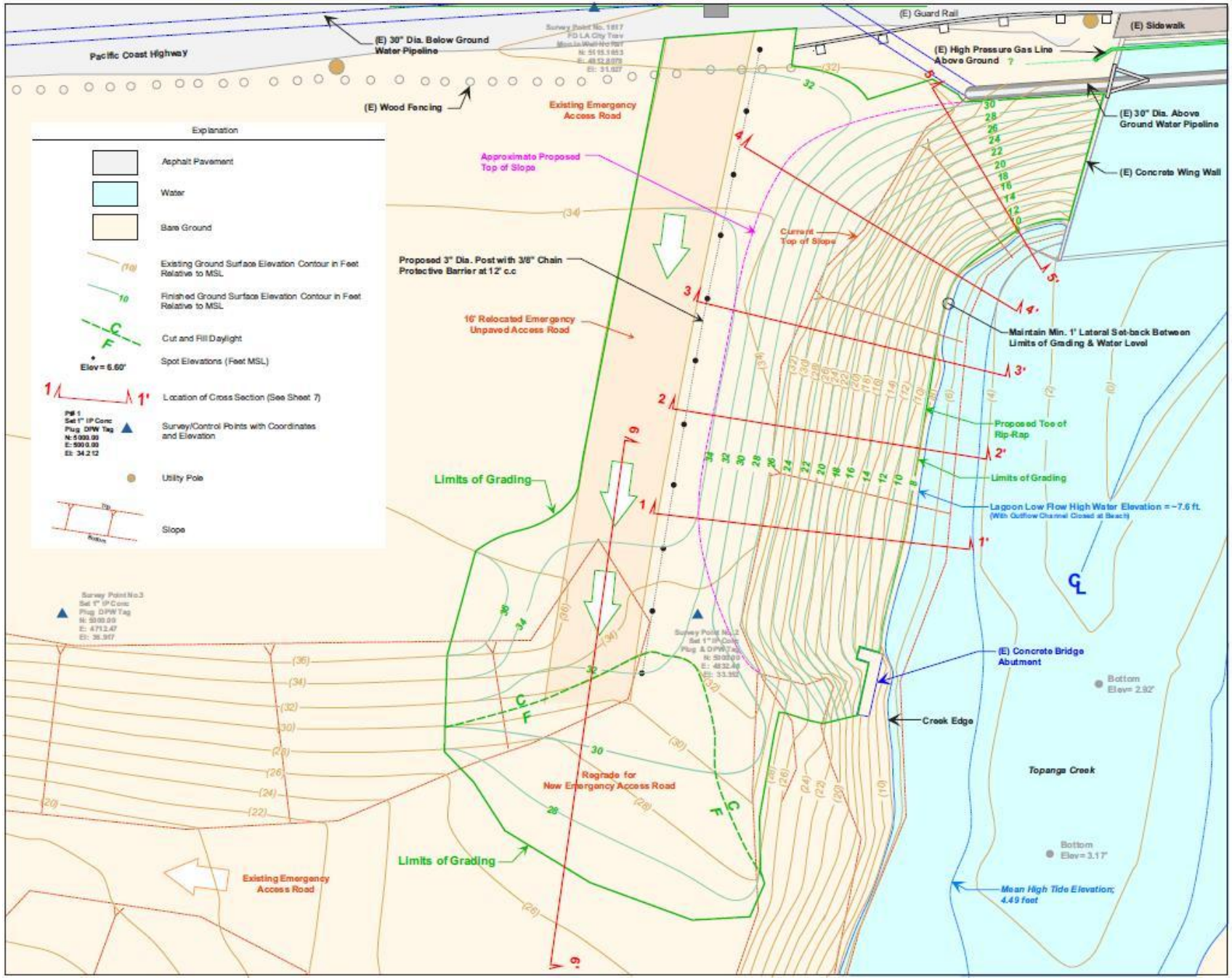
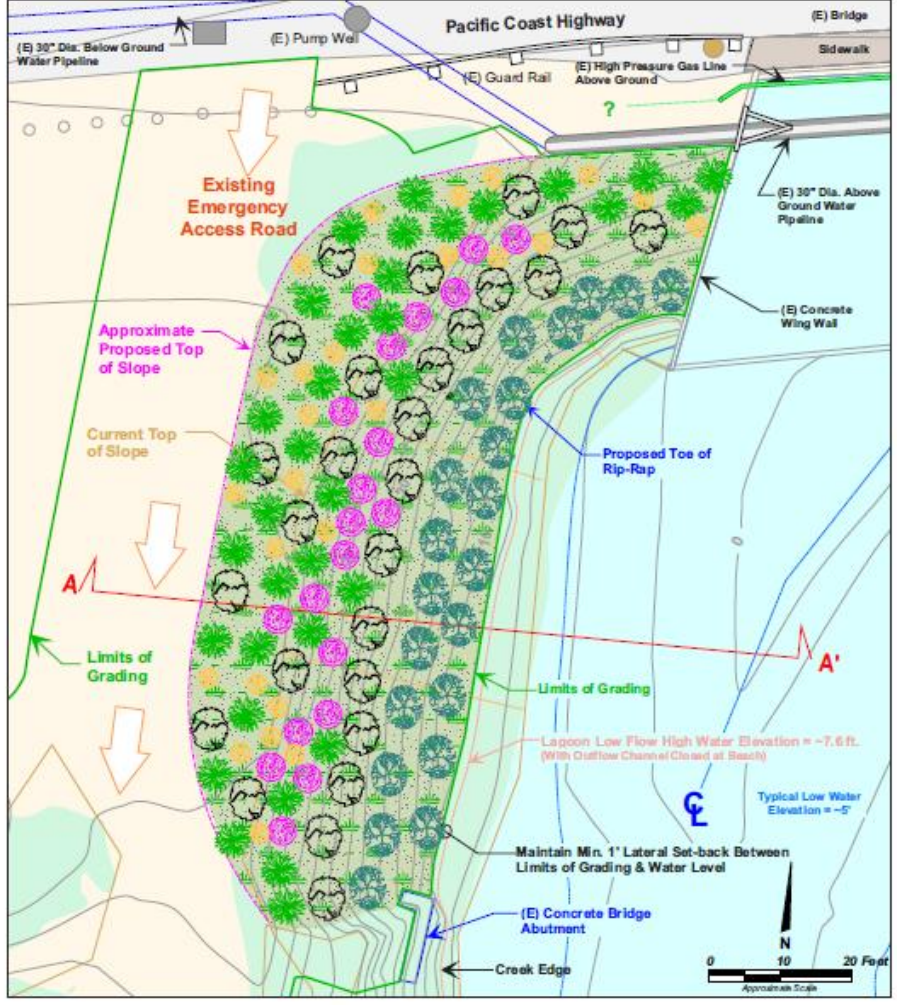
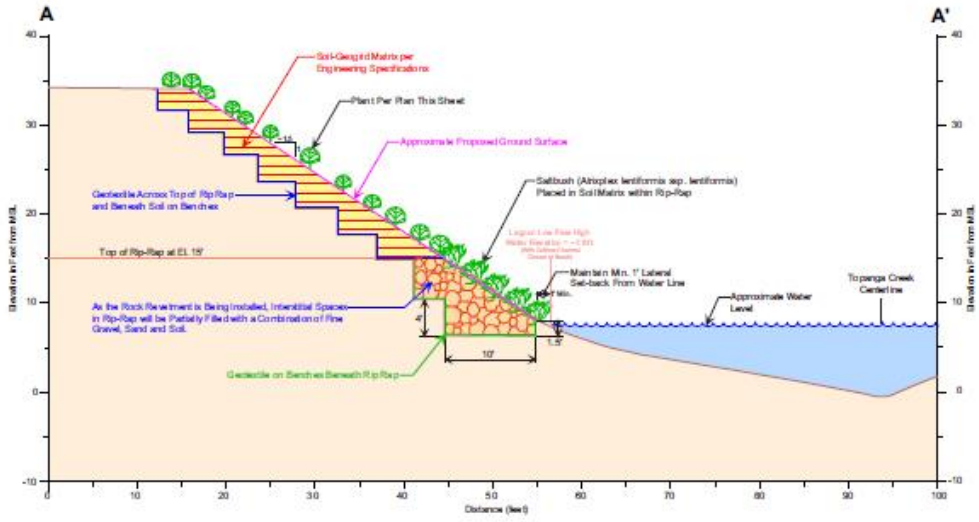


EXHIBIT 5
CDP No. 4-10-055
Grading Plan





Vegetation Restoration Notes:

Planting Layout and Installation
Saltbush plantings will be concentrated on the rip-rap portion of the slope in order to eventually cover the rip-rap and supplement the erosion control function of the rip-rap. Plants will be installed within the soil matrix between rip-rap boulders. Some saltbush and the rest of the plant species will be planted on the slope above the rip-rap. Plants will be installed in a natural-appearing array, i.e. not in rows. Plants installed on slopes will require excavation of a small terrace into the slope to accommodate a planting hole and basin around each plant. Planting holes will be dug to a depth and width that is about twice the size of the container in order to provide adequate drainage around and below each plant. Each planting hole will be irrigated prior to plant installation. Each planting hole should be partially backfilled prior to installation to make sure that plants are not set too deep. Empty space around each plant will be backfilled with indigenous soil. No fertilizer, mulch, or soil amendments will be initially added due to potential for washing into the creek. Plants will be hand watered at initial planting (see Planting Schedule below).

Inoculation
Because the soil used for planting substrate will have originated from saturated conditions in the creek, it is assumed that indigenous soil mycorrhizal associations appropriate for upland species will not be present. The benefit of such microbes for establishment of the species listed in Table 1 cannot be quantified at this time, but because the planting conditions on site are particularly severe, any measure with potential to enhance survivorship will be desirable. Therefore it is recommended that all plant material be inoculated prior to planting.

Planting Schedule
Planting will be initiated and completed as close to the first winter rain as possible, generally October 15 or later. Spring and summer planting is not recommended because of potential for plant mortality without irrigation. Natural rainfall is expected to be the only source of water supporting the plants. Supplemental water is recommended if it does not rain sufficiently during the initial planting and for the first month. A 3 to 6 inch layer of medium composted tree mulch will also help retain moisture for the plants if a continuous drought period occurs. We have recommended plant species that have greater potential for survival than many others based on the lack of a continuous and predictable irrigation.

Planting Palette

Latin Name	*Common Name*	*Life Form*	*Average Spacing (Ft.)*	*Percentage of Mix*
Atriplex lentiformis ssp. lentiformis	Saltbush	Shrub	10	28
Eriogonum cinereum	Ashyleaf buckwheat	Shrub	6	18
Eriophyllum confertiflorum	Golden Yarrow	Perennial Herb	6	18
Heteromeles arbutifolia	Toyon	Evergreen Shrub to	10	18
Isocoma menziesii	Coastal goldenbush	Small Tree Shrub	6	18

Note: For all species, 1-gallon container material rather than seeds will be used in order to accelerate plan establishment.

Planting Palette

- Saltbush (Atriplex lentiformis ssp. lentiformis)
- Ashyleaf buckwheat (Eriogonum cinereum)
- Toyon (Heteromeles arbutifolia)
- Golden Yarrow (Eriophyllum confertiflorum)
- Coastal goldenbush (Isocoma menziesii)

Explanation

- Existing Vegetation
- Water
- Bare Ground
- Limits of Vegetation Restoration

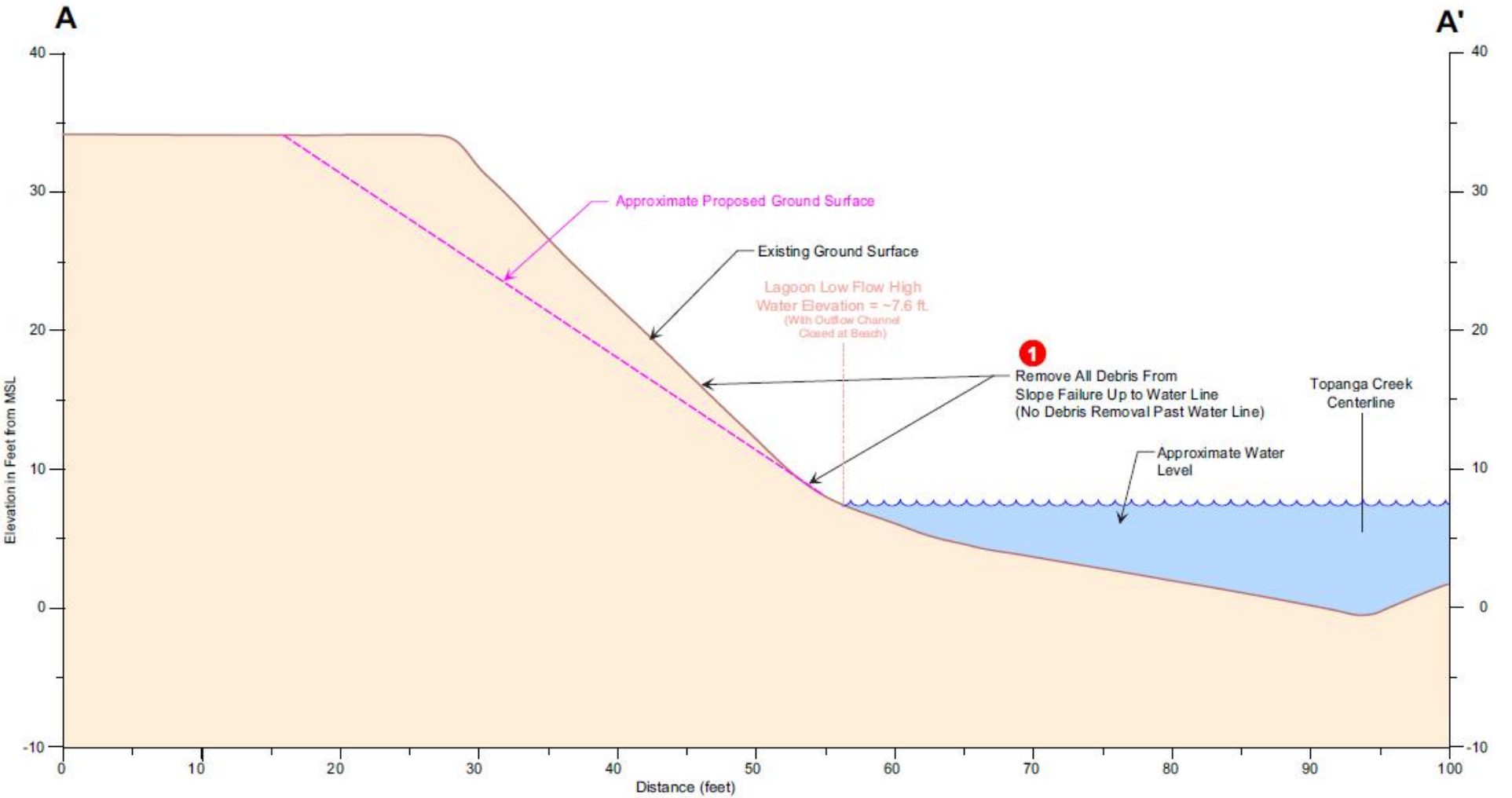
Planting/Vegetation Plan for Additional Erosion Control Measures

Survey Per Los Angeles County Department of Public Works; Steven Steinhoff on March 26, 2009

Cross Section A-A' Showing Planting/Vegetation on Slope for Additional Erosion Control Measures

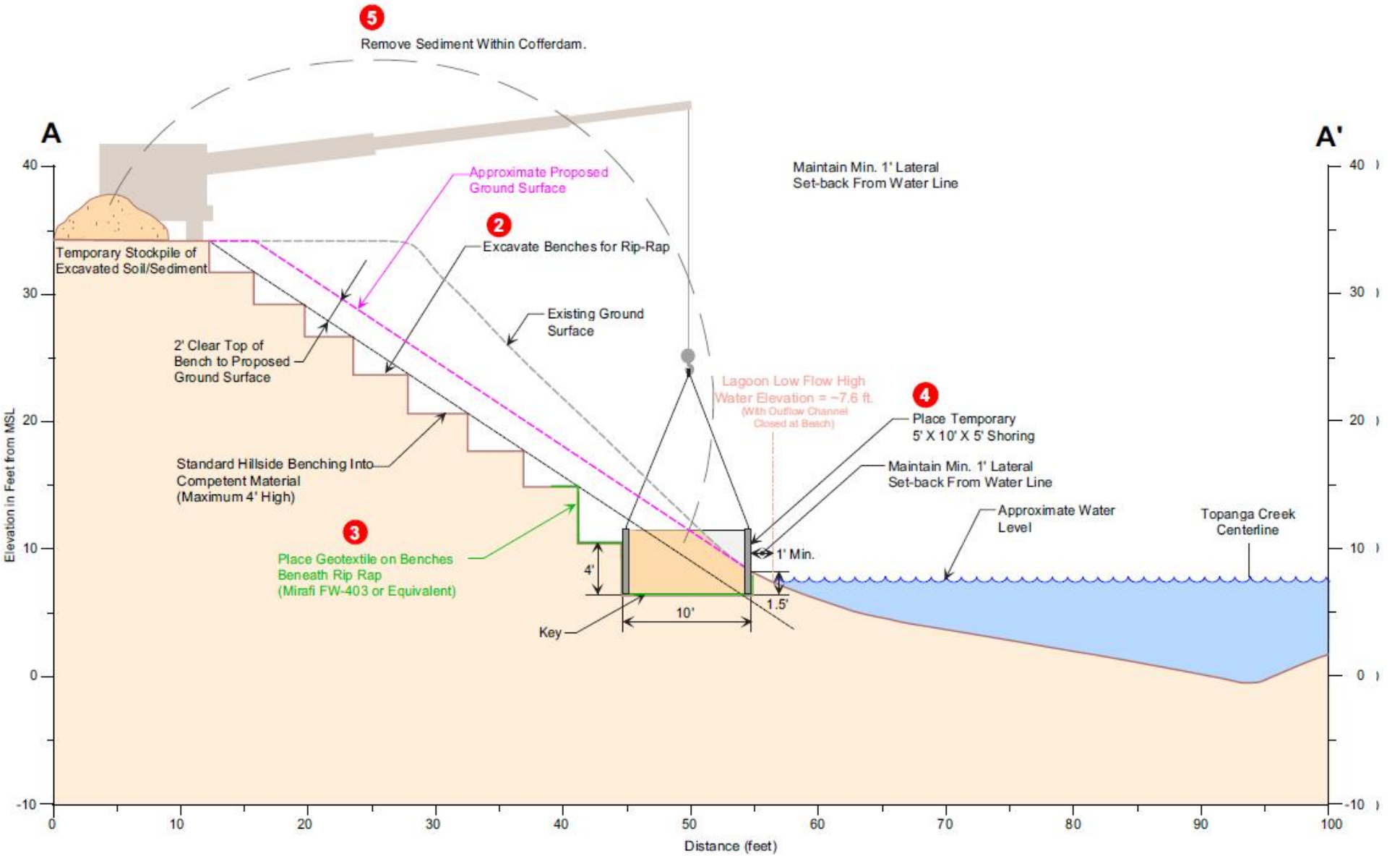
0 5 10 Feet
Approximate Scale

EXHIBIT 6
CDP No. 4-10-055
Planting Plan



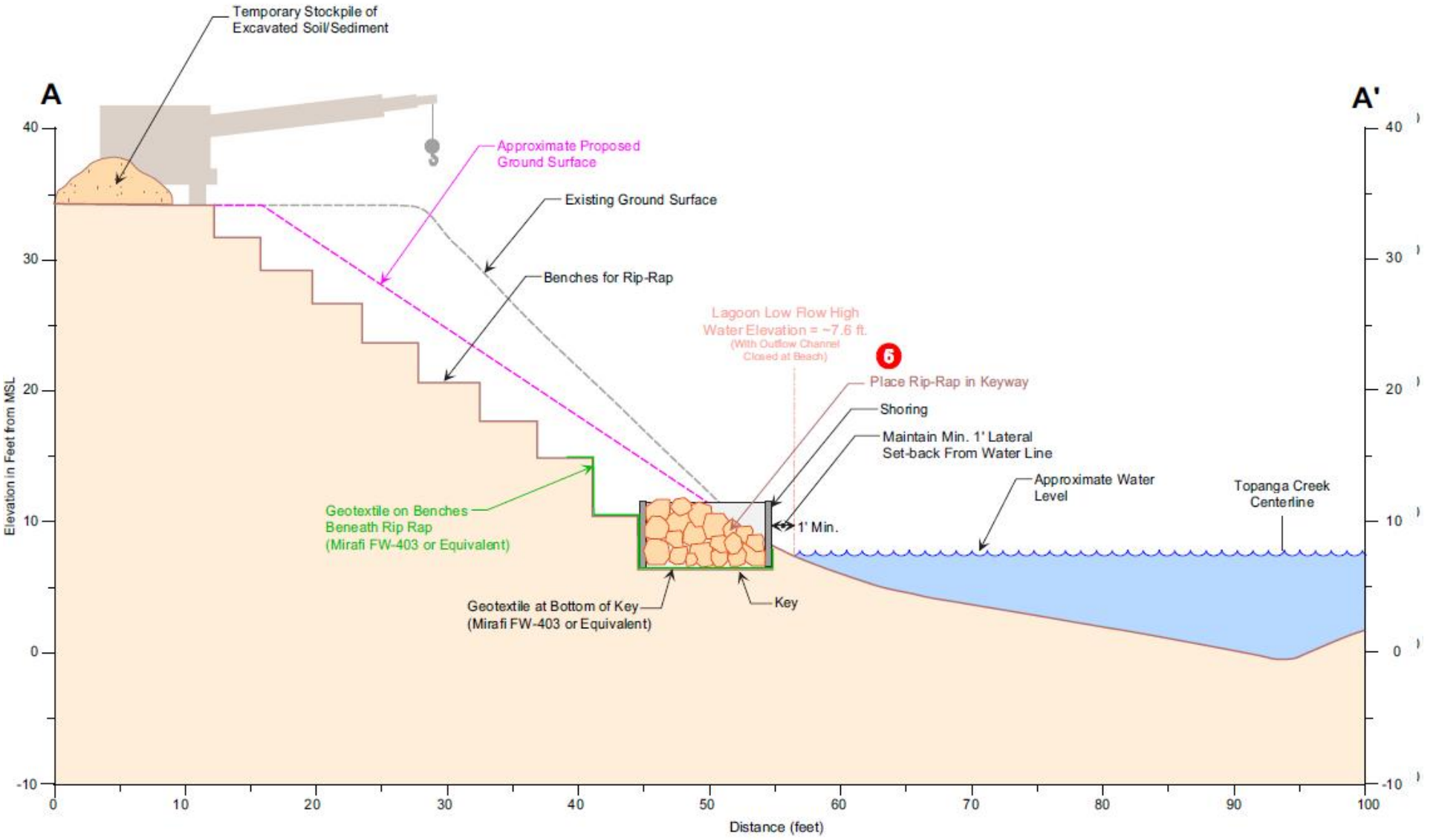
Existing Conditions. Step 1: Remove Debris

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence



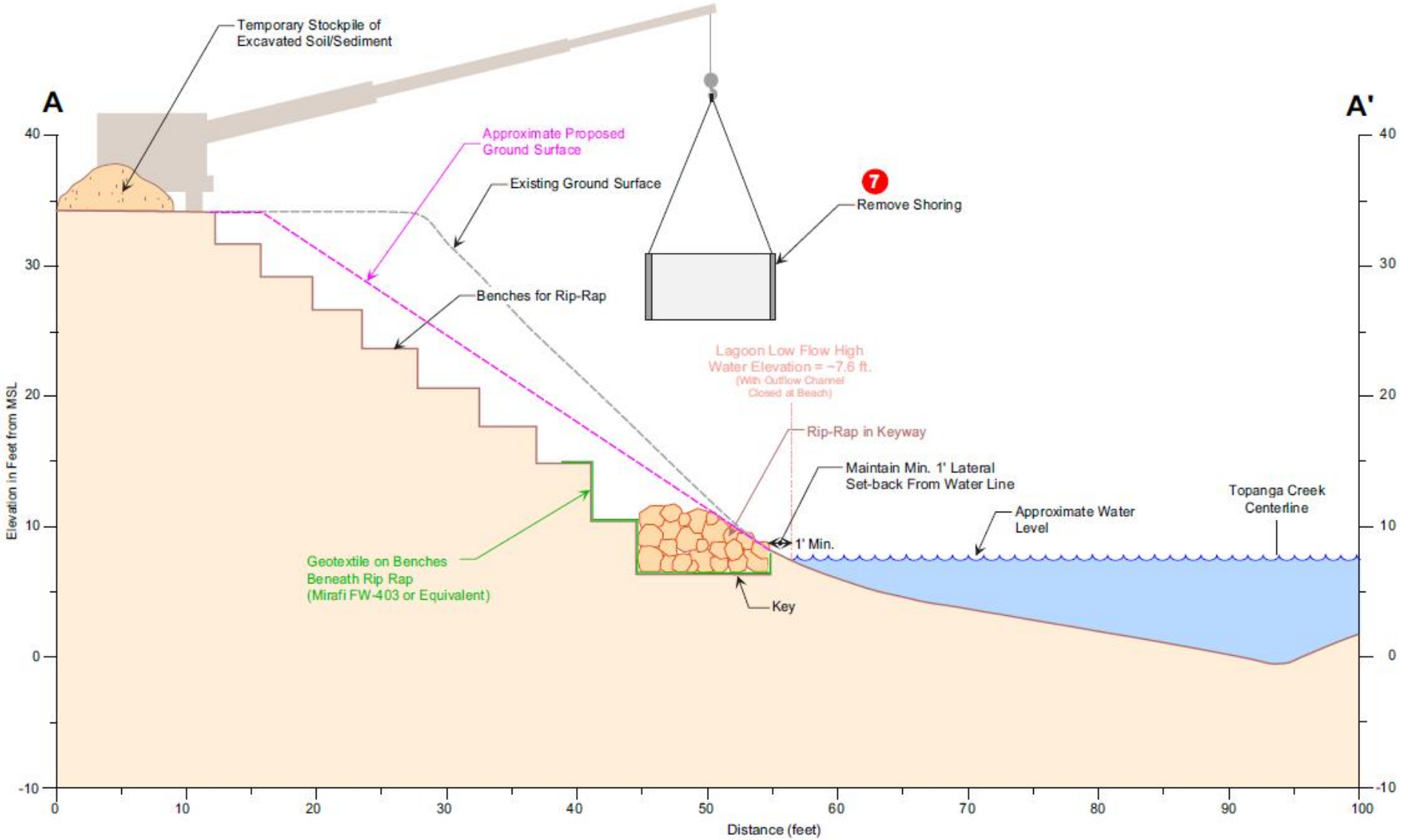
Steps 2 – 5: Place Temporary Shoring. Remove Sediment.

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence



Step 6: Place Rip-Rap Keyway Within Cofferdam.

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence



Step 7: Remove Shoring.

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence

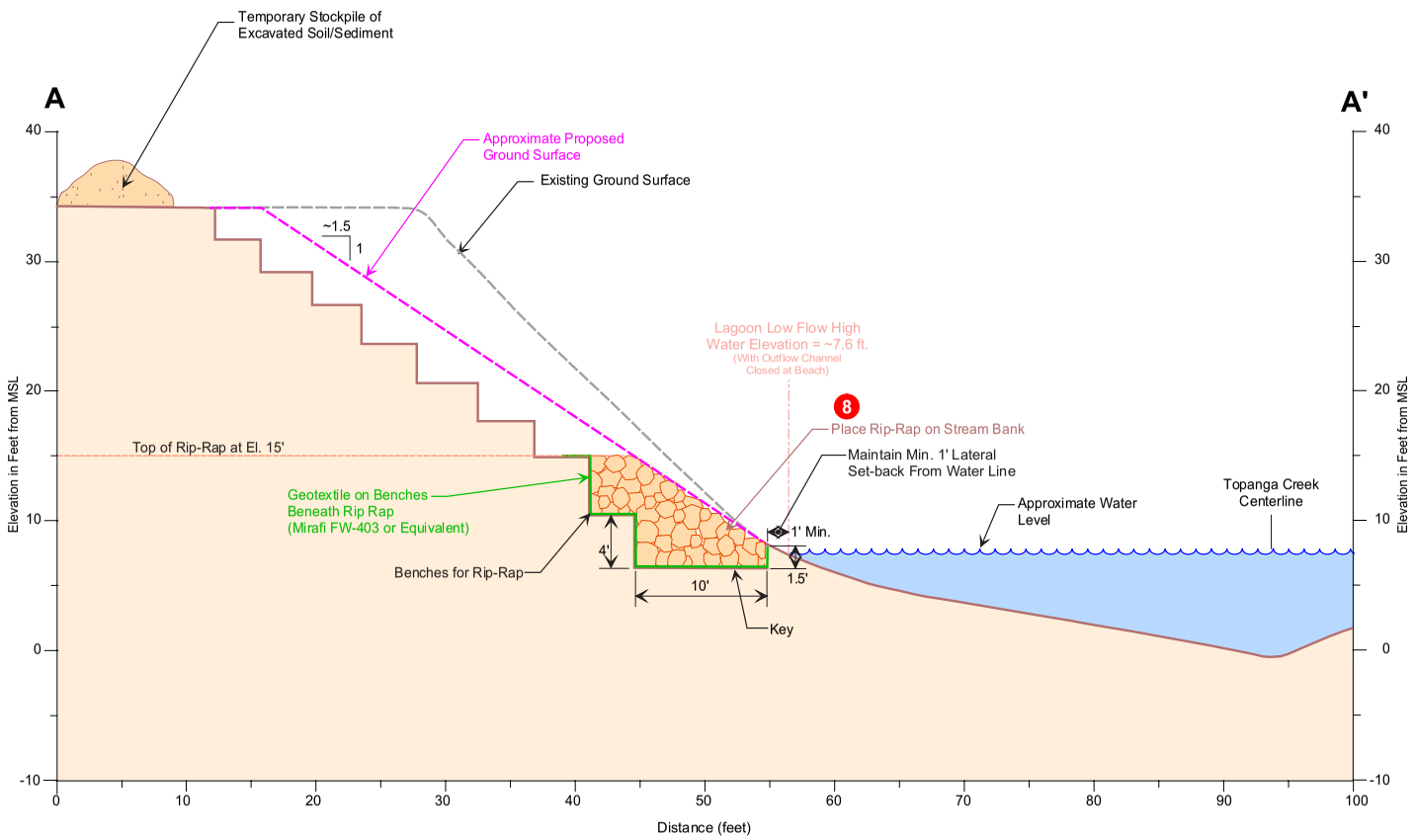


EXHIBIT 7
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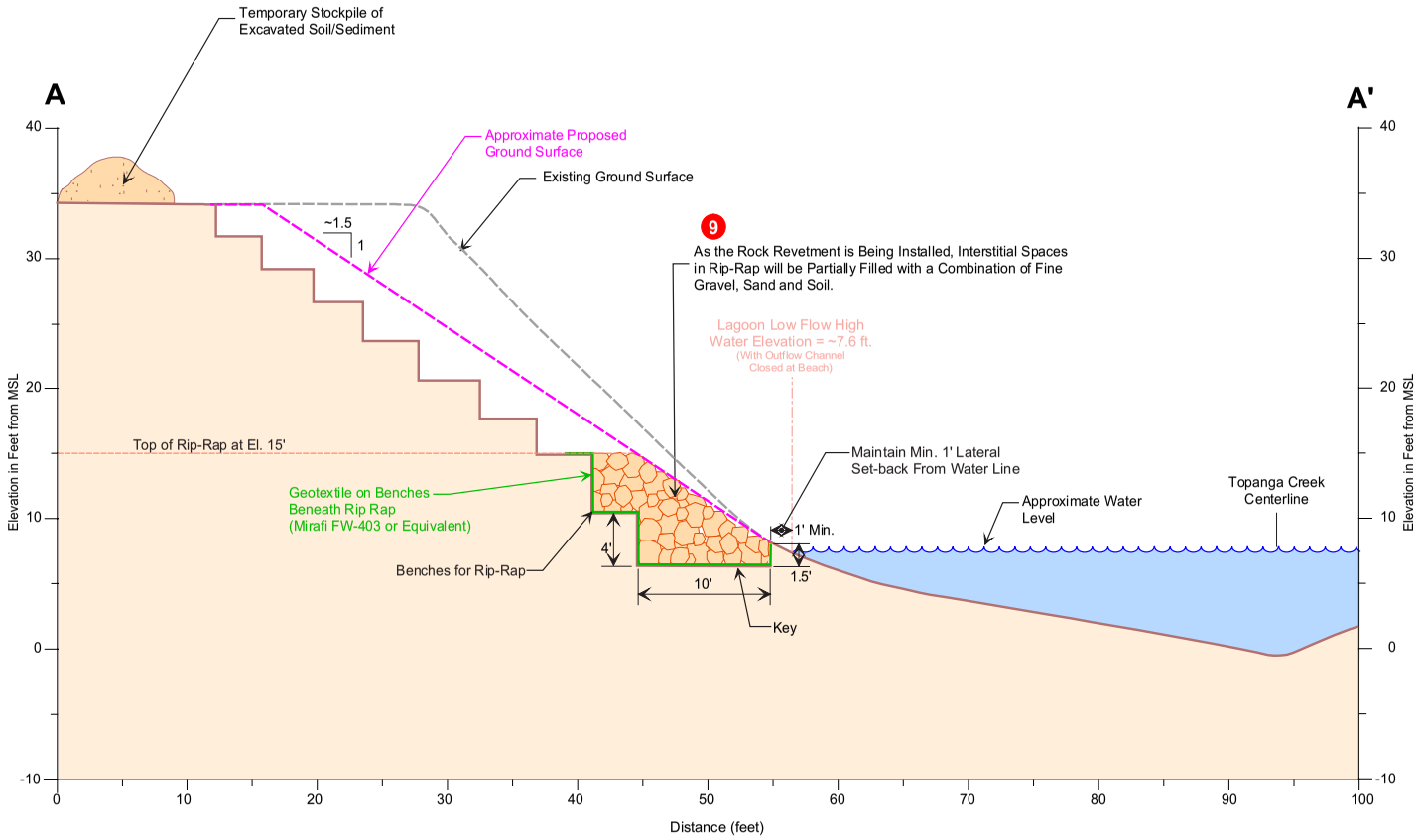
Step 8: Placement of Rip-Rap on Streambank



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Step 9: Fill Interstitial Spaces in Rip-Rap

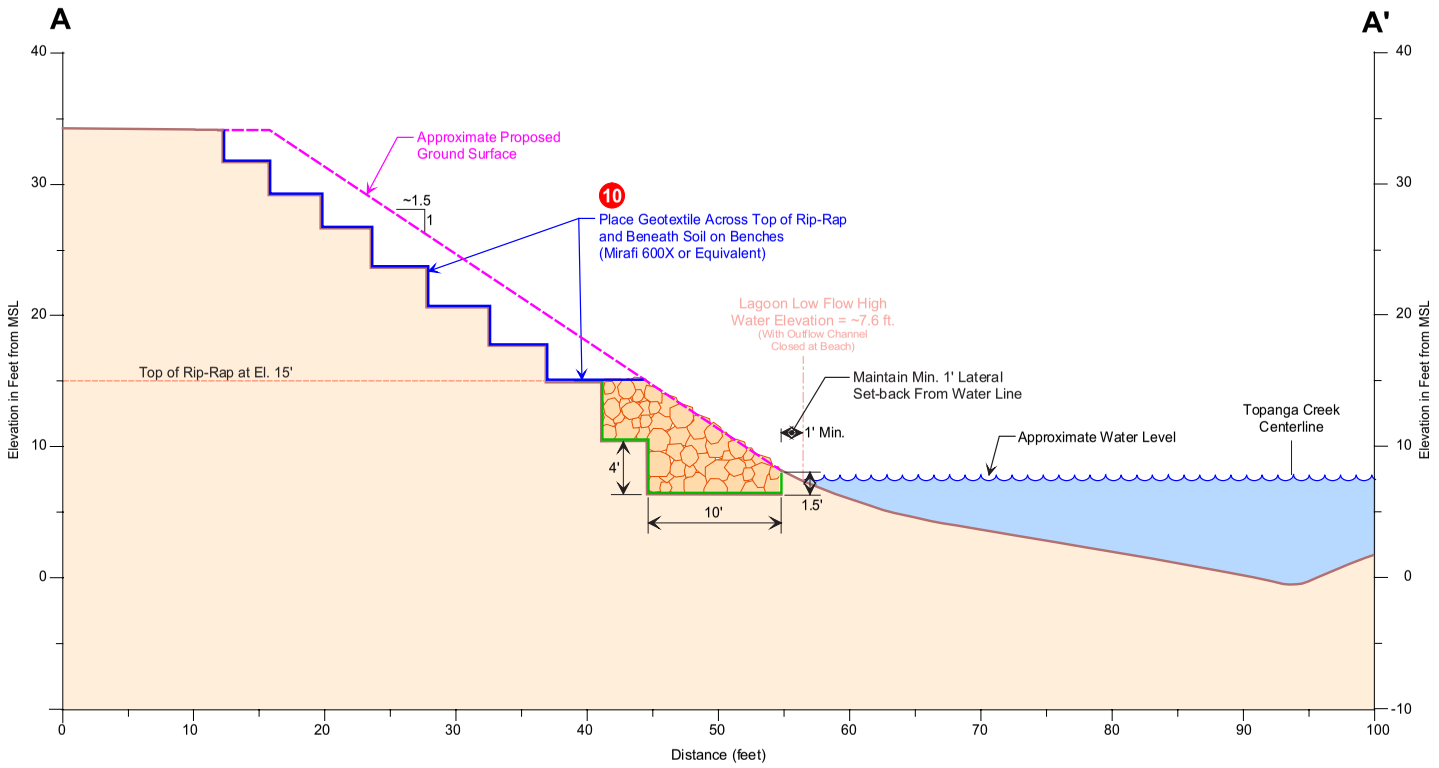

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence

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Step 10: Place Geotextile Across Top of Rip-Rap and Benches

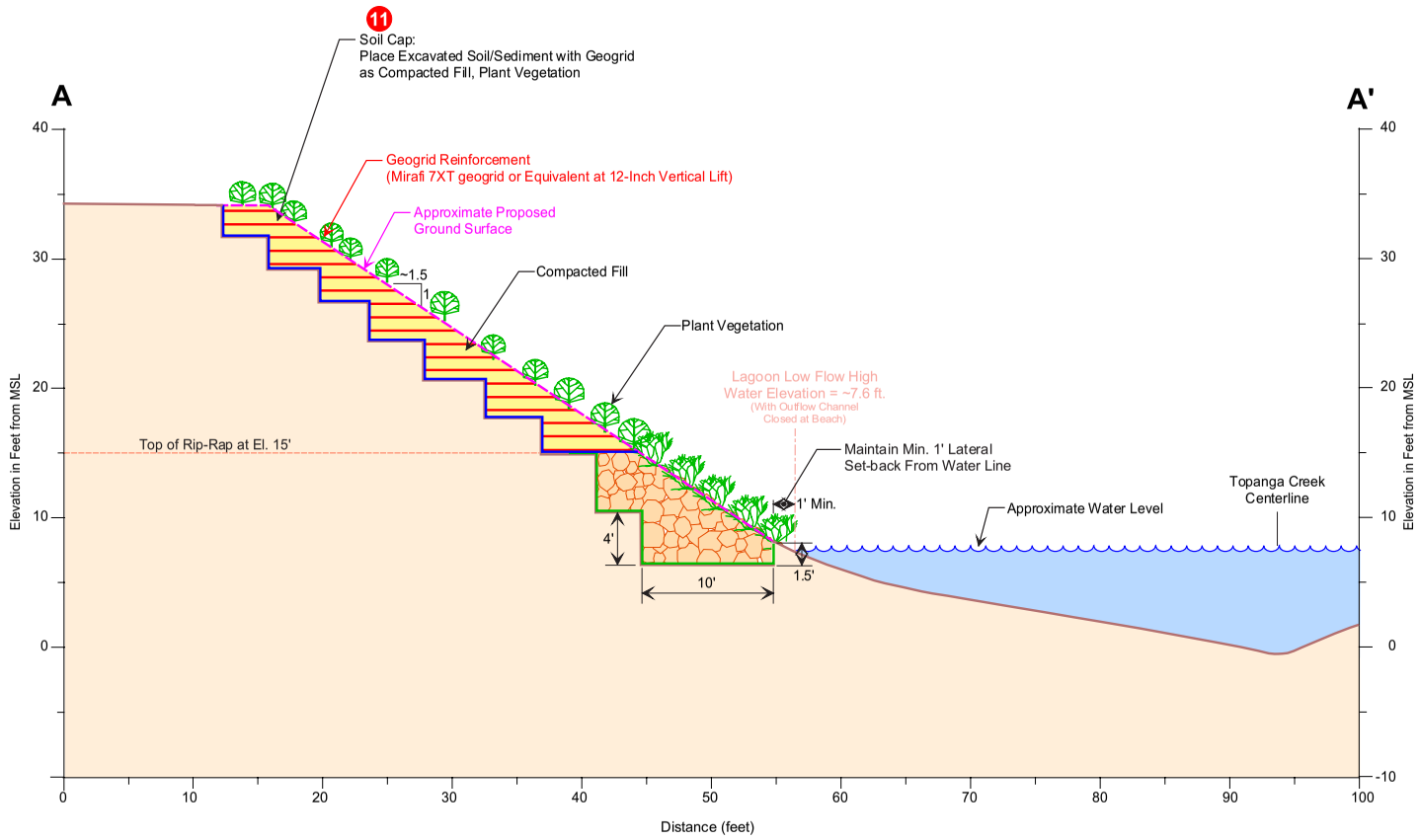

EXHIBIT 7
CDP No. 4-10-055
Repair Sequence

August 2011

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Step 11: Place Compacted Fill with Geogrid and Re-Vegetate