CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
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Filed:	2/2/09
180th Day:	Waived
270th Day:	10/30/09
Staff:	D. Christensen
Staff Report:	7/22/09
Hearing Date:	8/13/09

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-09-013

APPLICANT: Mariposa Land Company

PROJECT LOCATION: 3728 Cross Creek Road, City of Malibu, Los Angeles County

ASSESSOR PARCEL #: 4452-011-036

PROJECT DESCRIPTION: Follow-up to Emergency Coastal Development Permit No. 4-98-024-G for placement of rock rip-rap revetment along an approximately 500 foot long section of the west bank of lower Malibu Creek. The proposed project also includes revegetation of the revetment site to create approximately 0.59 acres of riparian and upland habitat.

MOTION & RESOLUTION: Page 4

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **APPROVAL** of CDP No. 4-09-013 with **fifteen (15) special conditions** relating to assumption of risk, revised bank protection plans, revised revegetation plans, revegetation implementation and monitoring, construction timing and best management practices, dewatering plan, aquatic species protection, required approvals, future alterations, deed restriction, site inspection, condition compliance, State Parks permission, nesting bird protection measures, and implementation of approved project. The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

The applicant is requesting authorization to permanently retain approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1:1 to 1.5:1 (H:V) slope and 14-16 feet in height (2-4 foot toe below stream bed). The applicant is also proposing to revegetate the revetment site by inserting willow bundles among spaces in the rock rip-rap and to plant the slope above the revetment with riparian plant species.

Continued on next page

In past permit actions concerning rock rip-rap in streams, the Commission has approved such development only where there is no feasible alternative to protect existing development and where revegetation with willows and other riparian species is incorporated into the actual construction. Given that the un-engineered revetment proposed here was not designed to accommodate plantings and was constructed at a very steep angle, it is not assured that the applicant's proposed revegetation will ensure that water quality, stability, scenic quality, and habitat value of the bank are all protected, consistent with the requirements of Chapter 3. It has not been demonstrated that the proposed project is the least environmentally damaging alternative or that it is sited and designed to be consistent with the Chapter 3 requirements for protection of habitat and scenic values of the riparian stream corridor of Malibu Creek.

However, an alternative has been identified that would function to adequately protect existing development in the floodplain as well as render the project consistent with the Chapter 3 protections for Malibu Creek ESHA, water quality, and visual resources. If the proposed project were revised, pursuant to the recommended special conditions, to re-construct the rock slope protection at a less steep slope in conjunction with incorporating filter fabric and willow stakes into the reconstructed rip rap design, the proposed project can be found consistent with Section 30230, 30231, 30236, 30251, 30253, and 30240 of the Coastal Act and the relevant policies of the Malibu LCP, which the Commission uses as guidance.

STAFF NOTE:

The hearing on this application had been scheduled for the July 8, 2009 meeting; however, the hearing was postponed at the request of the applicant. Prior to that, this application was brought to a Coastal Commission hearing on April 9, 2009. At the meeting, the Commission continued this item and directed staff to provide additional analysis regarding the revegetation-only alternative, and, conversely, the feasibility of laying the recommended vegetated rip rap design alternative back to a 3:1 (H:V) slope where possible. In addition, concern was raised regarding the impacts of potential construction dewatering on sensitive species. Since the April 9, 2009 hearing, staff has coordinated closely with Commission Staff Ecologist Dr. Jonna Engel and Commission Staff Coastal Engineer Lesley Ewing to consider and address the issues raised by the Commission. Regarding the revegetation-only alternative, sheer stresses in the subject reach of the channel have been determined to exceed what the use of vegetation only is capable of resisting, and therefore, this alternative is not recommended for this site, as described in detail on page 21 of this staff report. Regarding the alternative of laying back the vegetated rip rap design to a 3:1 slope, staff has taken a closer look at this option and found that there would be biological benefits to a more gradual bank gradient, and a 3:1 slope may be feasible along portions of the revetment where there is adequate space between the existing revetment toe and the adjacent commercial development and if determined to be hydraulically feasible, as discussed in greater detail in this report. Staff is now recommending that the rock slope protection be re-engineered to be laid back to a 3:1 (H:V) slope for all on-site areas where it is feasible; however, the re-engineered slope shall be no steeper than 2:1 (H:V) in any location. Where a 3:1 slope is determined to be infeasible by a registered engineer for any portion of the revetment, the applicant shall provide evidence demonstrating that a 3:1 slope is either hydraulically infeasible or spatially infeasible given site characteristics. Further analysis of water quality and ESHA impacts associated with the recommended revetment re-construction and potential dewatering are found on pages 27-28 of this staff report. Analysis of water quality and ESHA impacts associated with the proposed as-built revetment are found on pages 25-26.

Finally, staff has considered the appropriate timing for construction of the approved project. Per Dr. Jonna Engel's recommendation, Special Condition No. 5 on page 7 regarding construction timing has been modified to confine grading and rock slope protection work to the months of June 1 through October 31, which is during the dry season and outside the estimated peak period of tidewater goby spawning and the non-migration period of steelhead trout.

SUBSTANTIVE FILE DOCUMENTS: Certified City of Malibu LCP; City of Malibu Approval-in-Concept, dated June 28, 2007; Emergency Coastal Development Permit No. 4-98-024-G (Mariposa Land Company); U.S. Army Corps of Engineers Regional General Permit No. 98-00315-AOA for emergency placement of rip-rap revetment, issued February 13, 1998; U.S. Army Corps of Engineers Jurisdictional Determination letter for the proposed vegetation restoration plan, dated March 6, 2008; Notification of Emergency Streambed Alteration Work for revetment sent to California Department of Fish & Game February 19, 1998 (no agency response); California Department of Fish & Game letter stating statutory deadline had lapsed to issue an agreement regarding Streambed Alteration Notification No. 1600-2005-0503-R5 (vegetation restoration plan), dated January 13, 2008; "Emergency Regional General Permit No. 52," Regional Water Quality Control Board, Los Angeles Region; "City of Malibu Initial Study 03-003 and Mitigated Negative Declaration 04-002, dated July 7, 2005; "Lower Malibu Creek and Lagoon Resource Enhancement and Management Plan," by Richard Ambrose and Anthony Orme, dated May 2000; "Preliminary Engineering Design Study for Lower Malibu Creek Emergency Revetment," prepared by Pacific Advanced Civil Engineering Inc. (PACE), dated March 28, 2006; "Addendum to the Preliminary Engineering Design Study for Lower Malibu Creek Emergency Revetment," prepared by PACE, dated May 25, 2007; "Response to Comments" Memo, by PACE, dated October 18, 2007; "Evaluation of Biological Impacts of Bank Stabilization Project," prepared by Hunt & Associates Consulting Biologists, dated September 5, 2000; "Floodplain Analysis for Rock Levee along Malibu Creek," prepared by Land Design Consultants Inc., dated September 23, 1998; "Vegetation Restoration Plan,", prepared by Impact Sciences Inc., dated August 2007; January 9, 2009 Letter from Impacts Sciences, Inc. Regarding Modification to the "Vegetation Restoration Plan"; Riprap Installation Letter by Roy Brothers' Drilling Company, dated January 7, 2009; Memorandum by Commission Ecologist Dr. Jonna Engel, dated January 9, 2009; Memorandum by Commission Coastal Engineer Lesley Ewing, dated January 7, 2009 and June 23, 2009; "Biological Analysis Malibu Creek Riprap Replacement," by Impact Sciences, dated April 3,2009; Memorandum by PACE, dated March 24, 2009, regarding HEC-RAS modeling results of staff recommendation.

I. JURISDICTION AND STANDARD OF REVIEW

The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

II. STAFF RECOMMENDATION

MOTION: ***I move that the Commission approve Coastal Development Permit No. 4-09-013 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 Coastal Development Permit No. 4-09-013 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.

III. 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.

IV. SPECIAL CONDITIONS

1. Assumption of Risk

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

2. Revised Bank Protection Plans

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, two (2) sets of revised rock slope protection/grading plans with representative cross-sections. The plans shall be prepared and stamped by a registered engineer. The revised plans shall demonstrate the following:

1. That the rock slope protection has been re-engineered to be laid back to a 3:1 (H:V) slope for all on-site areas where it is feasible; however, the re-engineered slope shall be no steeper than 2:1 (H:V) in any location. Where a 3:1 slope is determined to be infeasible by a registered engineer for any portion of the revetment, the applicant shall provide evidence, for the review and approval of the Executive Director, demonstrating that a 3:1 slope is either hydraulically infeasible or spatially infeasible given site characteristics. The rock slope protection shall be designed to an appropriate depth to minimize undercutting of the revetment and integrated with the adjacent existing grouted rock slope protection to the north and the natural bank to the south.

   The toe of the slope protection shall not extend further into the creek than currently exists. If determined feasible, the footing portion of the rock slope protection may remain in place and only the upper portion of the rock shall be laid back per the requirement above.

2. That geotextile filter fabric and live willow stakes are incorporated into the re-engineered rock slope protection during construction, consistent with the Revised Revegetation Plan required as part of **Special Condition No. 3** below.

3. That where any fencing or unpermitted development exists along the bank that interferes with the re-engineered revetment required herein, as well as the associated Revised Revegetation Plan required as part of Special Condition 3 below, be removed from the site.

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

3. Revised Revegetation Plan

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a revised "Vegetation Restoration Plan," that incorporates the following changes.

1. The "Vegetation Restoration Plan" (by Impact Sciences Inc., dated 8/2007 and amended 1/2009) shall be revised pursuant to the approved rock slope protection plan required by **Special Condition 2** above. The revised plan shall indicate that geotextile filter fabric with holes for willow plantings will be placed on the graded slope of the bank prior to rock placement to stabilize the soil. As the rock revetment is being installed, live willow stakes shall be inserted among the voids, making sure the stakes penetrate the fabric filter and underlying soil. Interstitial spaces in the rip rap shall be partially filled with a fine gravel, sand, and soil combination. In addition, alkali bulrush (*Scirpus maritimus*), yerba mansa (*Anemopsis californica*), creeping wild rye (*Leymus triticoides*), and mugwort (*Artemisia douglasiana*) shall be added to the plant palatte for revegetation of the revetment. Arroyo willow shall be planted throughout the rock slope; alkali bulrush and yerba mansa shall be planted in the frequently flooded zone; and creeping wild rye and mugwort shall be planted above the frequently flooded zone. For the portion of the creek bank that is south of the rock revetment, mugwort (*Artemisia douglasiana*), mulefat (*Baccharis salicifolia*), and California wild rose (*Rosa californica*) shall be added to the proposed restoration plant palatte.

The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. Revegetation Implementation and Monitoring

By acceptance of this permit, the applicant agrees to implement the approved "Vegetation Restoration Plan" (Impact Sciences Inc.) that is revised per Special Condition No. 3 above. The plan shall be carried out under the direction of qualified biologist or resource specialist. Successful site restoration shall be determined if the revegetation of native plant species on site is adequate to provide 90% coverage by the end of the five (5) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation.

The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive

Director, documenting the completion of the initial planting/revegetation work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting/revegetation work.

Five years from the initial planting completion date, the applicant shall submit for the review and approval of the Executive Director, a Revegetation Monitoring Report, prepared by a qualified biologist or resource specialist, that certifies whether the on-site revegetation is in conformance with the revegetation plan approved pursuant to Special Condition 3 and has been implemented consistent with, and restoration has been successful as defined by, this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

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

5. Construction Timing and Best Management Practices

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

a. Grading and rock slope protection work shall be confined to the months of June 1 – October 31, which is during the dry season and outside the estimated peak period of tidewater goby spawning and the non-migration period of steelhead trout. This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director.

b. No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.

c. No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers.

d. Any and all debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project.

e. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.

f. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.

g. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

h. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

i. All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.

j. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.

k. The discharge of any hazardous materials into any receiving waters shall be prohibited.

l. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

m. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity.

n. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

o. Silt screens, filter fabric covers, coffer damming, silt curtains, and/or other dewatering method appropriate for use in estuary and intertidal setting applications shall be installed at the toe of the slope and around the perimeter of the area to be graded prior to the initiation of the grading activities and shall be maintained throughout project construction to minimize erosion and sediment from runoff waters during construction. Additional siltation barrier materials shall be kept at the site and deployed as needed to reinforce sediment containment structures should unseasonable rainfall occur. 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.

6. Dewatering Plan

If it is determined that construction dewatering is required to reconstruct the rock slope protection, ***prior to issuance of the Coastal Development Permit***, the applicant shall submit a dewatering plan to the Executive Director for review and approval, and evidence that the dewatering plan has been approved by the Regional Water Quality Control Board, California Department of Fish and Game, and California Department of Parks and

Recreation, or evidence that any such approval is not necessary. The dewatering plan shall detail the provisions and Best Management Practices that will be used for the diversion and/or removal of water within the construction site, and indicate the location, size, and details of all dewatering devices that will be utilized. The plan shall also detail the location, size, and capacity of the settling basin utilized to remove sediments prior to the discharge of water.

The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. Aquatic Species Protection

By acceptance of this permit, the applicant agrees to retain the services of a qualified aquatic species specialist to implement the following aquatic species protection measures if the approved project requires construction dewatering or work within the waters of Malibu Creek:

1. The qualified resource specialist shall survey for sensitive aquatic species (tidewater gobies and steelhead trout) within 100 feet of the project area prior to commencement of construction site dewatering work. If sensitive aquatic species are present, the qualified resource specialist and a crew working under his/her direction shall move, by hand, sensitive species from the area to be dewatered to safe locations elsewhere along the reach of Malibu Creek.

2. The qualified resource specialist shall inspect the dewatered areas and construction site regularly to detect whether any tidewater gobies or other fish are passing through the cofferdam/silt curtain and investigate whether tidewater goby protection measures are being implemented.

3. The qualified resource specialist shall be present when the cofferdams are removed and the construction area refilled with water to relocate any fish present in the construction area before completion of removal operations and to ensure successful reintroduction of aquatic habitat in the construction area.

4. The applicant shall cease work should the qualified resource specialist determine that any breach in permit compliance has occurred, or if any unforeseen sensitive habitat issues arise. If the Executive Director determines that significant impacts or damage have occurred to sensitive habitats or to wildlife species, the Executive Director may require the applicant to revise the project to adequately mitigate such impacts, which shall be processed as an amendment to this coastal development permit or a new coastal development permit.

8. Required Approvals

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

9. Maintenance Activities and Future Alterations

The permittee shall maintain the permitted bank protection in its approved state. Any change in the design of the project or future additions/reinforcement of the approved structure beyond exempt maintenance as defined in Public Resources Code section 30610(d) and Section 13252 of Title 14 of the California Code of Regulations to restore the structure to its original condition as approved herein will require a coastal development permit. However, if (after inspection) it is apparent that repair and maintenance is necessary, the permittee shall contact the Executive Director to determine whether a coastal development permit or an amendment to this permit is legally required, and, if required, shall subsequently apply for a coastal development permit or permit amendment for the required maintenance.

10. Deed Restriction

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

11. Site Inspection

A. By acceptance of this permit, the applicant irrevocably authorizes, on behalf of itself and its successors-in-interest with respect to the subject property, Coastal Commission staff and its designated agents to enter onto the property to undertake site inspections for the purpose of monitoring compliance with the permit, including the special conditions set forth herein, and to document their findings (including, but not limited to, by taking notes, photographs, or video), subject to Commission staff providing 24 hours advanced notice to the contact person indicated pursuant to paragraph B prior to entering the property, unless there is an imminent threat to

coastal resources, in which case such notice is not required. If two attempts to reach the contact person by telephone are unsuccessful, the requirement to provide 24 hour notice can be satisfied by voicemail, email, or facsimile sent 24 hours in advance or by a letter mailed three business days prior to the inspection. Consistent with this authorization, the applicant and its successors: (1) shall not interfere with such inspection/monitoring activities and (2) shall provide any documents requested by the Commission staff or its designated agents that are relevant to the determination of compliance with the terms of this permit.

B. ***Prior to issuance of the Coastal Development Permit***, the applicant shall submit to Commission staff the email address and fax number, if available, and the address and phone number of a contact person authorized to receive the Commission's notice of the site inspections allowed by this special condition. The applicant is responsible for updating this contact information, and the Commission is entitled to rely on the last contact information provided to it by the applicant.

12. Condition Compliance

Within 180 days of Commission action on this coastal development permit application, or within such time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions Chapter 9 of the Coastal Act.

13. California Department of Parks & Recreation Permission

Prior to issuance of the Coastal Development Permit, the applicant shall provide to the Executive Director evidence that California State Parks has granted permission to undertake the portion of the project that is on State Parks property, or evidence that no permission is required.

14. Nesting Bird Protection Measures

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

15. Implementation of Approved Project

The applicant shall remove the existing as-built revetment and implement and complete the approved revetment project within 18 months of issuance of this coastal development permit. The Executive Director may grant additional time for good cause.

V. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

Background

On February 20, 1998, the Executive Director authorized Emergency Coastal Development Permit No. 4-98-024-G. The permit authorized Mariposa Land Company (Grant Adamson) to place approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek, about 300 feet upstream of the Pacific Coast Highway bridge. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1:1 to 1.5:1 (H:V) slope and 14-16 feet in height (2-4 foot toe below stream bed). The contractor who installed the rock used a backhoe to cut back the eroded vertical bank slope and notched a key at the toe of the slope to allow for a stable base surface for the rock. Rocks were then placed individually with the backhoe, starting at the key, and working upwards in sections. In the several months following the initial installation, boulders were adjusted and additional rocks were added to enhance the stability of the emergency revetment.

In the application for Emergency Permit 4-98-024-G, the applicant stated that the revetment was necessary to protect the subject property and an adjacent commercial development from further severe stream bank erosion in the face of potential continuing winter storms. Prior to placement of the revetment, approximately 20 feet of lateral erosion occurred along the subject stretch of creek bank following significant storm flows in February 1998. Conditions of approval of Emergency CDP No. 4-98-024-G required the applicant to apply for a regular CDP within 60 days in order to seek permanent authorization for the emergency work, and that the regular CDP application was to include an analysis of stream bank protection alternatives prepared by a qualified engineer (**Exhibit 10**).

On June 3, 1998, Mariposa Land Co. submitted a regular CDP application (No. 4-98-024) requesting permanent authorization for the rock rip-rap revetment that was installed under the emergency permit. However, the CDP application did not contain enough information to deem the application “complete” under the applicable regulations, and Commission staff sent the applicant an “incomplete” letter on June 24, 1998, outlining the needed application items. Additional information was not received from the applicant until July 2000. However, again, not all of the information requested in staff’s 1998 letter was included. Commission staff sent a follow-up letter in September 2000 outlining the

outstanding items. Over the next eight years the applicant submitted portions of the requested application items and numerous contacts were made by Commission staff to the applicant attempting to obtain the necessary information, particularly in regards to an engineering analysis of alternatives. In July 2006 and June 2007, the applicant provided an engineering design study/alternatives analysis for the proposed project. And in October 2007, the applicant revised the proposed project description to include planting of the rip-rap stream bank and top of bank with riparian and upland species, and submitted a "Vegetation Restoration Plan", prepared by Impact Sciences, Inc.

On May 21, 2008, the CDP application was deemed complete, and Commission staff tentatively scheduled the application for the Commission's November, 2008 hearing. In August 2008, it was brought to the attention of Commission staff that the as-built project plans submitted by the applicant and analyzed by their engineer were not based upon a detailed survey and therefore are not a reliable depiction of the actual configuration of the rip-rap slope across the project area. Commission staff requested the applicant provide accurate, detailed surveyed plans of the proposed project, prepared by a licensed land surveyor, to facilitate staff's analysis of the as-built project. The applicant provided staff with surveyed plans on October 10, 2008.

Application No. 4-98-024 was filed on May 21, 2008, and would have had to have been acted on by the Commission at its November 2008 meeting in order to comply with the Permit Streamlining Act (PSA). However, in order to allow staff adequate time to analyze the recently submitted surveyed as-built plans, the applicant extended the Commission's review time by 90 days. The application was then scheduled for the February 4, 2009 Commission hearing and a staff report was circulated on January 22, 2009. The February hearing was the last hearing the Commission could act upon the application before the 270th day PSA deadline. Therefore, since the applicant found they needed more time to respond to the January 22, 2009 staff report, the applicant withdrew permit application No. 4-98-024 two days before the scheduled hearing and re-submitted it as a new application. The re-submitted application is identical to the previous application, but it was assigned a new permit number (4-09-013) and filed on February 2, 2009. This application was brought to a Coastal Commission hearing on April 9, 2009. At the meeting, the Commission continued this item and directed staff to provide additional analysis regarding the revegetation-only alternative, and the feasibility of laying the recommended vegetated rip rap design alternative back to a 3:1 (H:V) slope where possible.

Environmental Setting

The Malibu Creek watershed covers approximately 110 square miles. It is the second largest watershed draining into Santa Monica Bay and the largest draining from the Santa Monica Mountains. Lower Malibu Creek watershed includes the steep and rugged Malibu Canyon, which cuts through the central axis of the Santa Monica Mountains. Downstream of Malibu Canyon the watershed emerges onto a coastal plain where channel slopes and flow velocities reduce and the Malibu Creek fluvial system begins to transition to a coastal estuarine lagoon system. Malibu Lagoon is a 31-acre shallow embayment at the terminus of Malibu Creek that empties into the Pacific Ocean at Surfrider Beach. However, depending on hydrologic conditions of the estuary system, the mouth of the lagoon may either be "open" with no barrier beach, or "closed" by the presence of a barrier beach and

lack of tidal inlet channel. When the lagoon is closed, the water level in the subject reach of creek ranges between 6 and 7 feet in depth.

Malibu Creek and its estuary provide habitat for a diversity of wildlife, including waterfowl, shorebirds, wading birds, songbirds, and raptors. A smaller number of mammals, amphibians and reptiles also inhabit the area. The significant species of fish that are known to utilize lower Malibu Creek are southern steelhead trout (*Oncorhynchus mykiss*), a state-listed threatened species, and tidewater goby (*Eucyclogobius newberryi*), federally listed as endangered and a California species-of-special-concern.

The subject 500 linear foot section of the west bank of lower Malibu Creek is situated along a westward meander cut bank approximately 300 feet upstream from the Pacific Coast Highway bridge and Malibu Lagoon (**Exhibits 1-3**). The project site is located on a narrow, relatively flat, 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek to the east (**Exhibit 2**). The site is located within the 100-year floodplain for Malibu Creek, as designated by the Federal Emergency Management Agency (FEMA). Prior to severe storm erosion and subsequent placement of the proposed rip rap revetment on the property in the late 1990's, the subject stretch of creek bank was primarily disturbed and did not possess a well-developed riparian canopy due to its close proximity to a commercial shopping center and Pacific Coast Highway. Currently, the subject bank and rip rap is largely devoid of vegetation, with the exception of a small amount of arroyo willow at the northern end of the revetment and a small amount of mulefat at the southern end. The upland area above the revetment is dominated by weeds and non-native annual grasses. A footpath also exists on the upland area above the revetment. The width between the top of existing revetment and the adjacent commercial development/property varies between 18 feet and 60 feet (**Exhibits 3-4**).

Lower Malibu Creek in the project vicinity has changed significantly over time according to historic aerial photographs dating back to 1932. Stream flows had historically been confined to a rather straight channel leading up to the Pacific Coast Highway bridge, since much of the floodplain was in agricultural production, particularly the west side of the creek. In the 1960's, a shopping center was built in close proximity to the subject stretch of the west bank. An old rip rap revetment that extends along the west creek bank at least a thousand feet upstream from the Pacific Coast Highway bridge is evident in a 1972 aerial photograph. It appears this old revetment was constructed to protect the adjacent shopping center prior to 1972. The sinuosity of the lower Malibu Creek stream channel increased substantially between 1976 and 1985, which increasingly directed flows against the west bank in the project location. By 1998, it appears that most of the old rip rap revetment had fallen away due to changes in channel morphology. However, there still exists some grouted rip rap on either side of a storm drain outlet located on an adjacent parcel approximately 100 feet north of the proposed rip rap revetment. A canopy of healthy riparian vegetation is growing on the bank above the grouted rip rap section. The storm drain and grouted rip rap were installed by Los Angeles County Flood Control District in the 1970's. Although this grouted rip rap is connected to the stretch of proposed rip rap, it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act. However, according to the applicant's site plan, it appears a small portion of

the proposed rip rap is located on an adjacent parcel owned by California Department of Parks & Recreation (4452-011-903). As such, **Special Condition No. Thirteen (13)** is required to ensure that State Parks permission is obtained prior to issuance of the permit.

Description of Proposed Project

The applicant is requesting authorization to permanently retain in its "as-built" condition approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1:1 to 1.5:1 (H:V) slope and 14-16 feet in height (2-4 foot toe below stream bed) (**Exhibits 5-6**). The applicant is also proposing to revegetate the revetment site to create approximately 0.59 acres of riparian and upland habitat ("Vegetation Restoration Plan," prepared by Impact Sciences, Inc., dated August 2007, amended January 2009). To vegetate the existing rock revetment, the applicant had proposed to secure fascines of willow cuttings to the rip rap with wire. The willow bundles would be oriented at a 45-degree angle, facing downstream, with one end placed into the creek. Once the willow fascines produced sufficient roots, the interstitial spaces would be filled with sand and fine gravel as a substrate for additional plantings. The applicant also proposes to plant the upland area above the revetment with a mixture of native shrubs and trees, such as mulefat, sycamore, black walnut, cottonwood, and elderberry (**Exhibits 7-8**).

In a letter dated January 9, 2009, Impact Sciences Inc. revised the proposed Vegetation Restoration Plan to omit the willow fascine element and to instead place willow cuttings that are at least one inch in diameter and six feet long into the interstitial spaces between rocks (**Exhibit 9**). Once the willows establish, the interstitial spaces would be filled with sand and fine gravel as a substrate for additional plantings. In researching examples where the concept of securing willow fascines to rock had been used successfully per the request of Commission staff, Impact Sciences found that willow fascines were not appropriate for use atop a rock slope protection and that the willows needed contact with moist soil beneath the rock. After consulting with the Natural Resources Conservation Service, Impact Sciences revised their revegetation plan to instead place willow cuttings into the spaces of the rip rap.

Agency Review/Approvals

The Commission has received the following agency correspondence from the applicant regarding the proposed project:

- U.S. Army Corps of Engineers Regional General Permit No. 98-00315-AOA (with concurrence from the U.S. Fish & Wildlife Service) for emergency placement of rip rap revetment, issued February 13, 1998;

- U.S. Army Corps of Engineers Jurisdictional Determination letter for the proposed vegetation restoration plan, dated March 6, 2008;

- Notification of Emergency Streambed Alteration Work for emergency placement of rip rap revetment, sent to California Department of Fish & Game February 19, 1998 (no agency response);

- California Department of Fish & Game letter stating statutory deadline had lapsed to issue an agreement regarding Streambed Alteration Notification No. 1600-2005-0503-R5 (vegetation restoration plan), dated January 13, 2008;

- Emergency Regional General Permit No. 52, Regional Water Quality Control Board, Los Angeles Region;

- City of Malibu Approval-in-Concept, dated June 28, 2007.

Correspondence Received

Commission staff has received correspondence from the following interested parties (letters attached as **Exhibit 13**):

a. Letter from Dr. J. Robert Hatherill, former faculty member of the UCSB Environmental Studies Program, dated August 11, 2008, expressing support for the proposed restoration plans to enhance the habitat value of the creek bank for tidewater goby and other native fauna.

b. Letter from Ron Schafer, California Dept. of Parks and Recreation District Superintendent, dated November 14, 2008, expressing concern regarding the proposed project. The letter states that the un-engineered revetment continues to contribute to an unstable site for establishment of riparian vegetation. Now that the emergency has passed, State Parks believes that the rip rap should be removed and the bank should be laid back at a less steep slope that is soft bio-engineered for greater water quality, stability, and habitat benefits.

c. Letter from Heal the Bay, dated June 23, 2009, asserting that portions of the proposed as-built riprap are failing, portions of the adjacent grouted riprap to the north are failing, and the stream bank south of the proposed riprap is unstable. Heal the Bay also asserts that there is evidence of unpermitted fencing and structures adjacent to the stream bank on the subject property. Heal the Bay provided GPS-mapping and photographs of the unpermitted development and bank failures. The issue of the compromised bank areas is addressed in Section V.B, page 26 of the staff report. Regarding the alleged unpermitted development on the subject property, staff has confirmed that there is a chain link fence enclosing a stockpile area and various structures at the northern portion of the property. The chain link fence runs parallel to the creek for several hundred feet, and is only a few feet from the top of bank of the subject rock revetment. It appears that the northern-most approximately 150 feet of the as-built/proposed revetment bank has a fence within feet of it. Some of the alleged unpermitted development on the subject property is unrelated to the proposed project in the subject permit application and in a location that is outside the Commission's retained jurisdiction. However, Commission enforcement staff has notified City of Malibu enforcement

staff of the alleged unpermitted development on the subject property. Although, regarding the development that is along the top of bank of the subject revetment where the applicant is proposing restoration, it appears this development would interfere with implementation of the approved project and should be removed. As such, Special Condition 2 of the staff recommendation has been modified to address this issue.

d. Letter from Heal the Bay, dated February 3, 2009 and April 6, 2009, expressing opposition to the proposed project and the staff recommendation. Heal the Bay states that stream bank armoring is an ineffective method for long-term bank stabilization and a major cause for downstream bank erosion and sedimentation. Heal the Bay recommends a soft solution in that the rip rap should be removed, the bank slope laid back at a 3:1 slope and re-vegetated, and if necessary, a floodwall installed next to the shopping center as far back as possible. Heal the Bay also believes that the subject stream bank should be designated ESHA. These comments and concerns are addressed in Section V.B of the staff report. Lastly, Heal the Bay states that the grouted rip rap at an upstream storm drain outlet and an adjacent fenced storage area are unpermitted and should be included in the scope of work for the subject permit. See staff response to bullet (c) above regarding the fenced storage area. Regarding the grouted rip rap at the upstream storm drain outlet, although it is connected to the stretch of proposed rip rap, it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act.

e. Letter from Malibu Surfing Association, dated February 3, 2009 and April 7, 2009, joining in and concurring with Heal the Bay's letter described above.

f. Letter from Mark Abramson of Santa Monica Baykeeper (SMB), dated February 3, 2009 and April 7, 2009, expressing opposition to the proposed project and the staff recommendation. SMB states that stream bank armoring is an ineffective method for long-term bank stabilization and a major cause for downstream bank erosion and sedimentation. SMB recommends a soft solution in which the bank slope is laid back at a 3:1 slope and re-vegetated. In addition, SMB states that the subject stream bank should be designated an ESHA. These comments and concerns are addressed in Section V.B of the staff report. SMB also states that a grouted rip rap area upstream and an adjacent fenced storage area are unpermitted and should be addressed as part of the subject permit application. See staff response to bullet (c) above regarding the fenced storage area. Regarding the grouted rip rap at the upstream storm drain outlet, although it is connected to the stretch of proposed rip rap, it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act.

g. Letter from Sandra Albers of the Santa Monica Mountains Resource Conservation District (SMM RCD), dated April 7, 2009, in opposition to the proposed project and the staff recommendation. The SMM RCD states that bioengineering techniques,

which provide valuable habitat for fish and wildlife species and improved water quality, should be utilized in this case.

h. Letter from the applicant's attorney, Sherman Stacey, dated March 31, 2009, objecting to the March 19, 2009 Staff Report and Recommendation and asserting that the staff recommended alternative will be more environmentally damaging than the proposed project.

Commissioner ex parte communications received to date are attached as **Exhibit 14**.

B. WATER QUALITY, STREAM ALTERATION, HAZARDS, AND SENSITIVE HABITAT

The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

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 that:

> ***The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.***

Section 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 (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain 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 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, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.***

Section 30233(a) of the Coastal Act provides as follows, in applicable part:

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:

(1) 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.

Coastal Act Section 30240 affords protection of environmentally sensitive habitat areas as follows:

(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 30107.5 of the Coastal Act defines an environmentally sensitive area as:

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

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and, where feasible, restored through, among other means, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. Special protection shall be given to areas and species of special significance, and uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. Section 30236 limits channelizations, dams, or other substantial alterations of rivers and streams to flood control projects necessary to protect public safety and existing development and two other types of projects, any of which must incorporate the best mitigation measures available and where there are no feasible alternatives. 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 significantly degrade those resources.

In addition, the City of Malibu certified Local Coastal Program contains the following policy that specifically pertains to lower Malibu Creek:

> ***LUP Policy 3.34***
> ***Bioengineering methods or "soft solutions" should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered. Any applications for protective measures along lower Malibu Creek shall demonstrate [1] that existing development in the Civic Center is in danger from flood hazards, [2] that the proposed protective device is the least environmentally damaging alternative, [3] that it is sited and designed to avoid and minimize impacts to the habitat values of the riparian corridor along the creek and the recreational and public access use of State Park property along the creek, and [4] that any unavoidable impacts have been mitigated to the maximum extent feasible.***

The proposed project site is situated along a 500 linear foot section of the west bank of lower Malibu Creek, approximately 300 feet upstream from the Pacific Coast Highway bridge and Malibu Lagoon. The lower Malibu Creek watershed emerges onto a coastal plain where channel slopes and flow velocities reduce and the Malibu Creek fluvial system begins to transition to a coastal estuarine lagoon system. Malibu Lagoon is a 31-acre shallow embayment at the terminus of Malibu Creek that empties into the Pacific Ocean at Surfrider Beach. Malibu Creek and its estuary provide habitat for a diversity of wildlife, including waterfowl, shorebirds, wading birds, songbirds, and raptors. A smaller number of mammals, amphibians and reptiles also inhabit the area. The significant species of fish that are known to utilize lower Malibu Creek are southern steelhead trout (*Oncorhynchus mykiss*), a state-listed threatened species, and tidewater goby (*Eucyclogobius newberryi*), federally listed as endangered and a California species-of-

special-concern. Malibu Creek is a U.S.G.S. designated blue-line stream that supports a well-developed riparian corridor which constitutes ESHA. Malibu Creek and its riparian corridor is also designated as ESHA in the certified Malibu LCP.

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

The project site is located on a narrow, approximately 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek to the east. Prior to severe storm erosion and subsequent placement of the proposed emergency rip rap revetment on the property in the late 1990's, the subject stretch of creek bank was primarily disturbed due to modifications to the creek's west bank and floodplain that created a highly disturbed riparian environment of presumably limited habitat value. Currently, the subject bank and proposed as-built rip rap remains largely devoid of vegetation, with the exception of a small amount of arroyo willow at the northern end of the revetment and a small amount of mulefat at the southern end. The upland area above the revetment is dominated by weeds and non-native annual grasses. A footpath also exists on the upland area above the revetment. The width between the top of revetment and the fence/wall that delineates the edge of a commercial shopping center varies between 18 feet and 60 feet.

For the reasons listed above, the Commission finds that Malibu Creek itself meets the definition of ESHA under the Coastal Act, but the disturbed west bank in the area of the proposed project does <u>not</u> meet the definition of ESHA under the Coastal Act.

The applicant is requesting authorization to permanently retain approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1:1 to 1.5:1 (H:V) slope and 14-16 feet in height (2-4 foot toe below stream bed). The applicant is also proposing to revegetate the revetment site to create approximately 0.59 acres of riparian and upland habitat. At the time of installation, the proposed rock was placed outside the stream channel and within the footprint of the excavated/eroded stream bank following a severe El Nino storm event. Therefore, no fill of wetland areas occurred at the time of installation.

Pursuant to Coastal Act Section 30236, the substantial alteration of coastal streams is limited to necessary water supply projects, habitat improvement projects, and flood control projects where flood protection is necessary for public safety or to protect existing structures in the floodplain and no other method of protecting the structures is feasible. In

this case, prior to placement of the emergency revetment, approximately 20 feet of lateral erosion occurred along the subject stretch of creek bank following significant storm flows in February 1998. The revetment was deemed a necessary measure to temporarily protect an adjacent commercial development from damage as a result of further severe stream bank erosion in the face of potential continuing winter storms. The applicant asserts that the existing rock slope protection is permanently needed in the project location to continue to protect adjacent development from future erosion and flooding. The subject 500 linear foot section of the west bank of lower Malibu Creek is situated along a westward meander cut bank. The hydraulics of the creek will likely erode the west bank, perhaps significantly during a severe storm event, and threaten the existing development if some form of bank protection is not utilized. In this case, the proposed flood control project is allowed to protect existing development consistent with Section 30236. However, Section 30236 further limits streambed alterations for flood control to situations where no other method for protecting the existing structures in the floodplain is feasible. In addition, Policy 3.34 of the Malibu LCP requires that bioengineering methods should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered provided they are demonstrated to be the least environmentally damaging alternatives and are sited and designed to avoid and minimize impacts to the habitat values of the riparian corridor along the creek. In other words, under the policies of the Coastal Act and the Malibu LCP, the project must be the least environmentally damaging feasible alternative.

Alternatives Analysis

The various alternatives to the proposed project that have been analyzed are discussed below:

1. **Revegetation of Creek Bank**: This alternative would involve removing the temporary emergency revetment that is in place and revegetating the subject bank with riparian vegetation. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because stream power and velocity values along this reach of cut bank exceed what re-vegetation alone is capable of resisting. Shear stresses in the channel exceed 3 lb/sq. ft. for most of the subject channel length, and greater than 5 lb/sq. ft. at the main bend in the project area. The use of vegetation alone for bank protection is not considered appropriate for shear stresses greater than 2.5 lb/sq. ft. Staff, including Commission Staff Coastal Engineer Lesley Ewing, finds this analysis to be valid. Therefore, this would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

2. **Revegetation of Upper Bank with Rip Rap in Low Flow Channel**: This alternative would involve removing the temporary emergency revetment that is in place except for the rip rap in the low flow channel and revegetating the upper bank with riparian vegetation. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because erosion would occur within the channel behind the rip rap, which would eventually undermine the rip rap and cause it to fail. Staff finds this conclusion to be valid. Therefore, this

would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

3. **Revegetation of Creek Bank Using Geotextiles**: This alternative would involve removing the temporary emergency revetment that is in place, with the exception of a rock or concrete footing upon which to anchor geotextile fabric to the bank. The geotextile slope would then be vegetated. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because stream power and velocity values along this reach of cut bank exceed what geotextiles are capable of withstanding in the long-term. Concrete block-based geotextiles have a higher velocity and shear tolerance, but due to the steep bank slope and constrained space, this alternative would require more grading and likely placing fill into the creek to achieve sufficient grade. Staff finds this conclusion to be valid. Therefore, this would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

4. **Construction of Concrete Levee or Soil Cement Levee**: This alternative would involve removing the temporary emergency revetment that is in place, and installing a concrete or soil cement levee along the bank. The applicant's engineer has indicated that this alternative would be hydraulically feasible, but would require significant grading and costs to install. Staff finds this conclusion to be valid. Due to the intensive cost and environmental impacts associated with this alternative, it is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

5. **Construction of Crib Wall**: This alternative would involve removing the temporary emergency revetment that is in place, and installing crib walls (a three dimensional structure created from untreated timbers, fill, and live cuttings). Live cribwalls provide a means of long-term streambank stabilization and are best used as part of a system which includes a component to deter undercutting at the bed/bank interface, such as rock riprap or gabions. The applicant's engineer has indicated that this alternative is not hydraulically suitable for banks that experience lateral migration or in locations where bank roughness is an issue, such as the subject site. Staff finds this conclusion to be valid. Therefore this alternative is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

6. **Construction of Concrete Floodwall and Revegetation of Creek Bank**: This alternative would involve removing the temporary emergency revetment that is in place, installing a concrete floodwall next to the commercial development, lay back the bank between wall and channel, and revegetate bank. While this alternative would protect the adjacent development from flood waters permanently, the cut bank would continue to erode until there was no longer a natural bank between wall and channel. Such a solution is high cost and in the long run could result in the loss of any vegetated streambank area along this stretch of Malibu Creek. Therefore this alternative is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

7. **Laid-back Revetment with Revegetation**: This alternative would involve deconstructing the temporary emergency revetment that is in place, and reconstructing it at a more gradual slope and revegetating. The applicant's engineer has indicated that this alternative would significantly alter the hydraulics of the creek and increase turbidity/sediment delivery. The applicant's engineer also states that the subject bank was steep before and after placement of the emergency rip rap, which is a natural equilibrium slope for the cut bank. However, Commission Staff Coastal Engineer, Lesley Ewing, disagrees with the analysis of the applicant's engineer in regard to this alternative. In her memo dated January 7, 2009, Ms. Ewing states that, based on all information provided by the applicant, it appears feasible that the bank slope can be rebuilt at a more gradual 2:1 slope (**Exhibit 11**). Further, she states:

> "…This would require that the revetment be disassembled from the top, the bank be sloped back, and rock be placed again along the bank at a more gradual slope. The Preliminary Engineering Design Study by PACE (May 25, 2007) asserts that laying the top portion of the existing revetment back at a 2:1 (h:v) slope would result in increased turbidity. But, based the provided information, no evidence has been submitted to support this assertion. There is the potential for some temporary turbidity during construction; however this could be minimized through project scheduling, good work practices and implementation of best management practices. If the revetment were to be reconstructed along the bank at a more gradual slope, a bottom layer of filter fabric should be installed to reduce soil piping and reduce turbidity from high flow events. While it may be necessary to cut root holes into the filter fabric, the soil loss through these openings in the bottom layer would not be significant. Additionally, turbidity should be greatly reduced from the current revetment with rock covering a bare soil slope with no fabric filter layer at all..."

On April 6, 2009, several days before the initial hearing on this item, staff received a memo from the applicant's engineer (attached as part of Exhibit 13) who modeled this 2:1 bank slope alternative as well as the as-built bank slope to arrive at expected flow depths that would occur from each option for a 100-year flood event. Commission Staff Coastal Engineer, Lesley Ewing, reviewed the memo and the modeled output and found that flood depths vary slightly for each of the alternatives for most of the channel length and that overall the 2:1 laid back slope alternative would have flow depths of just +0.1 feet higher on average than the as-built rock slope. This represents an insignificant difference and a laid back revetment can certainly be designed to keep flow depths to levels that are below the effective protection level of the bank and revetment.

Additionally, Commission Staff Ecologist Dr. Jonna Engel, in her memo dated January 9, 2009, states that a less steep revetment slope than is proposed, in conjunction with incorporating filter fabric and willow stakes into the reconstructed rip rap design, would be more likely to result in successful riparian restoration along this stretch of Malibu Creek (**Exhibit 12**). As such, from both a biological and engineering standpoint, a bioengineered rip rap slope protection that is laid back at

a less steep slope is a feasible and preferred alternative, as discussed in more detail below.

Commission staff has received correspondence from the California Department of Parks and Recreation, Heal the Bay, and Santa Monica Baykeeper, all of whom recommend that the subject bank be laid back at a 3:1 slope to widen the channel and thereby reduce water velocities while also maximizing restoration of the riparian corridor. Staff has indicated that laying the bank slope back to no steeper than 2:1 is an environmentally preferred and feasible alternative in recognition of the fact that there is inadequate space between the top of bank and adjacent development along portions of the subject stretch of bank to accommodate a 3:1 slope. Laying the bank slope back to 3:1 would require increased grading of the upland area between the streambank and adjacent development, and require a larger area of the bank and upland area to be covered in rock rip-rap. However, the additional area covered by a 3:1 revetment bank slope would provide a wider area of streamside riparian habitat if native vegetation is integrated into the rock revetment design. A more gradual bank gradient would enhance plant establishment and persistence and also provide greater opportunity for a more diverse and multi-leveled structure of native plants within the riparian corridor. This in-turn provides for more diverse shelter and feeding sites for wildlife. Water quality is also enhanced by the increased water filtration and sediment removal capacity of a wider riparian corridor. In a memo to staff dated June 23, 2009 (attached as Exhibit 11), Staff Coastal Engineer Lesley Ewing addressed the feasibility of laying the rock protection slope back to 3:1. Ms. Ewing states that the proposed revetment should be no steeper than 2:1, but could be less steep, such as 3:1, in locations where conditions allow. The ends of the revetment should transition to the slope of the adjacent natural bank. Along most of the revetment, other than the end transitions, the slope can be laid back to a 2:1 or 3:1 slope, or vary between 2:1 and 3:1 slopes to accommodate site constraints (the distance between the top of the existing revetment and the adjacent commercial development/property varies between 18 feet and 60 feet in width). However, Ms. Ewing also notes that additional hydraulic analysis would be needed for the 3:1 lay back alternative to determine the new 100-year flow conditions. Small adjustments to the bank slope may be needed to keep the flow depths to levels that are below the effective protection level of the bank and slope protection. As such, the Commission finds that given the biological benefits of a wider area of streamside riparian habitat, laying the bank protection slope back to 3:1 where feasible, but no steeper than 2:1, is the environmentally preferred alternative.

Analysis of Proposed Project: The applicant is requesting permanent authorization for an un-engineered, as-built rip rap revetment, consisting of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1:1 to 1.5:1 (H:V) slope and 14-16 feet in height (2-4 foot toe below stream bed). Since the revetment site is almost completely devoid of native riparian vegetation, the applicant is also proposing to revegetate the revetment site to create approximately 0.59 acres of riparian and upland habitat. To vegetate the existing rock revetment, the applicant had, until recently, proposed to secure fascines of willow cuttings to the rip rap with wire. These willow bundles would be oriented at a 45-degree angle, facing downstream, with one end placed into the creek. Once the willow fascines

produced sufficient roots, the interstitial spaces would be filled with sand and fine gravel as a substrate for additional plantings. The applicant also proposes to plant the upland area above the revetment with a mixture of native shrubs and trees, such as mulefat, sycamore, black walnut, cottonwood, and elderberry. In a letter dated January 9, 2009, Impact Sciences Inc. revised the proposed "Vegetation Restoration Plan" to omit the willow fascine element and to instead place willow cuttings that are at least one inch in diameter and six feet long into the interstitial spaces between rocks. Once the willows establish, the interstitial spaces would be filled with sand and fine gravel as a substrate for additional plantings. In researching examples where the concept of securing willow fascines to rock had been used successfully per the request of Commission staff, Impact Sciences found that willow fascines were not appropriate for use atop a rock slope protection and that the willows needed contact with moist soil beneath the rock. After consulting with the Natural Resources Conservation Service, Impact Sciences revised their revegetation plan to instead place willow cuttings into the spaces of the as-built rip rap.

Technical studies prepared for the project have concluded that channel hydraulics of lower Malibu Creek are not significantly impacted by the proposed project and that the project will not cause erosion or other adverse impacts to adjacent banks. The applicant's engineer asserts that the subject bank was steep before and after placement of the emergency rip rap, and its steepness is a natural equilibrium slope for the cut bank. As mentioned previously, Commission Staff Engineer, Lesley Ewing, disagrees with the applicant engineers' assertion that a less steep bank in this location would significantly alter stream hydraulics. In her memo dated January 7, 2009, Ms. Ewing states that based on all information provided by the applicant it appears feasible that the bank slope can be rebuilt at a more gradual slope (Exhibit 11). In fact, laying the revetment back at a more gradual slope and incorporating a more bio-engineered design would substantially reduce turbidity and increase riparian and in-stream habitat value compared to the proposed un-engineered design. In the ten years that the existing revetment has been in place, vegetation has been unable to naturally establish along the majority of the rip rap, most notably along the steepest portions. It is the opinion of Commission Staff Ecologist, Dr. Engel, that site restoration would be more successful if the rip rap revetment were to be laid back at a lesser slope angle, such as 3:1 but no steeper than 2:1, which is more typical for vegetated rip rap stabilization designs.

The existing un-engineered revetment has resulted in adverse impacts to aquatic, semi-aquatic, and terrestrial habitats through loss of cover continuity and shade along the bank. Loss of shade and cover results in loss of protective foliage for animal movement, increased water temperatures, and loss of areas to seek shelter from predators. In addition, without filter fabric stabilizing the bank soils beneath the revetment, sediment transport and turbidity are increased during winter flows. As discussed above, the applicant is proposing to carry out a re-vegetation effort to install willows within the rock rip-rap and to plant the slope above the revetment with riparian plant species. In past permit actions concerning rock rip-rap in streams, the Commission has approved such development only where there is no feasible alternative to protect existing development and where revegetation with willows and other riparian species is incorporated into the actual construction. Such projects can be designed to include planting areas in the interstitial spaces between individual rocks in order to accommodate the planting of

willows and other riparian plants. It is much more difficult to retrofit an existing revetment that has not been designed to accommodate plantings. Given that the revetment proposed here was not designed to accommodate plantings and was constructed at a very steep angle, it is by no means assured that the applicant's proposed revegetation will be successful. While the proposed insertion of willow cuttings into the existing rock revetment may serve to improve stream and riparian habitat value to an extent, the steepness of the revetment and the unconventional methodology for bioengineering it will not ensure that water quality, stability, and habitat value of the bank are all protected consistent with the requirements of Chapter 3 of the Coastal Act. It has not been demonstrated that the proposed project is the least environmentally damaging alternative and is sited and designed to avoid and minimize impacts to the habitat values of the riparian stream corridor of Malibu Creek. As such, the Commission finds that the proposed project is *not* the least environmentally damaging alternative and does not protect Malibu Creek ESHA from significant disruption of habitat values or restore the biological productivity and water quality of Malibu Creek to maintain optimum aquatic populations. The project is therefore not consistent with Section 30230, 30231, 30236, and 30240 of the Coastal Act. In addition, the proposed project cannot be found consistent with Policy 3.34 of the Malibu LCP, which the Commission uses as guidance.

Additionally, Heal the Bay asserts that upon surveying the as-built revetment from Malibu Creek they have found evidence of undercutting and loose rock along the bank, which may indicate that the revetment is unstable. Heal the Bay has provided photographs of portions of the revetment that appear to be exhibiting signs of loosening and undercut. However, staff does not have enough information to confirm that the as-built revetment is being progressively undercut. Regardless, the Commission finds that the temporary, as-built rock revetment is resulting in adverse impacts to Malibu Creek ESHA and its proposed retention will not ensure that water quality, stability, and habitat value of the stream are all protected consistent with the requirements of Chapter 3 of the Coastal Act. The recommended alternative of redesigning and reconstructing the revetment at a more gradual slope and incorporating plantings will serve to ensure that the revetment is properly engineered for maximum function and stability.

An alternative has been identified that would function to adequately protect existing development in the floodplain as well as render the project consistent with the Chapter 3 protections for water quality and ESHA. As discussed previously, this alternative would involve deconstructing the temporary emergency revetment that is in place, and reconstructing the revetment at a more gradual slope along the bank (3:1 (H:V) slope where feasible, however, no steeper than 2:1 (H:V) in any location). This would also include incorporating filter fabric and plants into the reconstructed rip rap design, and revegetating the riparian corridor. The Commission's staff Coastal Engineer, Ms. Ewing, has stated that this alternative is feasible from an engineering standpoint. A more gradual revetment bank slope, such as 3:1, would provide a wider area of streamside riparian habitat if native vegetation is integrated into the rock revetment design. A more gradual bank gradient would enhance plant establishment and persistence and also provide greater opportunity for a more diverse and multi-leveled structure of native plants within the riparian corridor. This in-turn provides for more diverse shelter and feeding sites for wildlife. Water quality is also enhanced by the increased water filtration and sediment removal capacity of a wider riparian corridor.

Therefore, in order to protect Malibu Creek ESHA from significant disruption of habitat values and to restore the biological productivity and water quality of Malibu Creek to maintain optimum aquatic populations, **Special Condition No. Two (2)** requires revised rock slope protection plans demonstrating that the rock slope protection has been re-engineered to be laid back to a 3:1 (H:V) slope for all on-site areas where it is feasible, however, the re-engineered slope shall be no steeper than 2:1 (H:V) in any location. Where a 3:1 slope is determined to be infeasible by a registered engineer for any portion of the revetment, the applicant shall provide evidence, for the review and approval of the Executive Director, demonstrating that a 3:1 slope is either hydraulically infeasible, or spatially infeasible (in other words that there is not sufficient distance between the top of existing revetment and the adjacent commercial development/property to allow for a 3:1 slope) given site characteristics. However, the toe of the slope protection shall not extend further into the creek than currently exists. If determined feasible, the footing portion of the rock slope protection may remain in place and only the upper portion of the rock shall be laid back. **Special Condition No. Two (2)** also requires that a geotextile filter fabric with holes for willow plantings be placed on the graded slope of the bank prior to rock placement in order to stabilize soils. **Special Condition No. Three (3)** requires revised revegetation plans for the re-engineered bank protection that incorporates live willow cutting stakes among the rock voids, making sure the stakes penetrate the fabric filter and underlying soil. Installing willow cutting into the soil as the revetment is being constructed is a typical design for bioengineered rock slope protection, as it ensures the vegetation has a good foundation to root in throughout the slope. Pursuant to the recommendations of Commission Ecologist, Dr. Engel, the interstitial spaces in the rip rap shall be partially filled with a fine gravel, sand, and soil combination, and planted with appropriate native plants. In addition to willow, Dr. Engel recommends that alkali bulrush (*Scirpus maritimus*), yerba mansa (*Anemopsis californica*), creeping wild rye (*Leymus triticoides*), and mugwort (*Artemisia douglasiana*) shall be added to the plant palatte for revegetation of the revetment in order to add to the species diversity within the restored riparian corridor. Lastly, to ensure that the creek bank south of the rock revetment is also stabilized and revegetated with a rich mix of riparian plant species, Special Condition 3 requires that mugwort (*Artemisia douglasiana*), mulefat (*Baccharis salicifolia*), and California wild rose (*Rosa californica*) be added to the plant palatte of the applicant's proposed restoration plan. The revised plans required by **Special Conditions 2 and 3** will serve to minimize impacts to the habitat values of the riparian stream corridor of Malibu Creek to the maximum extent feasible.

To ensure that the revegetation plan is successful and that the subject area is adequately revegetated, **Special Condition No. Four (4)** requires implementation of the revised revegetation plan, monitoring for a five year period, submission of a Revegetation Monitoring Report at the end of the five year period for the review and approval of the Executive Director, and supplemental planting/seeding be implemented as necessary, to ensure successful restoration that is in compliance with the specified guidelines and performance standards outlined in the revegetation plan.

Staff has confirmed that there is a chain link fence enclosing a stockpile area and various structures at the northern portion of the property. The chain link fence runs parallel to the creek for several hundred feet, and is only a few feet from the top of bank of the subject

rock revetment. It appears that the northern-most approximately 150 feet of the as-built/proposed revetment bank has a fence within a few feet of it. It appears this development would interfere with implementation of the project and should be removed. As such, the Commission finds that removal of any fencing or unpermitted development along the bank that interferes with the re-engineered revetment required as part of Special Condition 2, or the Revised Revegetation Plan required as part of Special Condition 3, is required, as detailed in Special Condition 2.

Construction activities could disturb raptors or other sensitive bird species if they are nesting in or close to the project site. In order to minimize any construction impacts to raptors and other native birds, the Commission finds it necessary to require the applicant to survey the area within 500 feet of the construction zone to detect the nests of any raptor or sensitive bird species, 30 days prior to the commencement of construction. If any such nests are found, measures must be taken to avoid impacts. These requirements are set forth in **Special Condition No. Fourteen (14)**.

Although the conditions described above render the project sufficiently stable to satisfy the requirements of Section 30253, no project is wholly without risks. Due to the fact that the project is located in an area subject to an extraordinary potential for damage or destruction from erosion and flood flows, those risks remain substantial here. If the applicant nevertheless chooses to proceed with the project, the Commission requires the applicant to assume the liability from these associated risks. Through the assumption of risk condition, the applicant acknowledges the nature of the flood flow and erosion hazard that exists on the site and that may affect the safety of the development. Therefore, **Special Condition No. One (1)** is required, as determined in the findings above, to assure the project's consistency with Section 30253 of the Coastal Act and as a response to the risks associated with the project.

At the time of installation, the proposed rock was placed outside the stream channel and within the footprint of the excavated/eroded stream bank following a severe El Nino storm event. Therefore, no fill of wetland areas occurred at the time of installation. However, if it is determined that the toe portion of the revetment must be reconstructed pursuant to the revised bank protection plans specified in Special Condition No. 2, the revised revetment toe may not extend further into the creek than currently exists, as required in **Special Condition No. Two (2)**. Extending the toe of the revetment streamward would constitute fill of wetlands for flood control, which is not an allowable use of wetland fill under the requirements of Section 30233 of the Coastal Act.

The project, as revised, would involve some soil disturbance and vegetation removal along the bank during the revetment re-construction. The work will take place along a bank that has obviously been disturbed over the years, both by the erosive forces of Malibu Creek and by disturbance from adjacent development in the floodplain. As such, the subject bank is not considered ESHA. However the project area is adjacent to the Malibu Creek channel that is considered to be ESHA and the potential exists for impacts to the water quality of the creek, particularly from erosion of sediment from the site. Although implementing the revised project will ultimately enhance the habitat value of lower Malibu Creek, there is potential for <u>temporary</u> adverse impacts to water quality and biological productivity of Malibu Creek through the release of sediment. Soil disturbance

and vegetation removal adjacent to the creek could result in the discharge of sediment into Malibu Creek, causing increased turbidity and adversely affecting fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water, and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. Sediments may physically alter or reduce the amount of habitat available in a watercourse by replacing the pre-existing habitat structure with a stream-bottom habitat composed of substrate materials unsuitable for the pre-existing aquatic community. In addition, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles. It is particularly critical that these impacts are avoided given the presence of endangered southern steelhead and tidewater goby in Malibu Creek and Lagoon during certain times of the year.

Conducting work for the revised rock slope protection plan when stream flows are minimal during the dry season will minimize erosion into the creek, associated turbidity, and will minimize the potential for disturbing local amphibians and fishes. As such, **Special Condition No. Five (5)** outlines construction timing and best management practices to be implemented during all approved work activities. In particular, grading and rock slope protection work shall be conducted in the dry season, within the months of June through October to avoid tidewater goby peak spawning period (April-May) and southern steelhead migration period (winter season).

If it is determined that the approved revised rock slope protection plans will require work within stream waters, **Special Condition No. Six (6)** requires that the applicant submit a dewatering plan, for the review and approval of the Executive Director, and evidence that the dewatering plan has been approved by the Regional Water Quality Control Board (RWQCB), California Department of Fish & Game, and California State Parks, or evidence that such approvals are not required. In order to minimize potential impacts to tidewater gobies and southern steelhead, **Special Condition No. Five (5)** also limits grading and rock slope protection work to the dry season, and particularly the months of June through October to avoid tidewater goby peak spawning period (April-May) and southern steelhead migration period (winter season).

If the revised project requires construction dewatering or work within the waters of Malibu Creek, measures to protect sensitive aquatic species are necessary. Therefore, **Special Condition No. Seven (7)** requires that a qualified resource specialist survey for sensitive aquatic species (tidewater gobies and steelhead trout) within 100 feet of the project area prior to commencement of construction site dewatering work. If sensitive aquatic species are present, the qualified resource specialist and a crew working under his/her direction shall move, by hand, sensitive species from the area to be dewatered to safe locations elsewhere along the reach of Malibu Creek. The qualified resource specialist shall inspect the dewatered areas and construction site regularly and be present when the dewatering device is removed. The qualified 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 applicant shall be required to revise the project to adequately mitigate such

impacts, which shall be processed as an amendment to this coastal development permit or a new coastal development permit.

In addition, the revised project may require review by other regulatory agencies such as RWQCB, U.S. Army Corps of Engineers, California Dept. of Fish & Game, or City of Malibu. Therefore, **Special Condition No. Eight (8)** requires the applicant to obtain all other permits that may be necessary for the approved project.

To ensure that the permitted bank protection is maintained in its approved state and future repairs or additions to the approved structure receive the appropriate approvals, **Special Condition No. Nine (9)** requires the applicant to contact the Executive Director for a determination of whether a coastal permit or permit amendment are legally required when it is apparent that repair and maintenance is necessary. **Special Condition Ten (10)** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and thereby provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

In order to ensure that the project, as required to be revised, is implemented in a timely manner, **Special Condition Nos. Twelve (12) and Fifteen (15)** require that the applicant satisfy all conditions of this permit which are prerequisite to the issuance of this permit within 180 days of Commission action and implement and complete the approved project within 18 months of issuance of this coastal development permit. The Executive Director may grant additional time for good cause.

Finally, in order to ensure that the terms and conditions of this permit are adequately implemented, **Special Condition Eleven (11)** authorizes Commission staff to enter onto the property (subject to 24 hour notice to the property owner) to undertake site inspections for the purpose of monitoring compliance with the permit.

As such, the Commission finds that, with the mitigation measures discussed above, the project will (a) protect the ESHA from any significant disruption of habitat values, (b) not significantly degrade adjacent ESHA, (c) be compatible with the continuance of the habitat area, (d) restore the biological productivity and water quality of Malibu Creek to maintain optimum aquatic populations, and (e) minimize risks to life and property and assure stability. Therefore, the project, as conditioned, is consistent with Section 30230, 30231, 30233, 30236, 30253, and 30240 of the Coastal Act. In addition, the project, as conditioned, is consistent with Policy 3.34 of the Malibu LCP, which the Commission uses as guidance.

C. 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 natural land forms, to be visually compatible***

with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

Section 30251 of the Coastal Act requires scenic and visual qualities to be considered and preserved. Section 30251 also requires that development be sited and designed to protect views of scenic areas, minimize alteration of landforms, and be visually compatible with the surrounding area.

The project is located along a 500-foot section of the west bank of lower Malibu Creek, approximately 300 feet upstream from Pacific Coast Highway and Malibu Lagoon State parkland. The project site is located on a narrow, approximately 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek and State parkland to the east. The subject site is visible from State parkland to the east, as well as Pacific Coast Highway to the south, a designated scenic highway.

The proposed as-built rock revetment is composed of light-colored granite boulders that was not constructed to encourage natural recruitment of riparian vegetation. As such, the stream bank is almost entirely devoid of natural vegetation that would have acted to screen views of the armored stream bank from public viewing areas. While the proposed insertion of willow cuttings into the existing revetment may serve to soften public views of the rock to an extent, it has not been demonstrated that the steepness of the revetment and the unconventional methodology for bioengineering it will maximize revegetation success. As discussed above, an alternative project design is required to render the project consistent with the Chapter 3 protections for water quality and ESHA. The revised revetment design, will result in the slope of the revetment being 3:1 where feasible and no steeper than 2:1, and is required to utilize filter fabric, and to incorporate planting areas in the interstitial spaces between the rocks. Finally, this alternative will include the revegetation of these planting areas with willows or other riparian plant species, and the planting of the area adjacent to and above the revetment with a diverse mix of riparian and upland native plants. As conditioned, the revised revetment will be vegetated and the area landward of the revetment will be vegetated with plants appropriate for the riparian and upland areas of the project site. This will reduce the reflective effect of the light colored rocks and soften, if not obscure, the view of the revetment from Malibu Creek State Beach and other public viewing areas.

The following special conditions are required to assure the project's consistency with Section 30251 of the Coastal Act:

Special Condition 2. Revised Bank Protection Plans
Special Condition 3. Revised Revegetation Plans
Special Condition 4. Revegetation Implementation and Monitoring

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30251 of the Coastal Act.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

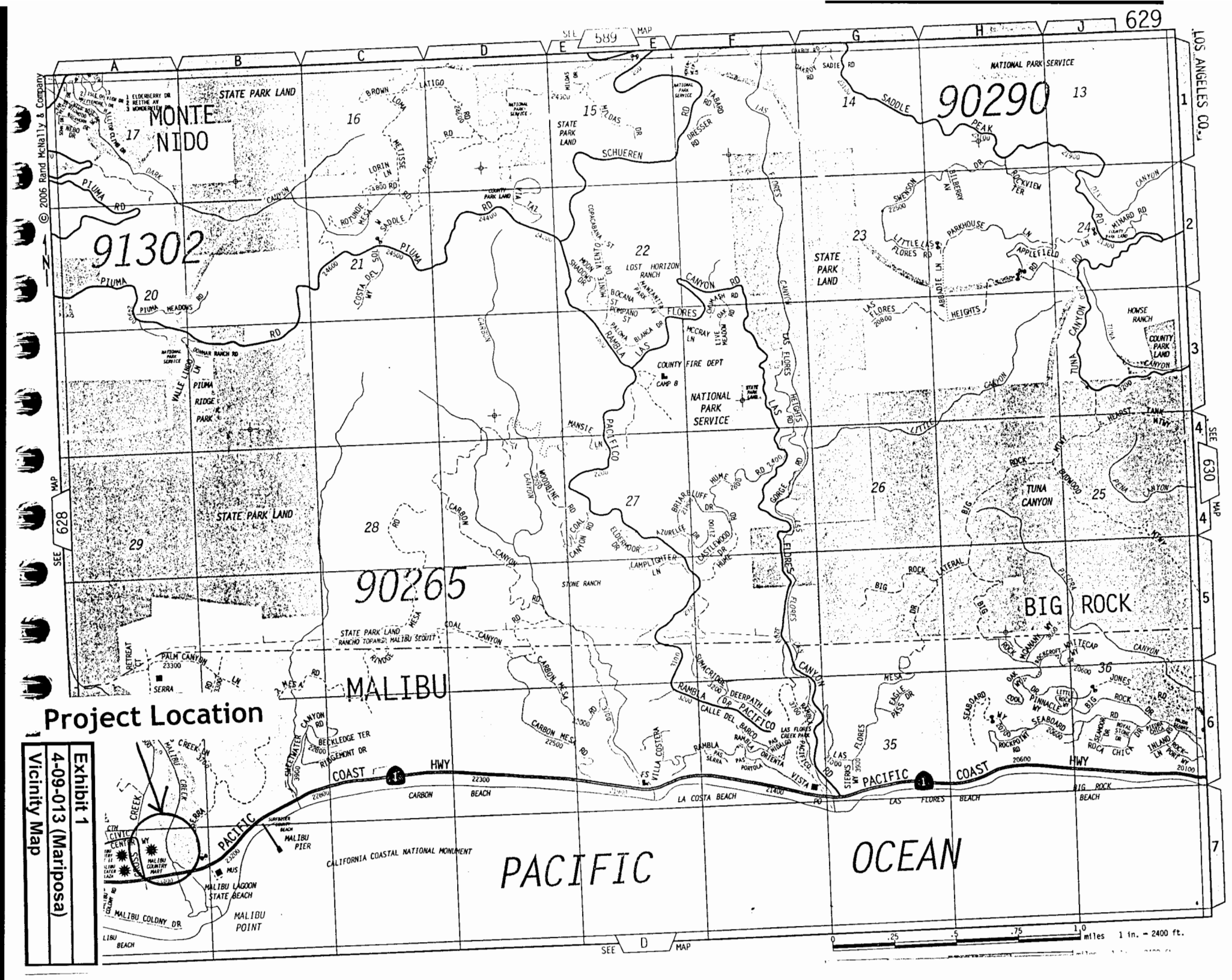
Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California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

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, project alternatives and mitigation measures have been considered and incorporated into the project. Five types of mitigation actions include those that are intended to avoid, minimize, rectify, reduce, or compensate for significant impacts of development. Mitigation measures required to minimize impacts include requiring best management practices (water quality and ESHA), limitations on construction timing (water quality and ESHA), revised revegetation plans (ESHA, water quality, visual resources), revised plans (ESHA, water quality, visual resources), and dewatering plan with aquatic species protection measures (ESHA).

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

Special Conditions 1 through **15**

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 project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.



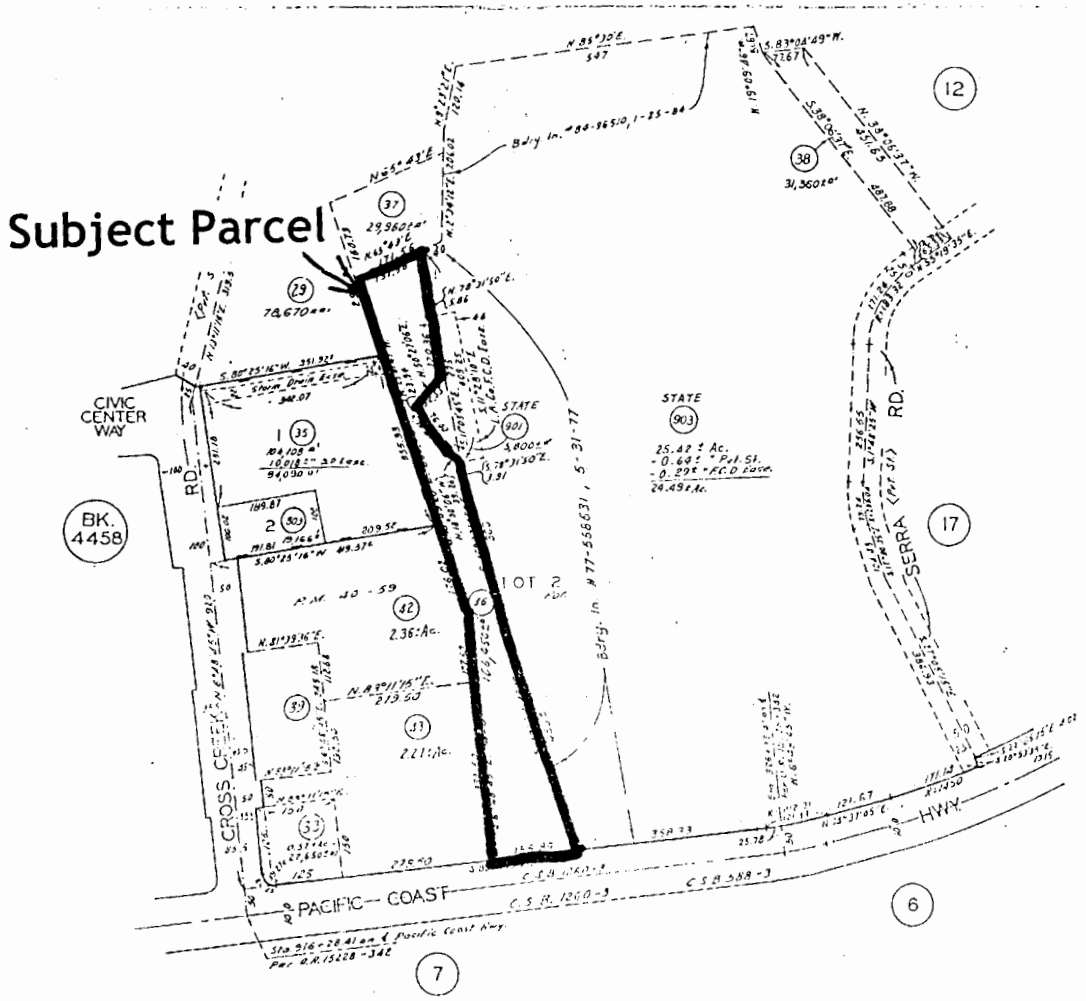
Project Location

Exhibit 1
4-09-013 (Mariposa)
Vicinity Map

4452 | 11

SCALE 1" = 200'

1992



PARCEL MAP _ _ P. M. 166 - 6 - 7

LAND OF MATTHEW KELLER IN THE RANCHO TOPANGA MALIBU SEQUIT R.F. 534

CODE 10850

LOC. PREV. ASSMT SEE: 4452 - 11 & 12

ASSESSOR'S MAP COUNTY OF LOS ANGELES, CALIF.

Exhibit 2
4-09-013 (Mariposa)
Parcel Map

Exhibit 3
4-09-013 (Mariposa)
Aerial View (1 of 2)

Exhibit 3
4-09-013 (Mariposa)
Aerial View (2 of 2)

Exhibit 4
4-09-013 (Mariposa)
Site Photos (1 of 2)

Exhibit 4
4-09-013 (Mariposa)
Site Photos (2 of 2)

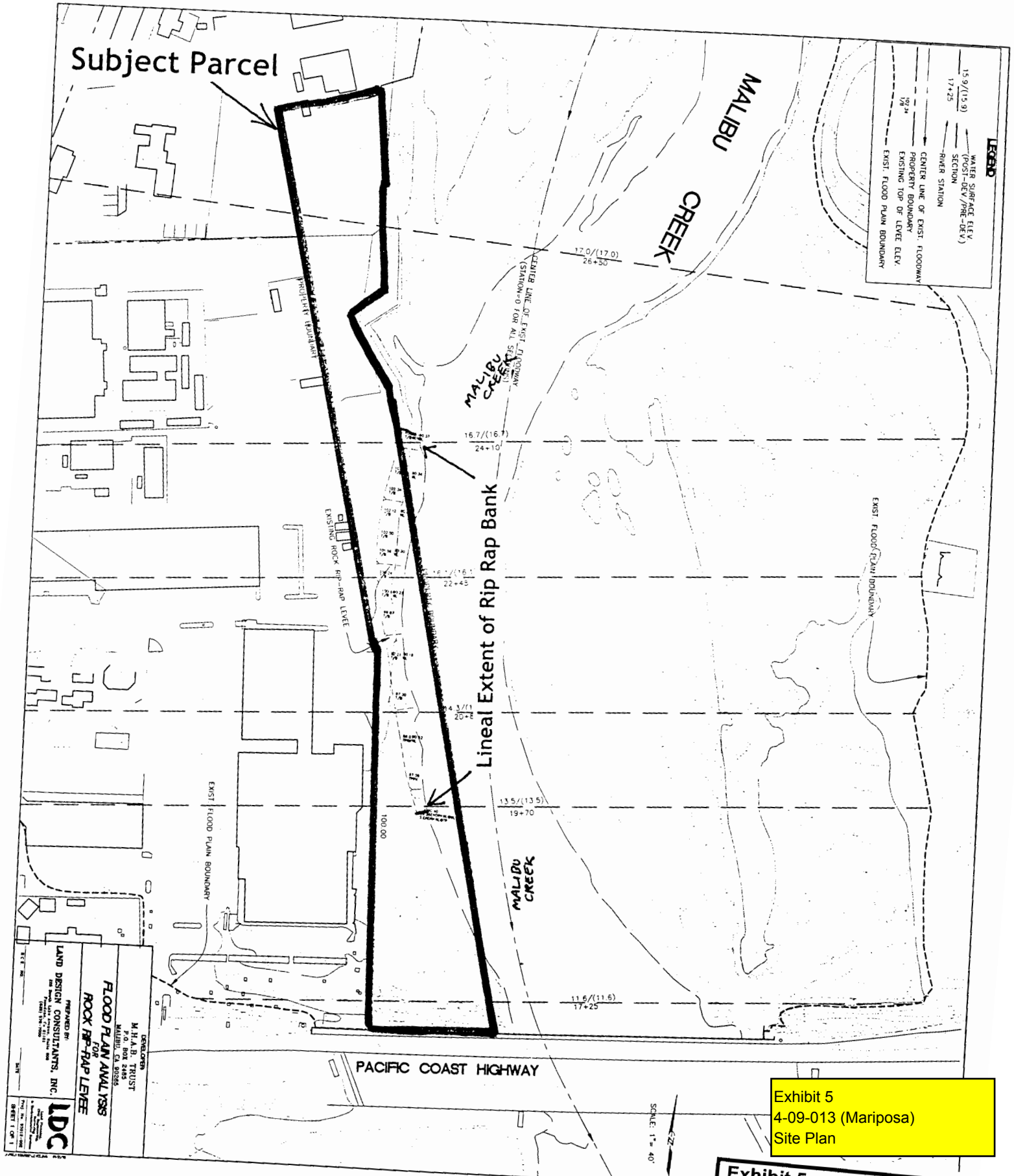


Exhibit 5
4-09-013 (Mariposa)
Site Plan

Exhibit 5
4-09-013 (Mariposa)

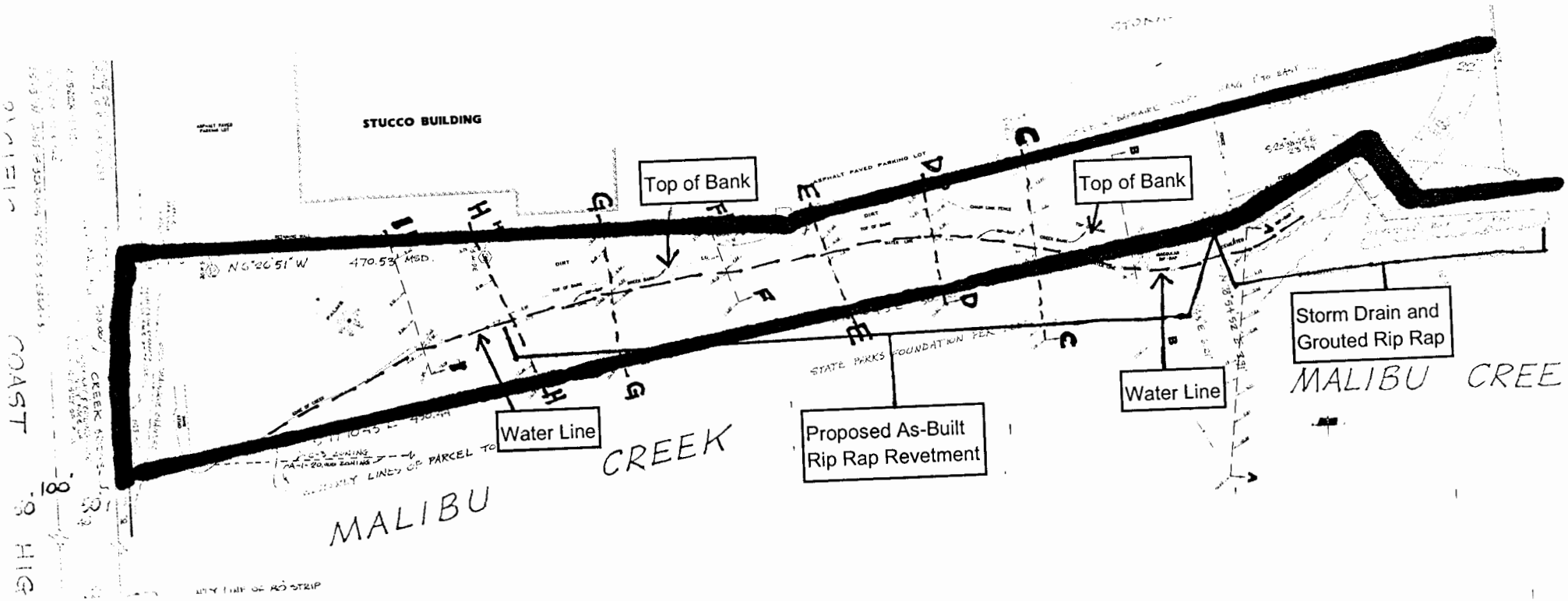
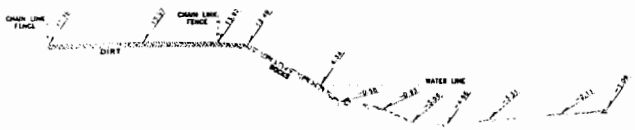


Exhibit 6
4-09-013 (Mariposa)
Surveyed Site Plan with Cross Sections

SECTION VIEW "C-C"



65% Slope
Top of Bank to Property Line: 45 ft.

SECTION VIEW "D-D"

81% Slope
Top of Bank to Property Line: 19 ft.

SECTION VIEW "E-E"

85% Slope
Top of Bank to Property Line: 18 ft.

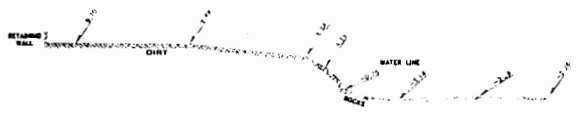
SECTION VIEW "F-F"

73% Slope
Top of Bank to Property Line: 22 ft.

SECTION VIEW "G-G"

100% Slope
Top of Bank to Property Line: 35 ft.

SECTION VIEW "H-H"



75% Slope
Top of Bank to Property Line: 58 ft.

SECTION VIEW "I-I"

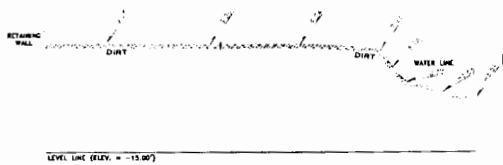
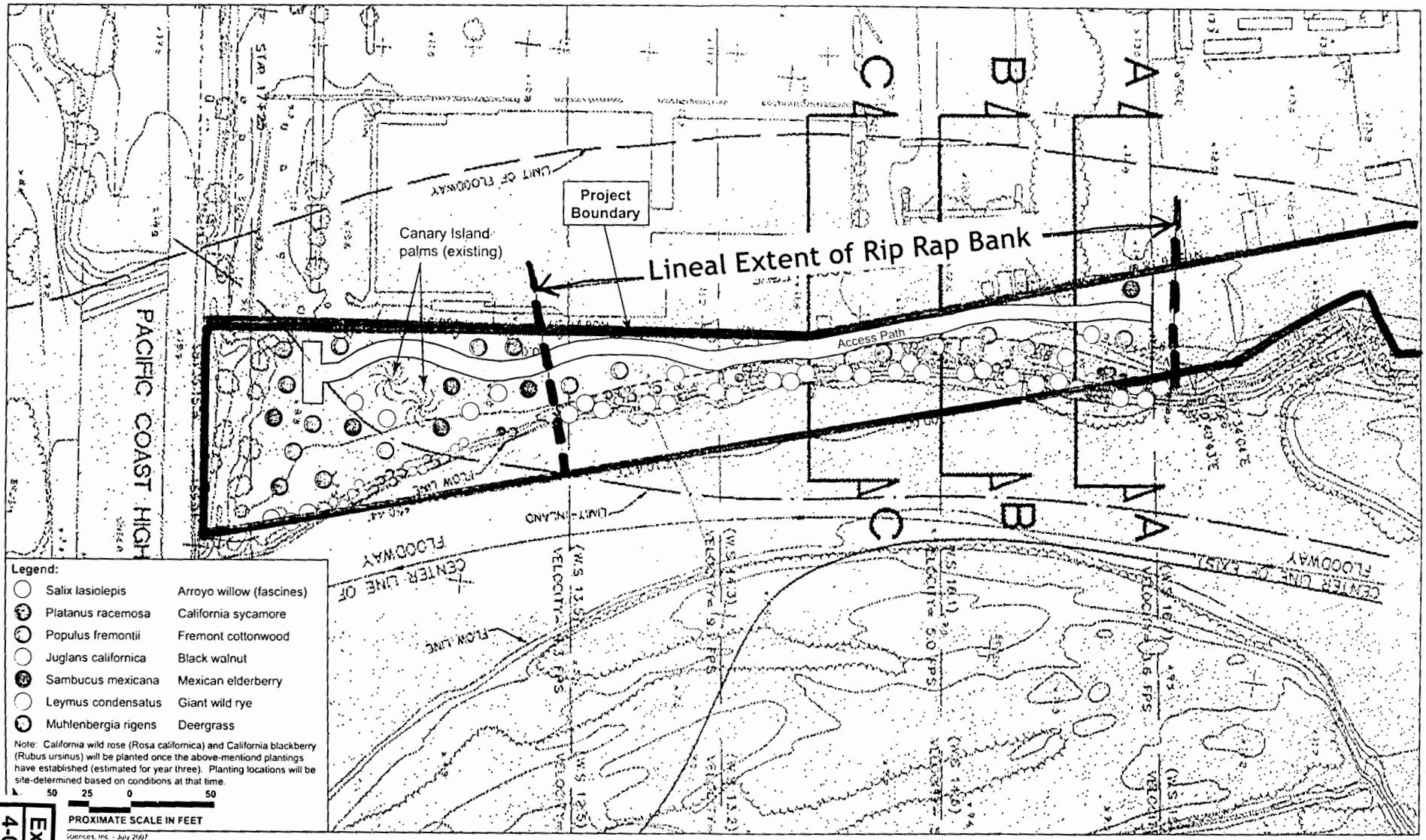


EXHIBIT 6

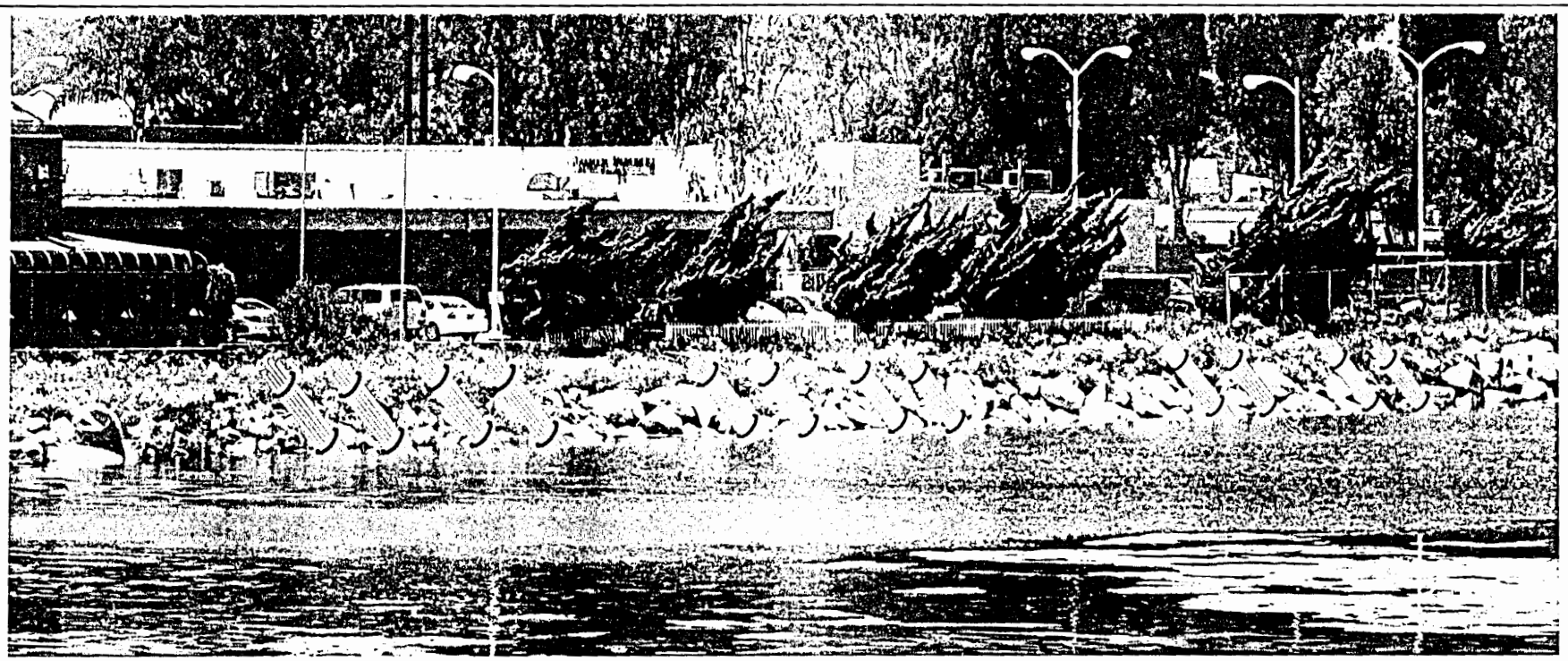


Sciences, Inc - July 2007

FIGURE 4

Planting Plan

Exhibit 7
4-09-013 (Mariposa)
Proposed Planting Plan



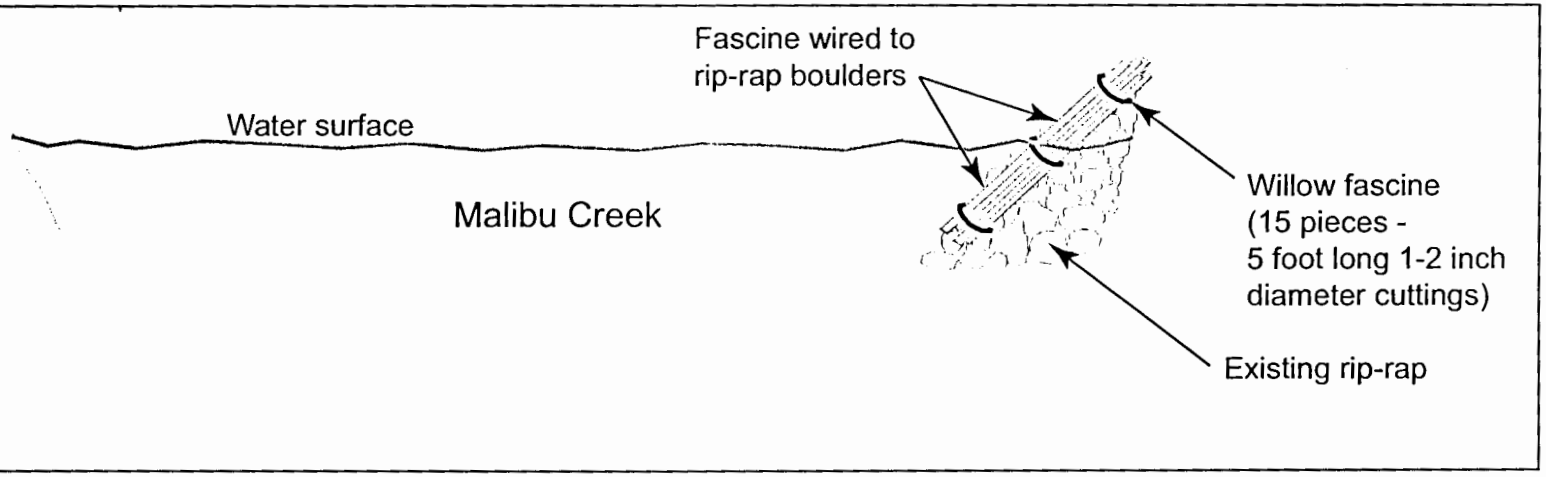


Exhibit 8
4-09-013 (Mariposa)
Willow Fascine
Schematic

O SCALE

ences - July 2007

FIGURE 5

Willow Fascine Schematic

IMPACT SCIENCES | 20 YEARS

January 9, 2009

California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001-2801

Attn: Deanna Christensen

Re: Modification to the Mitigation Plan for Mariposa Land Company at Malibu Creek.

Dear Ms. Christensen:

Impact Sciences proposes to modify one aspect of the "Vegetation Restoration Plan – Malibu Creek", the restoration plan that was submitted as part of the application package for Malibu Land Company's pending final permit for bank stabilization along Malibu Creek. Specifically, Impact Sciences now proposes to use willow cuttings, rather than using the willow fascines fastened to the riprap.

In discussing the establishment of willows in riprap, particularly with Susan Litteral, NRCS Agricultural Engineer in the Templeton CA Field Office and Charles Davis, the State Conservation Engineer, the Natural Resources Conservation Service has been planting willows in riprap for over 25 years. According to Mr. Davis, "The key is the willow roots need to be in water." Mr. Davis provided the attached document entitled *"History of NRCS Streambank Protection Projects with Rock Slope Protection Completed under the NRCS Emergency Watershed Protection Program"*

Ms. Litteral indicated that fascines were most useful in establishing willows to protect otherwise unprotected banks where the fascines could be placed in contact with the soil. However, for areas already protected by riprap, particularly where the riprap had sufficient interstitial spaces between the riprap, and into the soil where it can be reached between the riprap, that cuttings should be placed through the riprap and into moist soil. Ms. Litteral, who has a number of project in San Luis Obispo County, recommended this method, including auguring holes for the cuttings, or using a water jet to excavate holes to place the cuttings into. Ms. Litteral also mentioned that typically, the initial growth of willow cutting planted during the winter is to have one or more leaves emerge in early spring, and for the cutting to then have root growth for a year or so before additional leaves emerge.

Therefore, we propose to modify the plan by eliminating the willow fascines, replacing them with willow cuttings, placed into the interstitial spaces

Exhibit 9
4-09-013 (Mariposa)
Amended Willow Planting Plan Memo

riprap, and into the soil where the soils is sufficiently moist on a permanent basis. Willow cuttings, which shall be at least one inch in diameter and six feet long, shall be planted at an average of one cutting per eight linear feet (63 - 65 cuttings), with some areas planted more closely than other areas to give a more natural appearance. The exact location of each willow cutting shall be determined by the project biologist.

All other parts of the "Vegetation Restoration Plan" remain unchanged. IF you have any questions, please call me at (805) 437-1900.

Sincerely,
Impact Sciences, Inc.

Larry Lodwick

Larry Lodwick
Associate Prinicpal

Cc: Grant Adamson
Daryl Koutnik

ex. 9

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

EMERGENCY PERMIT

February 20, 1998

Applicant: **Grant Adamson (Mariposa Land Company)** **Permit No.: 4-98-024-G**

Project Location: **3728 Cross Creek Road (west bank of Malibu Creek)**

Work Proposed: **Placement of rock rip-rap along 450 feet of the west bank of Malibu Creek to protect property from erosion. The revetment will use 1,500 tons of .5 to 8 ton boulders and will be approximately 14 to 16 feet in height (2-4 foot toe below stream bed).**

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from the information submitted that an unexpected occurrence in the form of severe stream bank erosion resulting in a threat to a parking area and property requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows; and

(c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the reverse.

Very Truly Yours,

Peter M. Douglas
Executive Director

Chuck Damm

By: Chuck Damm
Title: Senior Deputy Director

Exhibit 10
4-09-013 (Mariposa)
Emergency CDP 4-98-024-G

CONDITIONS OF APPROVAL:

1. The enclosed form must be signed by the property owner and returned to our office within 15 days.

2. Only that work specifically described above and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.

3. The work authorized by this permit must be completed within 30 days of the date of this permit.

4. Within 60 days of the date of this permit, the permittee shall apply for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the Director.

5. In exercising this permit the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.

6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies.

7. The regular coastal development permit application shall include an analysis of all other alternatives for shoreline, bluff, or stream bank protection prepared by a qualified engineer.

IMPORTANT

Condition #4 indicates that the emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a coastal permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly.

If you have any questions about the provisions of this emergency permit, please call the Commission Area office.

Enclosures: 1) Acceptance Form; 2) Regular Permit Application Form

cc: Local Planning Department

File: gm/98-024g

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

January 7, 2009

TO: Deanna Christensen, Coastal Program Analyst

FROM: Lesley Ewing, Coastal Engineer.

SUBJECT: CDP# 4-98-024; Lower Malibu Creek West Bank Revetment

I have reviewed the Preliminary Engineering Design Study (Pacific Advanced Civil Engineering (PACE), May 25, 2007) and the Malibu Creek Survey (Grimes Surveying and Mapping, Inc. surveyed September 15, 2008) and had discussions about this project with both Commission staff and Mr. Dave Jaffe, PACE Project Engineer.

It is my understanding that in 1998 rock was placed along the western bank of the lower Malibu Creek as an emergency measure to address a situation of on-going erosion during a high-flow event, likely in association with one of the severe El Niño storms. The property owner has been attempting to make permanent some form of bank stabilization that will protect the bank from future erosion. And, while the need for bank stabilization has been demonstrated, staff has been requesting that the applicant develop some alternative permanent bank stabilization alternatives that will allow for the propagation of native vegetation to reduce some of the impacts from stabilized banks.

The as-built stabilization is quite steep, approaching 1:1 in some locations. The applicant's engineer asserts that the steepness of the bank stabilization is intended to mimic the natural bank cut that developed on the outer bank of the creek bend. However, this steepness does not readily allow for plants to colonize in the voids between the rocks and, from inspection of photographs of the stabilized bank it appears that most of the bank is void of vegetation.

The current bank and stabilization can feasibly be recontoured to achieve a less steep slope. This would require that the revetment be disassembled from the top, the bank be sloped back, and rock be placed again along the bank at a more gradual slope. The Preliminary Engineering Design Study by PACE (May 25, 2007) asserts that laying the top portion of the existing revetment back at a 2:1 (h:v) slope would result in increased turbidity. But, based the provided information, no evidence has been submitted to support this assertion. There is the potential for some temporary turbidity during construction; however this could be minimized through project scheduling, good work practices and implementation of best management practices. If the revetment were to be reconstructed along the bank at a more gradual slope, a bottom layer of filter fabric should be installed to reduce soil piping and reduce turbidity from high flow events. While it may be necessary to cut root holes into the filter fabric, the soil loss through these openings in the bottom layer would not be significant. Additionally, turbidity should be greatly reduced from the current revetment with rock covering a bare soil slope with no fabric filter layer

at all. The applicant would need to prepare a revised engineering design for the new revetment. Also management plans would be needed to control silt and turbidity and schedule the revetment rebuilding to minimize impacts to coastal resources. Based on all information provided by the applicant, it appears feasible that this slope can be rebuilt at a more gradual 2:1 slope.

I will be happy to further discuss this project with you at your convenience, or to discuss it with the applicant's engineers. I can be reached at the main office number above, by my direct line (415/904-5291) or by e-mail (lewing@coastal.ca.gov).

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105- 2219
VOICE AND TDD (415) 904- 5200
FAX (415) 904- 5400

June 22, 2008

TO: Deanna Christensen, Coastal Program Analyst
FROM: Lesley Ewing, Sr. Coastal Engineer
SUBJECT: Lower Malibu Creek West Bank, Emergency Protection

As we have discussed several times in phone conversations, protection of the west bank of Lower Malibu Creek poses several difficulties. The existing rock slope protection is not optimal for bank protection or for habitat enhancement. I understood the Commissioners to be recommending a more vegetated creek bank that could use some rock for stability. The proposed rock slope armoring should be no steeper than about 2:1, but in some locations, could be less steep, for example, 3 to 1, where conditions would allow. There are several constraints to the more gradual revetment slope. At the ends, where the revetment transitions to the natural bank, the slope of the revetment should transition to the slope of the natural bank. Along most of the revetment, other than the end transitions, the slope can be a uniform 2:1 or 3:1 or can vary between these slopes to accommodate parts of the upper bank that are not wide enough for a 3:1 slope, where the added slope would encroach into the maintenance path, or other possible constraints. Thus, while the mid-section of the revetment may be the most appropriate location for the more gradual slope, it may not be the part of the revetment that can easily accommodate the greater bank area.

Modifications to the bank slope will also result in small changes to the creek hydraulics. The applicant's engineer has modeled a 2:1 bank slope and the existing rock slope design and provided us with the expected flow depths that would occur from each option for a 100-year flood event. The flood depths vary slightly for each of these alternatives for most of the channel length. At the downstream end of the proposed project, from section 1616.66 through section 1568.5 (a section at least 48 feet long) flow depth for the emergency rock slope protection would be from +0.3 to +0.6 feet higher than the 2:1 slope. From section 1531.5 through section 1500 (a section at least 31.5 feet long), flow depth for the 2:1 slope would be 0.9 to 0.5 feet higher than for the emergency rock slope protection. Overall, the 2:1 slope would have flow depths +0.1 feet higher than the emergency rock protection slope. It may be useful to make small adjustments the revetment height if increased flow heights would exceed bank height. It is feasible to use a 2:1 bank slope, and a more gradual slope in some locations.

If the slope is to be reduced to 3:1 and vegetation is to be added for most of the project length, additional hydraulic analysis will be needed to determine the new 100-year flow conditions. Small adjustments to the bank slope may be needed to keep the flow depths to levels that are below the effective protection level of the bank and slope protection. Conversely, small adjustments to the bank slope protection may be needed to improve the effectiveness of the slope protection. Once an overall slope concept plan is developed, it would be important to check the hydraulic characteristics of this concept plan.

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

MEMORANDUM

FROM: Jonna D. Engel, Ph.D.
Ecologist

TO: Deanna Christensen
Coastal Program Analyst

SUBJECT: Malibu Creek Vegetation Restoration Plan, CDP# 4-98-024; Lower Malibu Creek West Bank Revetment

DATE: January 9, 2009

Documents Reviewed:
Impact Sciences, Inc. August 2007. Vegetation Restoration Plan – Malibu Creek. Prepared for the Mariposa Land Company, Malibu, California.

I have reviewed Impact Sciences "Vegetation Restoration Plan – Malibu Creek" for the nearly 500 feet of rip rap placed, under emergency permit conditions, on the west side of Malibu Creek to address the severe erosion caused by the 1997-1998 winter and spring high stormwater flows. Approximately 0.25 acre of land was lost that winter, creating a steep cut bank. Rip rap was placed on the bank to prevent further erosion from impinging on Mariposa Land Company property. Impact Sciences estimates that the rip rap slope angle is approximately 1:1 and that it stands 15 in height. A primary goal of the restoration plan is to plant the rip rap that remains bare as well as the undeveloped area between Malibu Creek and the Cross Creek Shopping Center to create 0.585 acre of native riparian habitat. To plant the rip rap, fascines of willow cuttings are proposed to be fastened along the length of the revetment to begin to fill in the interstitial spaces in order to create overhanging vegetation adjacent to Malibu Creek. The restoration plan also states that "interstitial spaces will be filled with sand or fine gravel as a substrate for additional plantings (estimated to take place during year three)."

Direct observation and photos demonstrate that along the bank areas where there is a less than 1:1 slope angle, vegetation has been able to naturally recruit among the rip rap. However, plants are unable to establish on the majority of the rip rap which stands at a steep 1:1 slope angle. It is my opinion that the streambank restoration would be more successful if the proposed rip rap were to be laid back at a lesser slope angle, such as 2:1, which is more typical for vegetated rip rap bank stabilization designs.

Lesley Ewing, Commission Coastal Engineer, has reviewed this project and stated that it is feasible from an engineering standpoint to recontour the current bank and

Exhibit 12
4-09-013 (Mariposa)
Dr. Engel Memo

revetment to attain a less steep slope (e.g. 2:1) that will support native riparian vegetation[1]. Ms. Ewing also points out that placement of a bottom layer of fabric filter under the rip rap will reduce soil piping and turbidity from high flow events while acknowledging that root holes in the fabric filter may be necessary to facilitate plant establishment. I am in agreement with Ms. Ewing's opinion that fabric filter should be placed under the rip rap with root holes for plants. I also recommend that willow cuttings be stuck directly into the interstitial spaces within the rip rap throughout the area. and that interstitial spaces be partially filled with a fine gravel, sand, soil combination..

The plant palette for the upland area, surrounding the rip rap, is provided in Table 2 of the proposed restoration plan and consists of California sycamore, Freemont cottonwood, black walnut, Mexican elderberry, arroyo willow, mulefat, giant wild rye, deergrass, California wild rose, and California blackberry. In addition to these species, I recommend that mugwot, *Artemisia douglasiana* and yerba mansa, *Anemopsis californica* be added to the proposed plant palette for the rip rap and upland area in order to add to the species diversity within the riparian corridor.

Impact Science's vegetation restoration plan provides appropriate plans for mitigation site preparation, non-native plant control and eradication, irrigation, plant maintenance and weeding. Impact Science states that "the site shall attain 75 percent cover after three years and 90 percent cover after five years for the life of the project." In addition they state that "all plantings shall have a minimum of 80 percent survival the first year and approaching 100 percent survival at the end of the five-year monitoring period." The goals and objectives of the mitigation project will be met by adhering to these performance standards. Impact Science's plan includes a well designed monitoring program that will be conducted for five years and will include annual reports. They have taken into consideration unforeseen situations by including an adaptive management and contingency measures section in their report by which they will be able to address any problems that may arise.

In conclusion, it is my opinion that a less steep revetment slope than is proposed, in conjunction with incorporating filter fabric and willow stakes into the reconstructed riprap design, would be more likely to result in successful riparian restoration along this stretch of lower Malibu Creek bank.

[1] Ewing, L. January 7, 2009. CDP# 4-98-024; Lower Malibu Creek West Bank Revetment Memorandum to Deanna Christensen, Coastal Program Analyst.

ex. 12

EXHIBIT 13
4-09-013

a. Letter from Dr. J. Robert Hatherill, dated August 11, 2008

b. Letter from Ron Schafer, California Dept. of Parks and Recreation District Superintendent, dated November 14, 2008

c. Letter from Heal the Bay, dated July 2, 2009

d. Letter from Heal the Bay, dated June 23, 2009

e. Letter from Malibu Surfing Association, dated February 3, 2009

f. Letters from Mark Abramson, Santa Monica Baykeeper, dated February 3, 2009 and April 7, 2009

g. Letter from Sandra Albers, Santa Monica Mountains Resource Conservation District, dated April 7, 2009

h. Letter from the applicant's attorney, Sherman Stacey, dated March 31, 2009

Exhibit 13
4-09-013 (Mariposa)
Correspondence

August 11, 2008

Ms. Deanna Christensen
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

RE: CDP Application Number 4-98-024

Dear Ms. Christensen,

It is a pleasure to write this letter in support of the existing creek bank stabilization effort and proposed mitigation of the west bank of Malibu Creek. In addition to numerous site visits to the lower Malibu Creek study area, I have extensively reviewed the "Lower Malibu Creek Emergency Revetment Geomorphic, Bank Erodibility, and Alternatives Analysis prepared by Pacific Advanced Civil Engineering, (PACE) and the Malibu Creek Vegetative Restoration Plan prepared by Impact Sciences. The studies identify the best action plan for flood- bank protection, creek hydraulic suitability, costs, re-vegetation and maintaining minimal environmental impacts. As a former faculty member of the Environmental Studies Program, University of California at Santa Barbara, I am qualified to review the mitigation measures presented herein.

The goals of the mitigation plan will substantially improve and:
- Protect the Western bank along Lower Malibu Creek from further erosion;
- Re-vegetate the area to create a native flora riparian habitat and;
- Improve the aesthetics of lower Malibu Creek.

The enhanced riparian corridor will include the installation of fascines of arroyo willow along the revetment perimeter to create overhanging vegetation adjacent to lower Malibu Creek. This action will likely attenuate the steep slope of the revetment and will be aesthetically pleasing.

Removing non-native species and planting a mixture of native shrubs and trees will improve the riparian habitat value. This action will increase the habitat area for the tidewater goby (Eucyclogobius newberryi), as the shaded areas of the creek are the preferred habitat of the tidewater goby. The extensive planting of native vegetation will dramatically improve the aesthetics of lower of Malibu Creek and support and provide a habitat for the native fauna.

I strongly support the proposed mitigation plans for the west bank of Malibu Creek, prepared by PACE and Impact Sciences. If you require additional information, please do not hesitate to contact me [jhatherill@delmar.edu].

Sincerely,

Dr. J. Robert Hatherill
Professor

AUG 14 2008

ex. 13a

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
ONE CYCLOTRON ROAD | BERKELEY, CALIFORNIA 94720 | TEL: 510.486.4000

State of California • The Resources Agency
Arnold Schwarzenegger, *Governor*

DEPARTMENT OF PARKS AND RECREATION • P.O. Box 942896 • Sacramento, CA 94296-001
Ruth G. Coleman, *Director*

Angeles District
1925 Las Virgenes Road
Calabasas, CA 91302
(818) 880-0350

November 14, 2008

Deanna Christensen
Coastal Program Analyst
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

Re: **Vegetation Restoration Plan for the Mariposa Land Property at Malibu Creek City of Malibu, California**

Dear Mrs. Christensen,

The California Department of Parks and Recreation, Angeles District, has reviewed the above referenced Restoration Plan and offers the following comments for your consideration.

This property has a long history and several proposals have been reviewed by State Parks. As with past plans, we have two concerns with the current proposal. First, leaving the rip-rap in place with its current 1:1 slope configuration is not a solution to mitigating the erosion problem next to the Mariposa Land Property. Second, using willow fascine and minimally erodible component to fill in interstitial spaces in between rip-rap is not a known or proven restoration method. Each concern is discussed in detail below.

Rip-rap Configuration

The placement of the rip rap was granted as an emergency permit during the1997-1998 wet season. It is known that hardened structures on stream banks change the hydrology of the creek. Evidence of this is apparent with the current emergency project, as well as the grouted rip-rap and chain link fencing upstream of the project. The unconsolidated nature of the boulders and their un-engineered placement has continued to contribute to an unstable site for vegetation development. This is evident by the absence of vegetation along the 500-foot stretch of rip-rap adjacent to the Mariposa Land property.

Now that the emergency has passed, it is justifiable that the applicant take the time to design a sustainable bio-engineered project. We suggest the rip-rap be removed to create a sustainable soft bio-engineered slope. If rip-rap can not be removed it should be modified with vegetation and other materials to create a soft bio-engineered slope. Using vegetation and other materials to soften the land-water

interface is known to improve ecological features without compromising the engineered integrity of the shoreline (Best Management Practices for Soft Engineering, U.S. Fish and Wildlife Services July 9, 2008).

Design considerations should include tying into the top of the existing slope with a slope that is 3:1. A 3:1 slope will widen the creek channel; thus, reducing water velocities along the edges of the creek. Reduced velocities will in turn encourage deposition of suspended sediment and help begin the process of establishing a soil matrix for vegetation growth. In addition, slopes that are 3:1 can be stabilized with riparian vegetation which provides shade for aquatic species and filters urban runoff.

Willow Fascines & Filling Interstitial Spaces

We are concerned with the proposed attachment of willow bundle fascines to rip-rap as a way to establish willows at the rip-rap water interface. Additionally, the suggestion to later fill in interstitial spaces (after 2-3 years) with minimally erodible material to establish vegetation cover is also a concern. To our knowledge, neither of these approaches is a proven restoration methodology.

As discussed above, we suggest utilizing a soft engineering approach to re-design the slope. This technique should combine live and dead vegetation with other materials to create a slope that can be planted with willow stakes (*Salix spp.*) and other native plants. Unlike the proposed willow bundle fascines, many examples of stream bank stabilization projects that utilize willow stakes can be found in California. Planting of willow stakes is a known method to reduce erosion, encourage deposition of suspended sediment, and improve wildlife habitat associated with the immediate streambank.

Overall, our suggestions focus on eliminating and/or reducing impacts from the current rip-rap configuration while providing natural bank stabilization. Hard structures are known to have a high failure rate and are difficult areas to re-establish vegetation. Softer bio-engineered solutions are now recognized as more sustainable than rock rip-rap. If you have any questions or need any clarification of the information in this letter, please call Environmental Scientist, Kristi Birney, at the number listed above, extension 104. She can also be reached by email at kbirney@parks.ca.gov .

Thank you for your consideration of these comments in this matter.

Sincerely,

Ron Schafer
District Superintendent

ex. 13b

Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1550
fax 310 496 1902

info@healthebay.org
www.healthebay.org

July 2, 2009

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

Submitted via FAX: (805) 641-1732

Re: Opposition to CDP Application No. 4-98-024 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road.

Dear Coastal Commissioners:

Heal the Bay has reviewed the staff report released June 25, 2009, related to Application No. 4-98-024 submitted by the Mariposa Land Company, which seeks to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. After thorough review of this updated report, Heal the Bay urges the Coastal Commission to deny this application.

The proposed project, including the changes in the current staff report, is still in direct conflict with numerous policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is designated environmentally sensitive habitat area ("ESHA"). Please refer to our previous letters submitted February 3, 2009 and August 4, 2005, where these concerns are documented in detail.

Our concerns with the most recent recommendations are as follows:

1. **ESHA should be consistently designated and protected at the Malibu Creek site.**

   The staff report inconsistently represents the affected habitat area. The report states that "Malibu Creek and its riparian corridor is also designated as ESHA in the certified Malibu LCP (p. 21)". This statement is followed by a contradictory statement that the placed rip-rip is on the west bank of Malibu Creek, an area which does not fit ESHA criteria. The staff report accurately reflects the designation of Malibu Creek as ESHA, yet the rip-rap in question extends far into the creek, thereby negatively affecting ESHA, which is discordant with the Coastal Act and LCP (see Heal the Bay's February 3, 2009 and August 4, 2005 for further detail). As we outlined in our previous letters, the Malibu LCP requires protection of both ESHA areas and ESHA buffer zones. The concrete rip-rap is placed both within the Malibu Creek streambed, as well as within the riparian corridor of Malibu Creek, which is the buffer zone to Malibu Creek. Therefore, according to both the Coastal Act and the Malibu LCP, Malibu Creek and its buffer zone should be protected as ESHA and ESHA buffer zone.

ex. 13c

Heal the Bay

1444 9th Street
Santa Monica CA 90401

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fax 310 496 1902

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www.healthebay.org

2. The permitted alternative must protect ESHA and endangered species onsite.

Our main concern with the current proposal is that staff recommends a "bioengineered" approach that still includes the placement of concrete rip-rap along the entire portion of the stream bank, as well as within the actual stream, which is a sensitive wetland environment. The new approach integrates more vegetative plantings between concrete blocks laid back at a less steep slope, which will benefit plantings; however, it still allows illegal hardening of Malibu Creek, which will continue to detrimentally affect sensitive wetland habitat and locally present endangered species, such as the Tidewater Goby. We have outlined this problem in our previous letters regarding this site. The revised proposal does not address the negative impacts of continued stream bank hardening to this species, nor does it recommend mitigation for the negative impacts caused by the rip-rap at this site over the past 10 years.

The staff report asserts that 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 (p. 33)." However, there is a viable option to remove instream and above ground rip-rap, and replace it with a true soft bioengineered solution. This alternative has not been adequately evaluated or assessed. We recommend combining a soft bioengineered approach (biodegradable filter fabric planted with vegetations) with engineered techniques that bury rip-rap up to the toe of the bank. This method would conserve instream sandy bottom habitat as well as riparian vegetation on the stream bank. Buried rip-rap could be used in areas where stability and close proximity to legal existing structures are of concern. After consultation at the site on June 22, 2009, Heal the Bay recommends this option, which has not yet been assessed by Commission staff, as the best alternative to stabilize the bank while protecting ESHA and critical habitat areas of endangered species on and contiguous to the site.

3. Clear directives are needed for the applicant to remove illegal developments onsite.

We support the staff recommendation under Special Condition 2 that states "...where any fencing or unpermitted development exists along the bank that interferes with the re-engineered revetment required herein, as well as the associated Revised Revegetation Plan..., be removed from the site (p. 5)." However, this condition is unsoundly limited to unpermitted development that interferes with the proposed project. We urge the Coastal Commission to require removal of all illegal structures on the site as a permit condition. Staff ecologists also noted that if all illegal structures are removed and restored to riparian habitat, onsite creek velocities will be largely absorbed by a more natural and vegetated buffer zone, which will positively mitigate downstream bank instability and erosion.

ex. 13c

Heal the Bay

1444 9th Street
Santa Monica CA 90401

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fax 310 496 1902

info@healthebay.org
www.healthebay.org

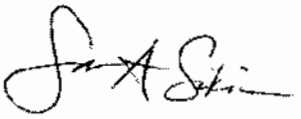
4. The timing of construction should avoid Tidewater Goby spawning season.

Lastly, the timing for construction outlined in the staff report (June through October) is within the peak season for Tidewater Goby spawning, which is documented to occur from April through July, and can extend through November, depending on seasonal temperature and rainfall[1]. If this project is permitted, we recommend the Commission include a requirement to avoid this season for construction to adequately protect this sensitive species.

We applaud staff for its attempt to further consider suitable alternatives to hardened rip-rap for this site; however, we cannot support the current recommendation, as it is not a "soft" bioengineered solution. Instead, we urge the Commission to recommend a "soft" bioengineered solution at this location to protect this environmentally sensitive area and endangered species, by restoring riparian habitat and some floodplain connectivity in this region. A "soft" bioengineered solution would also be more cost effective, as it would not require regular maintenance and repair. We appreciate the opportunity to comment on this staff report; please contact us if you have any questions.

Sincerely,

/s/



Alison J. Lipman, Ph.D.
Stream Team Manager
Heal the Bay

Sarah Abramson Sikich
Director of Coastal Resources
Heal the Bay

1 U.S. Fish & Wildlife Service. 2008. Federal Register 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Tidewater Goby (Eucyclogobius newberryi); Final Rule.

ex. 13c

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June 23, 2009

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

Submitted via email to jainsworth@coastal.ca.gov and dchristensen@coastal.ca.gov.

Re: Map and pictures to support opposition position to CDP Application No. 4-98-024 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road.

Dear Coastal Commissioners,

On June 22, 2009, Heal the Bay scientists, accompanied by Baykeeper staff, mapped onsite riprap and illegally developed areas, with GPS to an accuracy of 5 cm. This letter includes mapped and photographed areas of the Mariposa Land Co. site, which are relevant to CDP Application No 4-989-024.

The results of our mapping efforts are attached as Figure 1, which clearly delineates the unpermitted development on the site (referenced in our April 6, 2009 letter to the Commission). Photos of this area are attached as Figures 7-11. Development within the fenced area is visible in Figures 8-11. A photograph of the large white trailer visible in the later aerial photos (Figures 5 & 6) clearly shows surrounding intensive development that includes a road (Figure 11). The illegally fenced area and all enclosed unpermitted structures and development were constructed post 1979, with most development having occurred between 1986 and 2004, as indicated in the attached aerial photos of the area from 1979, 1986, 2002, 2004, and 2008 (Figures 2-6). Black line polygons were added as a layer to these aerial photographs in order to clearly delineate the area of unpermitted construction. The polygons appear to be slightly different sizes due to the different angles from which aerial photos were taken; however, they delineate the same area on the ground.

In addition to mapping the described unpermitted developments, Heal the Bay mapped areas of failing riprap and unstable stream bank downstream from the riprap. Linear areas mapped in Figure 1 include grouted concrete and portions of failing grouted concrete that are within a fenced area marked with a State Park sign. Areas of failing grouted riprap are visible in Figure 12. Also included in Figure 1 is the linear area of loose boulder concrete placed by Mariposa Land Co. and the area of unstable stream bank downstream of all riprap areas. There are multiple failures along the entire length of loose boulder riprap; two of these loose boulder riprap failures are visible in Figures 13 and 14. Areas of undercut loose boulder riprap, which we measured to 1.3 m, are mapped in Figure 1, and are visible in Figure 15. The entire length of stream bank on the subject site and downstream from riprap areas is clearly eroded and unstable (Figure 16).

ex. 13d

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The attached maps and photos clearly demonstrate that the property owners are in violation of their development permits and that the areas indicated in Figures 1-11 have been illegally developed over the last 20 years. Furthermore, the current placement of riprap on the stream bank of Malibu Creek is not only in violation of state and local coastal resource protection and development laws (as indicated in April 6, 2009 letter), but the riprap onsite is failing and promoting downstream erosion and bank instability. Finally, this stretch of creek is home to the federally endangered tidewater goby, and the riprap associated with this project is located in prime freshwater goby habitat (see Figure 1). This species requires soft bottom stream for its reproduction, and the concrete rip-rap is compromising its critical habitat.

Please contact us with any questions or for higher resolution copies of any of these photos. We appreciate the opportunity to provide information related to this site, and we hope it can be used to recommend a "soft" bioengineered solution at this location, which would restore riparian habitat and some floodplain connectivity in this region.

Sincerely,

/s/

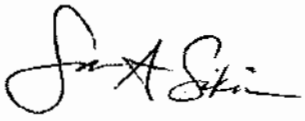

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Figure 1. Mariposa RipRap area on Malibu Creek, mapped June 22, 2009 by Heal the Bay and Baykeeper staff.

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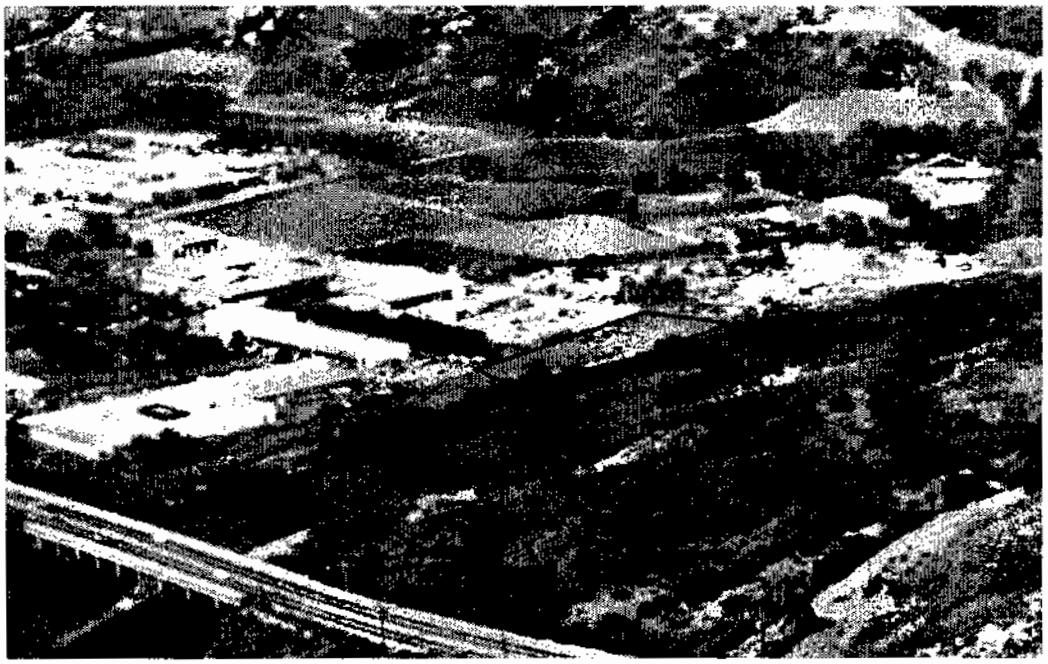

Figure 2. Malibu Creek, 1979, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

Figure 3. Malibu Creek, 1986, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org

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Figure 4. Malibu Creek, 2002, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

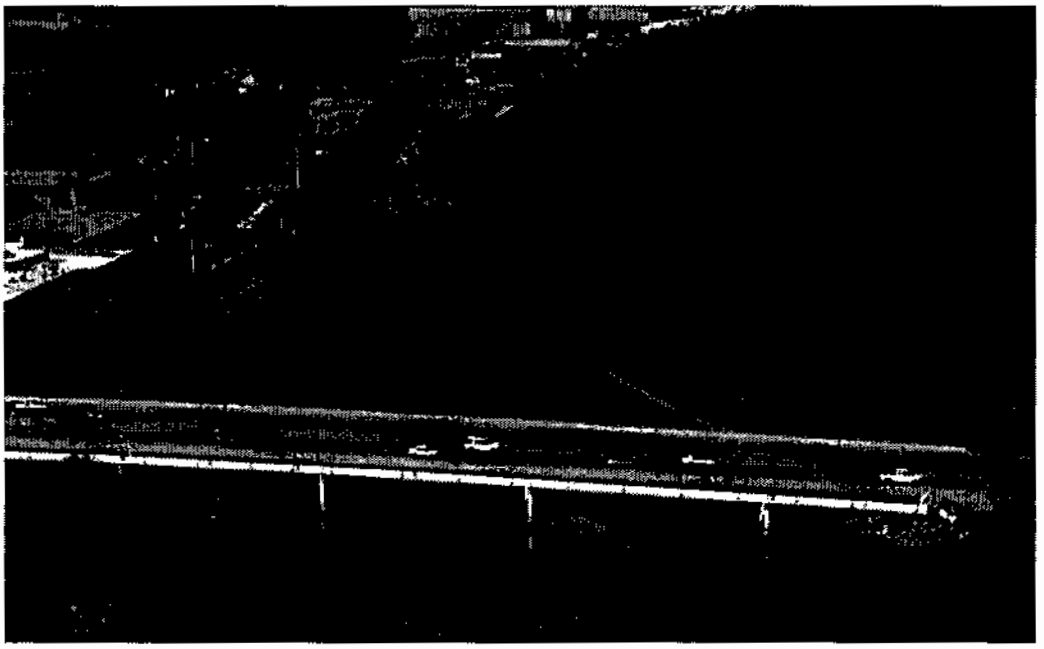

Figure 5. Malibu Creek, 2004, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

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Figure 6. Malibu Creek, 2008, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

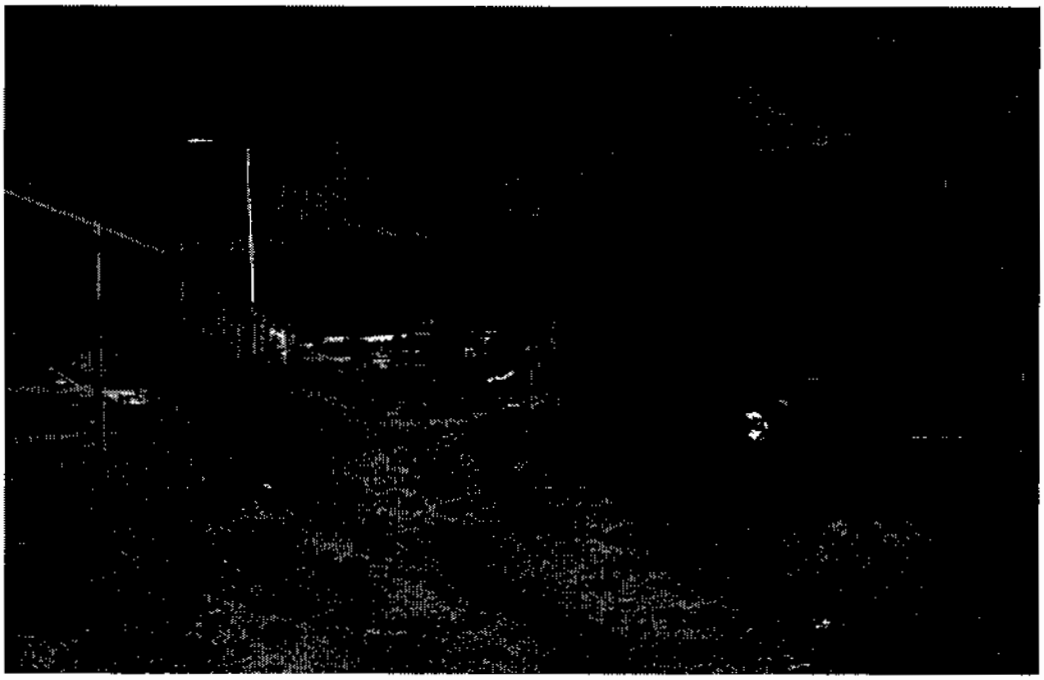

Figure 7. Illegally fenced area developed by Mariposa Land Co. on Malibu Creek. North facing picture taken from vantage point south of illegally fenced area, on June 22, 2009.

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Figure 8. Illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken just south of illegally fenced area, on June 22, 2009.

Figure 9. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken just south of illegally fenced area, on June 22, 2009.

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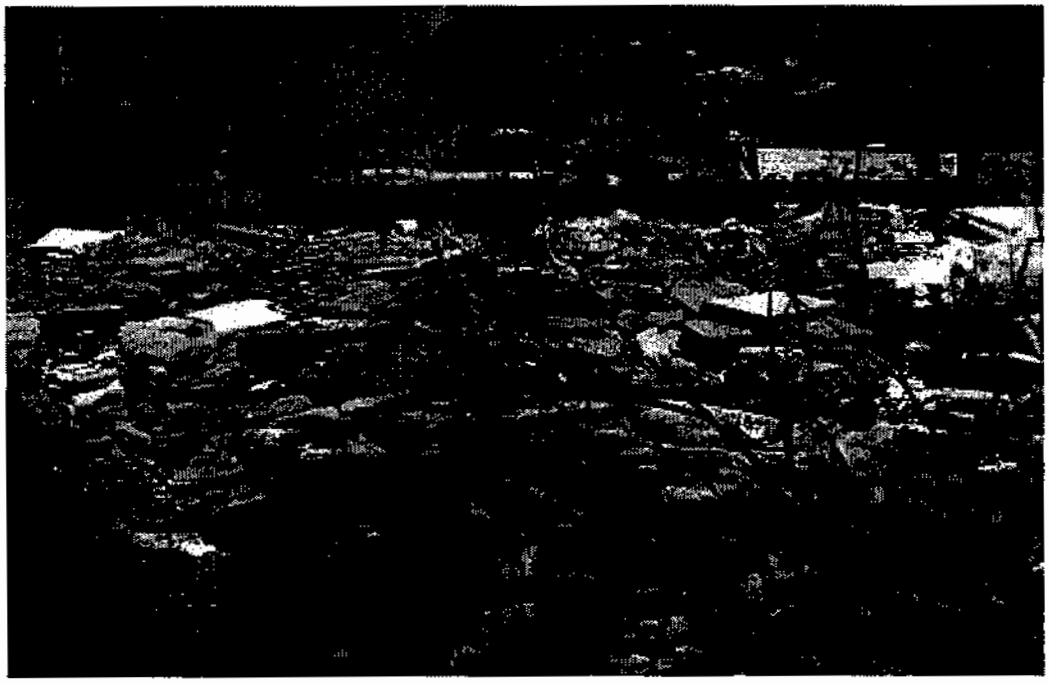

Figure 10. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. West facing picture taken just east of illegally fenced area, on June 22, 2009.

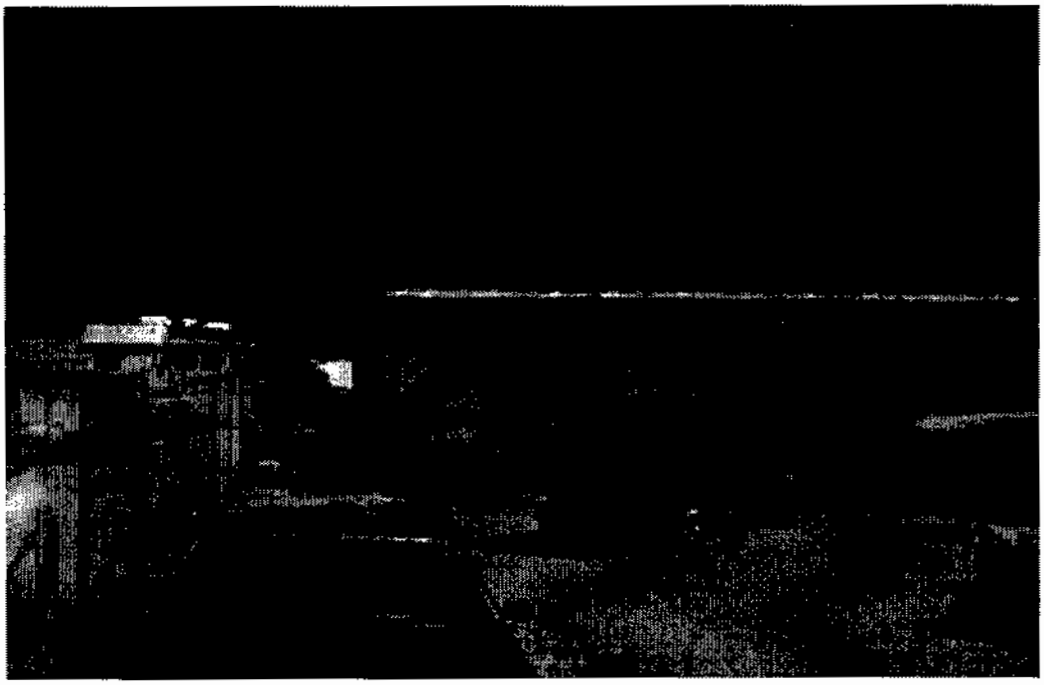

Figure 11. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken of trailer visible in Figures 5 & 6, on June 22, 2009.

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Figure 12. Failing grouted riprap. West facing picture taken from Malibu Creek on June 22, 2009.

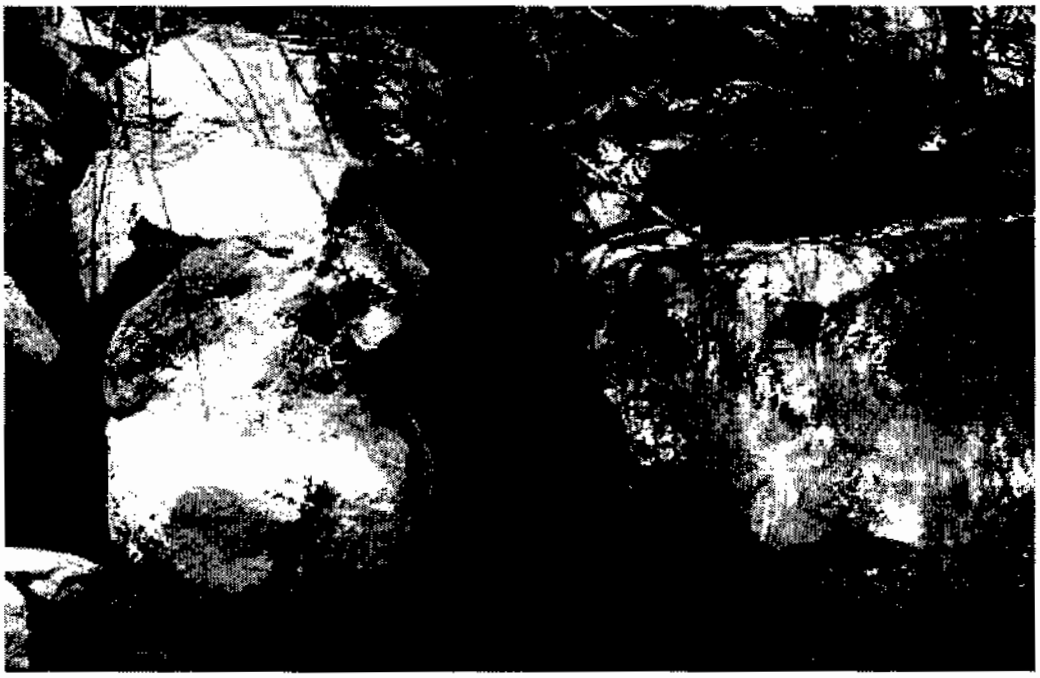

Figure 13. Failing loose boulder riprap placed by Mariposa Land Co. West facing picture taken from Malibu Creek on June 22, 2009.

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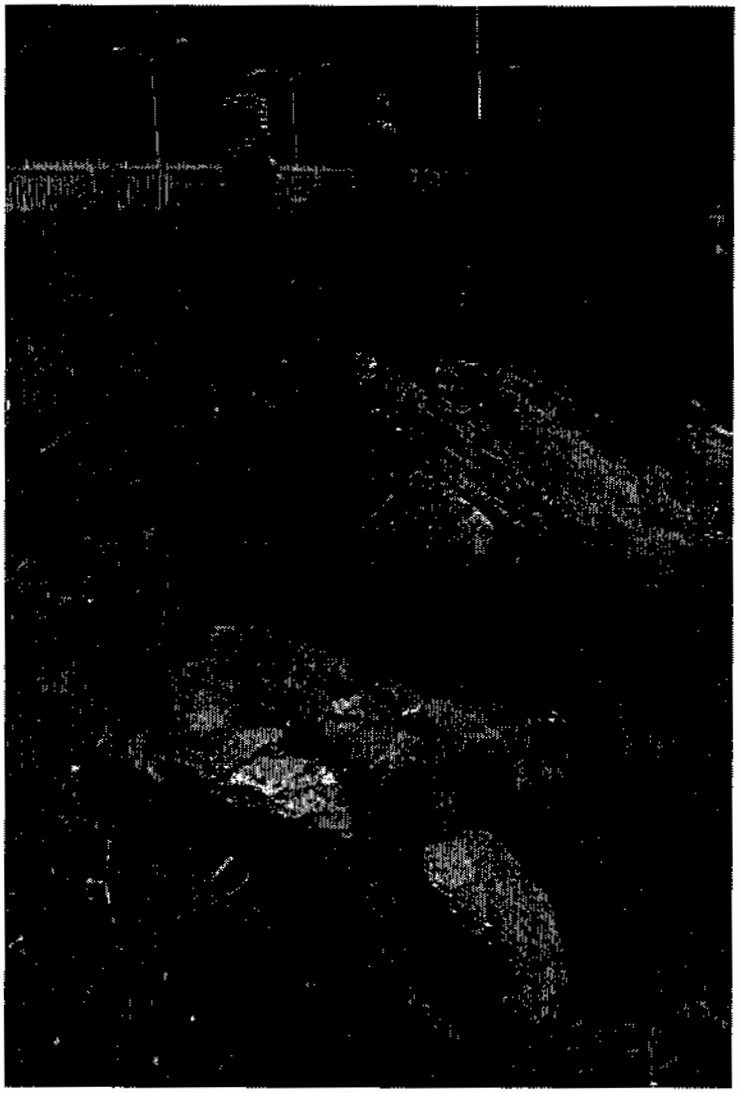

Figure 14. Failing loose boulder riprap placed by Mariposa Land Co. on Malibu Creek. North facing picture taken on June 22, 2009.

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Figure 15. Undercut loose boulder riprap placed by Mariposa Land Co. North facing picture taken from Malibu Creek on June 22, 2009.

Figure 16. Unstable stream bank on Mariposa Land Co property, south of loose boulder riprap. West facing picture taken from Malibu Creek on June 22, 2009.

13d

Malibu Surfing Association

A non-profit organization
Federal Tax ID 95-4459007

PO Box 2683
Malibu, California
90265-7683 USA

msasurfing.org

February 3, 2009

VIA FEDERAL EXPRESS

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

Re: Agenda Item: Th2.6a
Application No.: 4-98-024

To Whom It May Concern:

Malibu Surfing Association was founded by members of the Malibu community more than 40 years ago and we are intimately involved with the past, present, and future of Malibu Lagoon and Surfrider Beach. Many of our members are residents of the City of Malibu and we are an entirely volunteer association. We speak on behalf of our members whose views represent those of the surfing community and the 1.5 million visitors to Malibu Surfrider Beach who should be able to use this recreational resource without fear of water borne illness.

This letter shall constitute our objection to the California Coastal Commission Staff Report and recommendations, related to the Mariposa Land Company Application (4-98-024) for a permit to make permanent the 500 ft. stretch of riprap along the west bank of lower Malibu Creek, at their site at 3738 Cross Creek Road.

We are joining in and concurring with Heal the Bay's comment letter which is being submitted contemporaneously. In particular, we believe that the Staff Report and recommendations still fail to address the following:

1. The project, and the Coastal Commission's review of it, still defends illegal hardening of a streambank of Malibu Creek, which is designated as riparian habitat ESHA (Ecologically Sensitive habitat Area) by all interpretations of the Coastal Act and Chapter 3 of the City of Malibu LCP Land Use Plan. Even if this area were not designated ESHA, it would still be well within the legally protected 100 ft. buffer of Malibu Creek;

2. The proposal of the plan to "create riparian habitat," even with revisions by the Coastal Commission, is a false one, for the following reasons:

    a. The proposed 2:1 slope is still too steep to create viable habitat;

Re: Agenda Item: Th2.6a
Application No.: 4-98-024

b. The idea that concrete riprap can support native riparian flora and fauna, many of which depend on a sandy substrate, is absurd;

c. The idea to use a "geotextile filter fabric" as an underlay to the riprap could cause potential additional problems to the environment, depending on material used (many are plastic-based); and

d. The inclusion of only a handful of plant species in the revegetation plan does not constitute "habitat".

3. The proposal still does not address the illegal fence and 400 ft. of riprap located upstream and contiguous to the site;

4. Both the Coastal Act and the City of Malibu LCP Land Use Plan clearly state that impacts to ESHA and buffer areas to protect existing structures are allowed only when there are no "feasible alternatives." There are feasible alternatives to this plan that have not been considered. One is the creation of a flood wall on the existing parking structure, to protect the entire property; and

5. The current proposed plan could necessitate further impact to the creek, due to described construction activities.

Thank you for taking the time to consider our comments.

Sincerely,

Joseph S. Melchione, Chairman
Environmental Committee
Malibu Surfing Association

JSM/so

Malibu Surfing Association

A non-profit organization
Federal Tax ID 95-4459007

PO Box 2683
Malibu, California
90265-7683 USA

msasurfing.org

April 7, 2009

VIA FAX AT: (805) 641-1732

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

Re: Opposition to CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:

Malibu Surfing Association was founded by members of the Malibu community more than 40 years ago and we are intimately involved with the past, present, and future of Malibu Lagoon and Surfrider Beach. Many of our members are residents of the City of Malibu and we are an entirely volunteer association. We speak on behalf of our members whose views represent those of the surfing community and the 1.5 million visitors to Malibu Surfrider Beach who should be able to use this recreational resource without fear of water borne illness.

Malibu Surfing Association would like to join in on opposing the CDP Application No. 4-09-013 for the reasons set forth in Heal the Bay's letter which is attached hereto for your ready reference.

Sincerely,

Joseph S. Melchione, Chairman
Environmental Committee
Malibu Surfing Association

JSM/so
Attachment

cc: Michael Blum, President
Malibu Surfing Association (via email w/attachment: Michael.blum@gmail.com)

cc: Sarah Sikich, Coastal Resources Director
Heal the Bay (via email w/attachment: ssikich@healthebay.org)

ex. 13 a

SANTA MONICA BAYKEEPER

February 3, 2009
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

Re: Follow-up to Emergency Coastal Development Permit No: 4-98-024, Placement of Rock Rip Rap Along Lower Malibu Creek – DENY Permit Application

Dear Commissioners,

My name is Mark Abramson. I am the Director of Watershed Programs for Santa Monica Baykeeper. I have been monitoring water quality, biological communities, and restoring stream and wetland habitats throughout the Santa Monica Mountains for more than 12 years. I have also been commenting on this specific project for more than 10 years. This project remains relatively unchanged despite the fact that the Coastal Commission has recommended that the applicant restore the area and has denied the applicants previous Coastal Development Permits to leave the rip-rap on this site. The Santa Monica Baykeeper strongly urges the Commission to deny staff's recommendation on CDP ***Permit Application 4-98-024 with 13 special conditions to address the unpermitted loose boulder rip-rap on the applicant's property that was installed in 1998 as "an emergency permit".***

While the staff recommendations of the 13 special conditions improve the project they are wholly inadequate and do not restore the streambanks of Malibu Creek and Lagoon and will likely not work as staff intends. The staff report and proposed permit fails to address the 10 plus years of with the emergency permit and water quality degradation of Malibu Creek and Lagoon caused by the unpermitted rip-rap. The project as proposed is not compliant with the Coastal Act, the Malibu Local Coastal Plan LUP or LIP.

Additionally, staff has incorrectly stated that the project area in question is not ESHA. We vehemently disagree with this unfounded assertion. The disturbances on this site have been wholly caused by the property owner and the site has been maintained purposely in this unnatural state. Directly upstream and downstream of the project site Malibu Creek and Lagoon has intact riparian and wetland vegetation. If not for the activities of the landowner and the rip-rap installed on the site, this location would also have extensive riparian and wetland vegetation.

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Additionally, this area supports and is critical habitat for two federally endangered fish species: steelhead trout and tidewater goby. This deliberate degradation and destruction of ESHA should not be validated or encouraged as the staff is proposing here with its recommendation to approve the CDP.

In addition, the proposed permit does not address persistent Coastal Act violations that have occurred on the same parcel and constitute impermissible encroachment into the stream buffer area. These same violations exacerbate conditions that cause or contribute to streambank erosion and degrade water quality downstream. The staff report makes no recommendation to correct these violations.

The proposed staff solution to create planted rip-rap does not incorporate proper techniques or reflect current practices. Finally, the planting plan is woefully inadequate to restore riparian habitat and ESHA buffer back to this site.

In short, the overall plan as proposed is inconsistent with existing Coastal Act policies and the Malibu Local Coastal Plan; it will not function properly and will lead to further degradation of water quality and habitat over the long term.

I. Background:

Rip rap does a poor job of stabilizing stream banks and causes or contributes to downstream erosion and sediment loading. Based on my specific experience in the Malibu Creek Watershed I believe that the rip rap proposed by this project is a wholly inadequate approach to stream bank stabilization in the Lower Malibu Creek.

I have mapped over 70 miles of streams in the Malibu Creek Watershed and documented 987 individual bank armoring projects, of which 62% were failing or had failed. Loose boulder rip-rap accounted for 403 of the mapped bank armoring projects and had a failure rate of 74.9%, and grouted or concreted boulder rip-rap accounted for 173 of the mapped bank armoring projects with a failure rate of 68.2%. Armored stream banks were one of three major causes of downstream bank erosion and sedimentation identified in the Draft State of Malibu Creek Watershed Report. (Luce and Abramson, June 2005). The data analyzed in that report clearly demonstrated the ineffectiveness of bank hardening, especially rip-rap, as well as the damage that armored stream banks cause to downstream resources.

II. Noncompliance with Emergency Coastal Permit from September 1998 to present; no mitigation or attempt to correct violations.

The emergency permit ("Permit") was granted by the Coastal Commission to protect structures during an emergency situation (El Nino) and was never intended to help the applicant avoid meeting the conditions of the Coastal Act. Moreover, the applicant did not even meet the conditions required in the Permit to make the emergency work permanent. The applicant is therefore in violation of the Permit conditions and has been since September of 1998.

The intent of an emergency permit is not to allow for the permanent placement of structures that damage waters of the United States and fill wetlands, but to protect property during extreme conditions using temporary measures. This is clearly in the Permit dated February 20, 1998, Emergency Permit Application Number 4-98-024-G, in Attachment 7, Page 2, Bullet Point 4 and "Important" note.

Within 60 days of the date of this permit, the permittee shall apply for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the director.

IMPORTANT
Condition # 4 indicates that the emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a coastal permit must be obtained. A regular permit would be subject to all the provisions of the California Coastal Act and may be conditioned accordingly.

Bullet 7 on the same page states:

The regular Coastal Development permit application shall include an analysis of all other alternatives for shoreline, bluff, or stream bank protection prepared by a qualified engineer.

The applicant did not submit an application for a new Coastal Permit to make the emergency work permanent. Nor did the applicant conduct an analysis of all other alternatives for stream bank protection. Instead, the applicant now, 11 years later, is trying to make the rip-rap permanent with this application, which also contains no real analysis of alternatives. This is not consistent with the Coastal Act or the City of Malibu's LUP or LIP.

Further, the staff report fails to recognize the serious impacts caused to the ecosystem by the installation of the rip-rap in 1998 and the significant impacts that have occurred during the time in which the applicant has been in violation of their temporary Permit (September 1998 to date), as well as ignores the requirement to comply with the provisions of the Permit and to correct the situation. Allowing the rip-rap to become a permanent solution will degrade water quality and habitat downstream including critical habitat for the federally endangered steelhead trout and

tidewater goby. Exhibit 1 shows the map of this area; special notice should be paid to the stream bank erosion downstream of the rip-rap at issue. This is a continual source of sediment loading to Malibu Lagoon. Fine sediments are considered a significant source of phosphates in the summer months and contribute to eutrophication in the Lagoon (Malibu Lagoon Restoration and Enhancement Plan, June 2005). The existing rip-rap on site is already failing (toe undercut) and this lateral and downward channel erosion further exacerbates sediment loading to Malibu Lagoon. Malibu Lagoon is on the State 303(d) List of Impaired Water Bodies for algae, eutrophication, and sediment.

Santa Monica Baykeeper requests the Commission require the applicant to address the entire stream reach from the Civic Center Drain approximately 860 ft downstream to the Shell Drain (Exhibit 4). Addressing the entire streambank is essential to a successful stable final project Additionally, we request that property owner be assessed significant fines and penalties for the years of non-compliance and environmental degradation caused by this non-compliance. The applicant has been in non-compliance for more than 10 years (over 3,650 days). Even if the Commission issued a minimum fine of $ 500.00 dollars per day, the applicant would owe at least $ 1,825,000 as of today.

III. Failure to address adjacent unpermitted fencing and grouted rip-rap armoring directly upstream contribute to the stabilization problem.

The proposed special conditions specifically exclude the grouted rip-rap and fence placement directly upstream on the applicant's property on the same parcel (Exhibits 1 through 3), both of which contribute to bank erosion and bank failure downstream. If all three of these elements are not addressed together, existing erosion and bank failure problems will continue to occur and the resulting maintenance activities will continue to jeopardize water quality and habitat in the lagoon.

The attached 2004 and1997 and aerial photos (Exhibits 2 & 3 respectively) clearly shows that the upstream fencing did not exist prior to the bank erosion. Further, a comparison of Exhibit 2 taken in 2004 and Exhibit 3 taken in 1997 clearly shows the loss of vegetation that occurred within the fenced area. The steep bank that supports the fencing forces higher volumes and velocity water to scour the stream bank contributing to its failure. As there is no mention of the fencing in the temporary Permit, and there is no other Coastal Permit allowing this fencing, it should be removed. Similarly, the grouted rip-rap upstream of the project (Exhibits 1 and 2) actually deflects flows toward the project stream bank and likely induces scouring of that bank. Clearly, if the fencing and upstream rip-rap elements are ignored, there is an even higher likelihood that the proposed stabilization will continue to fail.

We urge the Commission to require the property owner to address the entire stream reach from the outlet of the Civic Center Drain to the Shell Drain approximately 860 ft. (Exhibit 4). The restoration should include removal of the unpermitted fencing and all material storage in that area. The restoration should require the reestablishment of the riparian vegetation and stream ESHA buffer. Staff recommends laying back the streambank to a 2-1 slope. Creating a 3-1 slope is more appropriate and better reflects the slopes of streambanks upstream and downstream of the project site in this area. Additionally a 3-1 slope would allow for far superior energy dissipation of stream flows and re-vegetation of the site.

IV. The current loose boulder rip-rap, grouted rip-rap, and fencing are in the riparian ESHA and riparian buffer ESHA.

The existing unpermitted structures and proposed recommendations in the staff report conflict with the following sections of the Coastal Act, Malibu's Local Coastal Plan, Land Use Plan.

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

3.23 State Development adjacent to ESHAs shall minimize impacts to habitat values or sensitive species to the maximum extent feasible. Native vegetation buffer areas shall be provided around ESHAs to serve as transitional habitat and provide distance (minimum 100ft.) and physical barriers to human intrusion.

3.32 Channelizations or substantial alterations of streams shall be prohibited except for flood protection of existing development **where there is no feasible alternative** and **bioengineering shall be preferred for flood protection over rip-rap channels.**

3.34 Bioengineering methods or "soft solutions" should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered. Any applications for protective measures along lower Malibu Creek shall demonstrate that existing development in the Civic Center is in danger from flood hazards, that the proposed protective device is the least environmentally damaging alternative, that it is sited and designed to avoid and minimize impacts to the habitat values of the riparian

corridor along the creek and the recreational and public access use of State Park property along the creek, and that any unavoidable impacts have been mitigated to the maximum extent feasible.

3.88 Buffer areas shall be provided around wetlands to serve as transitional habitat and provide distance and physical barriers to human intrusion. Buffers shall be of sufficient size to ensure biological integrity and preservation of the wetland they are designed to protect, but in no case shall they be less than 100 feet in width.

3.121 Alteration or disturbance of streams or natural drainage courses or human-made or altered drainage courses that have replaced natural streams or drainages and serve the same function, shall be prohibited, except where consistent with Policy 3.32. Any permitted stream alterations shall include BMPs for hydromodification activities.

This project also is in conflict with the City of Malibu, Local Implementation Plan, Section 17.9: Hydromodification, Paragraph B:

Any channelization or stream alteration permitted for one of these three purposes shall minimize impacts to coastal resources, including the depletion of groundwater, and shall include maximum feasible mitigation measures to mitigate unavoidable impacts. Bioengineering, unless no feasible alternative exists, is the only acceptable method of bank stabilization and flood protection for new development, and the preferred method for redevelopment. Where armoring of stream banks has failed, streambanks shall be stabilized using bioengineered structures, unless no feasible alternative exists. Any permitted stream alterations shall include BMPs such as incorporating vegetation in structure design, deflecting flow from eroding stream banks, and reshaping the eroding bank and establishing vegetation.

V. Alternatives Analysis is inadequate and conflicts with Malibu's LCP and LUP.

It appears that all the alternatives analyzed were done either by Commission staff and or the environmental community and not the applicant. In fact, other than what the applicant has proposed the project engineers state that all other alternatives are not feasible and/or more environmentally damaging. Santa Monica Baykeeper is currently managing the Lagoon Restoration and Enhancement project on behalf of California State Parks and the State Coastal Conservancy directly downstream of the project site. We had offered to include the Mariposa Land Company's rip-rap area as part of our original design and engineering for the Lagoon project but the property owner refused. Our engineers stated from their initial review that a project could be designed using soft bio-engineering solutions at this location. No review (other

than the applicant's consultants statements) has been conducted that adequately excludes soft bio-engineering. Also many of the other hybrid alternatives i.e. using geo-textiles, using rip-rap in the low flow channel and re-vegetating the upper bank have been successfully used on larger rivers (Ohio River) with significantly higher stream velocities and scour. Finally, the staff recommendations to plant the spaces between newly placed rip-rap is wholly inadequate and will not work. There are specific techniques required when installing planted rip-rap to better ensure vegetation will grow and establish. These techniques have been employed on Las Virgenes Creek upstream in the watershed and on Las Flores Creek in an adjacent watershed. We strongly recommend that only soft bio-engineered approaches be employed at this site but even if the Commission determined that planted rip-rap was needed a firm that knows how to design and install this technique must be required. Additionally, we need to see an engineered plan showing how this technique will be employed. Just describing it in a staff report is inadequate and inappropriate.

We urge the Commission to require soft bio-engineering at the site. Natural vegetation exists without armoring directly upstream and downstream of this location. Further, we are not employing any armoring in the Lagoon project directly downstream of the project site. The floodwall/ soft bio-engineered alternative accomplishes both property protection and real streambank restoration even though we believe that the floodwall is unnecessary.

VI. The current design has not employed the use of large woody debris to deflect flows from the streambank.

Santa Monica Baykeeper would strongly recommend that large woody debris be installed along two locations adjacent to the streambank. The woody debris should be anchored to the bank using the techniques in the Salmonid Habitat Restoration Manual produced by the California Department of Fish and Game. Additionally, this woody debris should be placed facing upstream to deflect flows away from the streambank design and installation should follow the procedures outlined in the Salmonid Habitat Restoration Manual produced by the California Department of Fish and Game. This will have two beneficial effects: 1. It will help deflect flows away from the streambank while allowing the vegetation to become established and 2. It will provide instream habitat for steelhead trout and tidewater goby.

VII. The Commission should require a Hazard Analysis Critical Control Point Plan (HACCP) to prevent the transport of New Zealand Mudsanils (NZMS) to other streams and watersheds.

Malibu Creek was identified as having NZMS in 2005 benthic macroinvertebrate samples. Santa Monica Baykeeper and the Santa Monica Bay Restoration Commission have conducted annual NZMS surveys on Malibu Creek 2006-2008. NZMS have dramatically increased their density

and geographic distribution since they were first discovered. NZMS are easily transported to uninfected waterbodies by attaching themselves to clothing (especially footwear) and equipment and hitching a ride to a new waterbody. NZMS have been recorded in densities greater than 500,000 organisms per square yard and simply outcompete our native benthic macroinvertebrates, such as dragonflies, which are a critical food source for fish and other aquatic wildlife. NZMS reproduce asexually or through cloning; it only takes one snail to start a new colony.

It is strongly recommended that measures be implemented to prevent the spread of this noxious invader. Clothing and footwear should be frozen for 48 hours after having contact with the stream. Construction workers must be required to strictly follow this protocol. Additionally, any equipment that has contacted the stream including heavy equipment should be pressure washed, steam cleaned and allowed to thoroughly dry out for 72-hours before being transported to another site. Requiring all contractors to complete a HACCP plan that is then approved by the Commission who understand how NZMS are transported is essential. Santa Monica Baykeeper and the Santa Monica Bay Restoration Commission are happy to review any HACCP plans.

VIII. Conclusion

We urge the Commission to **deny** this permit. The CDP, even incorporating commission staff recommendations for this site, is wholly inadequate and is in direct conflict with the State Coastal Act and Malibu's own Local Coastal Plan LUP and LIP.

The project site is within Malibu Lagoon, one of the few remaining coastal wetlands in Los Angeles County. Significant financial resources and investment have been spent and will be spent in the near future by the State to improve water quality and enhance habitat at Malibu Lagoon and Surfrider Beach. Further, the project site was considered one of the highest priority restoration sites to enhance Malibu Lagoon throughout the 6-year planning, facilitation, and design process that culminated in June 2005 with the Malibu Lagoon Restoration and Enhancement Plan. In fact during the creation of the Lagoon Restoration and Enhancement Plan, the applicant **refused** to have the consulting team research and present other solutions for this site.

As proposed the project will continue to degrade water quality and critical habitat for the federally endangered tidewater goby and southern steelhead trout. In addition, the rip-rap will require maintenance and repair in perpetuity, each time further degrading habitat and water quality in the Lower Malibu Creek and Lagoon. A bioengineered solution will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation – all critically needed to restore stream function and natural processes in this area. Moreover, soft bioengineering will be more cost effective and is consistent with the Coastal Act and

Malibu's Local Coastal Plan, as well as with the overall restoration effort for Malibu Lagoon and Surfrider Beach.

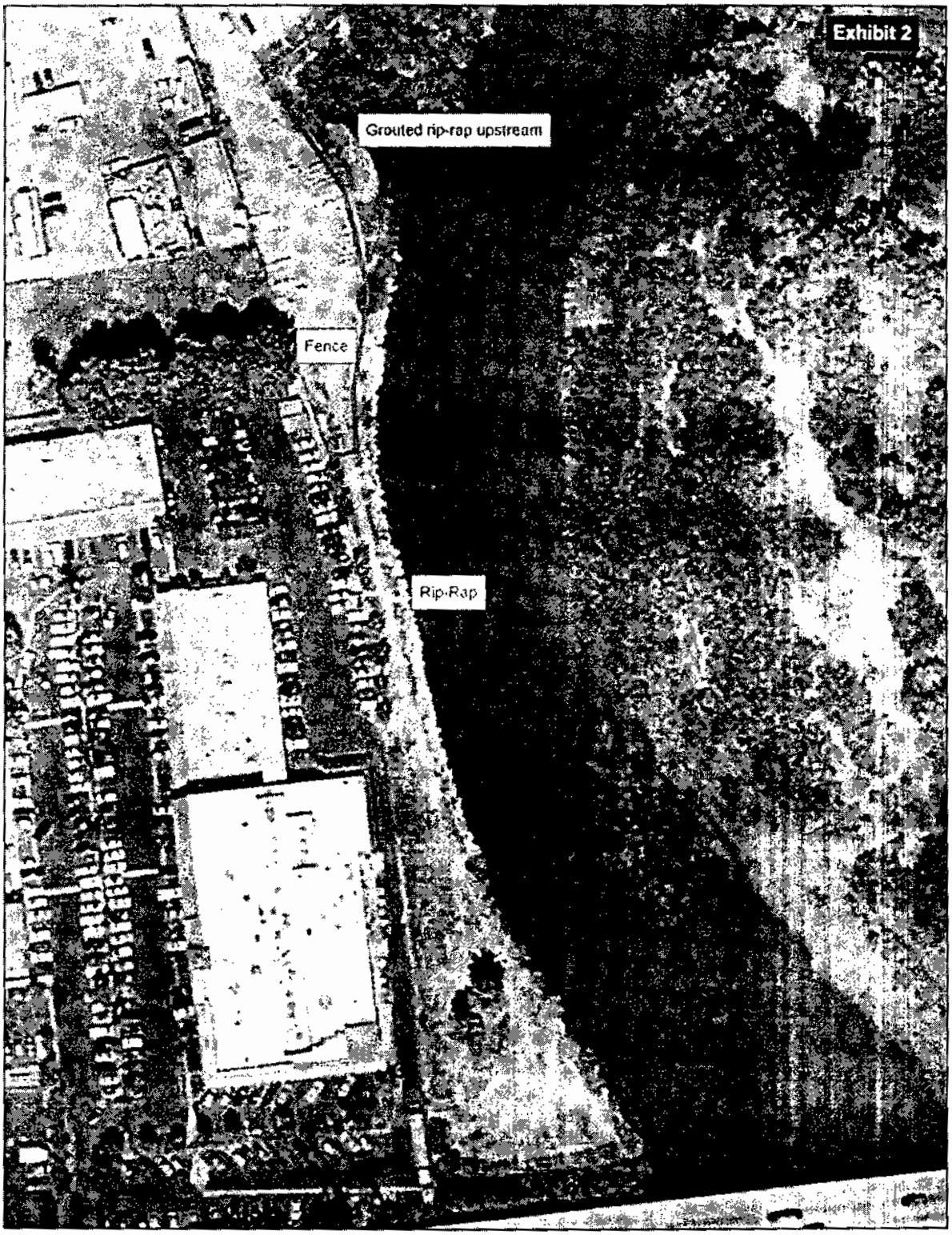
The emergency rip-rap bank stabilization has already had a detrimental impact on Malibu Lagoon's natural resources and water quality for more than ten years. At this point, the Commission shouldn't consider any project short of a full-blown stream bank and riparian buffer restoration plan that encompasses the entire approximate 860 ft. stream reach (Exhibit 4) with a mitigation component and fines for the historic damages caused by the emergency rip-rap bank modification. The proposed project even with staff recommendations fails to accomplish this. Consequently, the application for CDP should be DENIED.

We appreciate the opportunity to comment on this CDP.

Sincerely,

Mark Abramson
Director of Watershed Programs
Santa Monica Baykeeper

P.O. Box 10096 · Marina del Rey · CA · 90295 | 310·305·9645 | Fax 310·305·7985 | www.smbaykeeper.org



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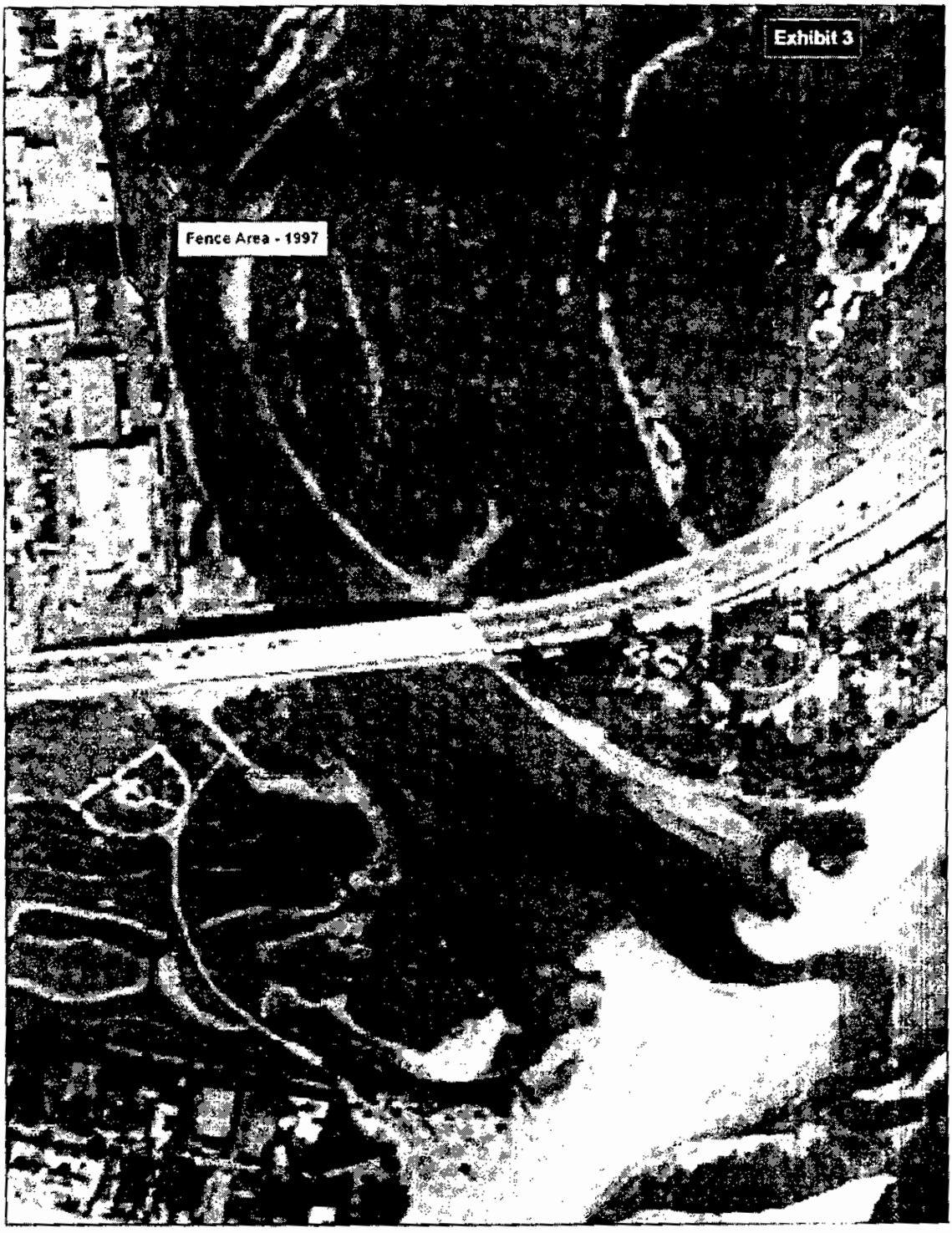

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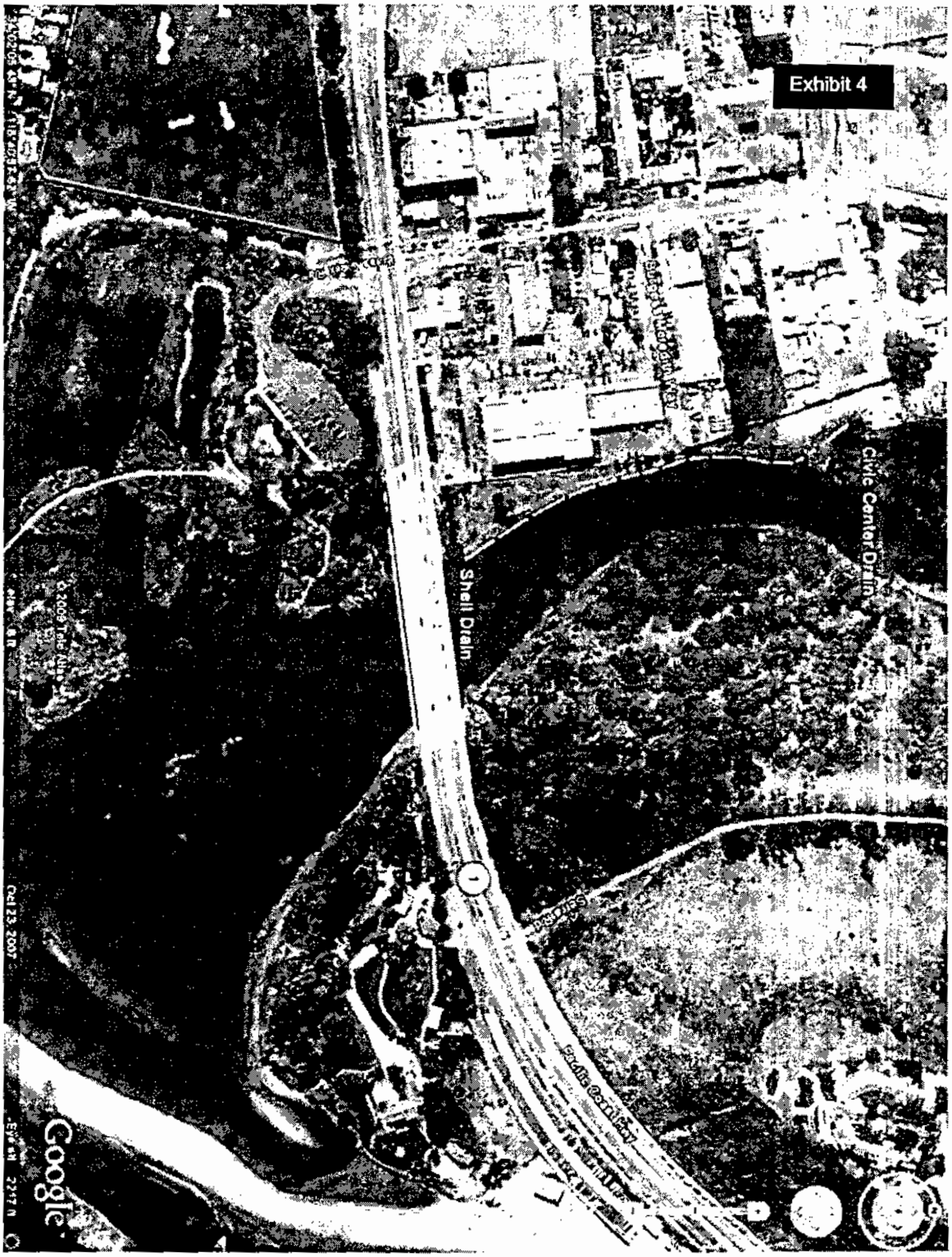

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SANTA MONICA BAYKEEPER

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APR 08 2009
CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Item Th 9c

April 7, 2009

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

Re: Opposition to CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:
Santa Monica Baykeeper (SMBK) has reviewed Application No. 4-09-013, submitted by the Mariposa Land Company, to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. SMBK urges the Coastal Commission to deny this application based on the detailed written comments we submitted on February 3, 2009 (Attachment A) and the concerns outlined below.

In 2005, State Parks and the California Coastal Conservancy offered to include the specific parcel subject to CDP Application No. 4-09-013 as part of the comprehensive Malibu Lagoon Restoration project at no cost to the project applicant. The larger Malibu Lagoon Restoration project design involved substantial engineering and monitoring that could have included the subject parcel resulting in a restored and fully-functional stream bank. Inexplicably, this offer was repeatedly refused by Mariposa Land Company and the parcel did not become part of the larger restoration effort. This resulted in continued degradation of water quality and sedimentation to the Malibu Creek and Lagoon ESHA, potentially impacting two federally endangered aquatic species (Tidewater goby and Steelhead trout). The Coastal Commission should not allow the perpetuation of this continued disregard and violation of the Coastal Act and the authority of the Commission to protect our coastal resources from pollution and ill-conceived development. Mariposa Land Company's CDP Application No. 4-09-013 should therefore be denied.

The proposed project is in direct conflict with numerous policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is designated as ESHA. In our previous letter we raised concerns that the subject stream bank should be designated ESHA, and therefore the proposed project should be designed to provide the most ESHA protection. Although the staff report states that this concern is addressed in its section B, that section has not been updated since the staff report on the previous application 04-98-024 and in fact no new information regarding ESHA has been added.

Malibu Creek is a USGS-designated blue-line stream, which constitutes ESHA. Malibu Creek and its riparian corridor are also designated as ESHA in the certified Malibu LCP. Section 30240 of the Coastal Act requires that both ESHA and ESHA buffers be protected from development and activities that cause degradation. Surveys that I conducted throughout the Malibu Creek Watershed document that armored streambanks are one of three major causes of downstream bank erosion and sedimentation. Moreover, these types of armoring have the highest rates of failure of any type of stream bank armoring projects (74.9 % failure rate for loose boulder rip-rap and 68.2 % for grouted rip-rap). In fact, the exact same streambank subject to this permit application was previously rip-rap before it failed during the 1998 storm events.

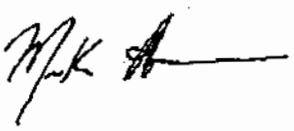
In addition to the hardened streambank, the proposed project also features permanent submerged rip-rap within Malibu Creek and Lagoon, which is undoubtedly ESHA and is designated critical habitat for the federally endangered Tidewater goby and southern Steelhead trout. Approval of a permanent hardened revetment in Malibu Creek, Lagoon, and their buffers is inconsistent with the ESHA policies of the Coastal Act and the City of Malibu LCP, as it will cause further degradation of stream, wetland, and riparian habitat in this area. Instead, we support a bioengineered solution, as it will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation.

In our February 3, 2009 letter we also pointed out that the grouted rip-rap at an upstream storm drain outlet and an adjacent fenced storage area on the same parcel owned by Mariposa Land Company are unpermitted and should be included in the scope of work for the subject permit (Exhibit 1 and 2). It is highly unlikely that the project as described in the CDP application will be successful if the upstream grouted rip-rap area that currently is putting pressure on the proposed area downstream is not addressed. This entire contiguous stream reach must be sloped back and restored if the project is to succeed.

Staff responded in the current report that this development "is unrelated to the project proposed in the subject permit application and in a location that is outside the Commission's retained jurisdiction." Aerial photographs and parcel data gathered from the City of Malibu clearly shows that this upstream area is on the same parcel and is therefore subject to this permit (Exhibits 1 and 2). Furthermore, it is unclear how that area would be outside of the Commission's retained jurisdiction, as properties to the north, south, east and west of that property all fall within the Coastal Zone. The staff report and proposed permit fail to address the emergency permit (Emergency CDP No. 4-98-024-G) and associated development, which has existed unpermitted and has contributed and continues to contribute to water quality and habitat degradation in Malibu Creek and Lagoon for more than 10 years. In addition, the permanent rip-rap proposed within this application will require regular maintenance and repair, which will further degrade habitat and water quality in the Malibu Creek and Lagoon.

We urge the Commission to deny this permit application and recommend that a bioengineered solution be designed for this site. A soft bioengineered solution will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation in Malibu Creek and Lagoon. We strongly object to the lack of alternatives analysis and the heavy reliance of the Coastal Commission Staff on the project applicant's engineer. In addition, the entire contiguous stream reach must be addressed to ensure the success of the project and protection of the ESHA. In order for the Coastal Commission or the public to truly evaluate the impacts of the project as proposed by either the project applicant or the Commission Staff actual engineered drawings, and a fully thought-out planting plan should be provided for review. A bioengineered solution is consistent with the Coastal Act and the City of Malibu LCP, and will be the most cost-effective long-term solution for stabilization at this site.

Sincerely,



Mark Abramson
Director of Watershed Programs
Santa Monica Baykeeper

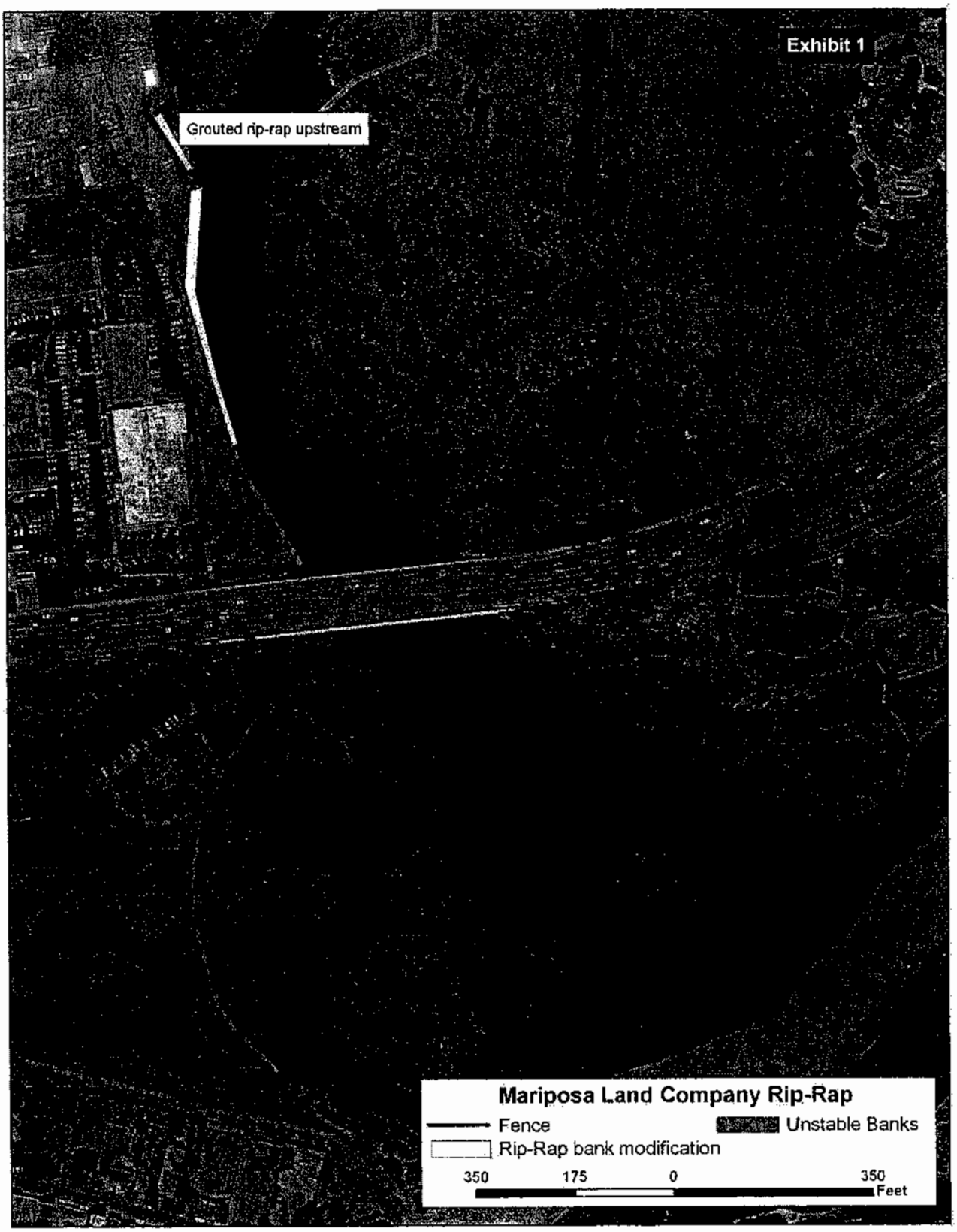


Exhibit 1
Grouted rip-rap upstream
Mariposa Land Company Rip-Rap
Fence
Unstable Banks
Rip-Rap bank modification
350
175
0
350
Feet

Exhibit 2

RESOURCE CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

30000 MULHOLLAND HIGHWAY, AGOURA HILLS, CALIFORNIA 91301
MAIL: P.O. BOX 638, AGOURA HILLS, CALIFORNIA 91376-0638
(818) 597-8627 FAX (818) 597-8630

A Political Subdivision
of the State of California

DANIEL C. PREECE
Executive Officer

April 7, 2009

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

RE: CDP Application 4-98-024: Rip-rap revetment on Malibu Creek at 3738 Cross Creek Road

Dear Coastal Commissioners:

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) has reviewed the Coastal Development Permit Application 4-98-024 submitted by the Mariposa Land Company, concerning the permanent placement and continued maintenance of an approximately 500-foot linear riprap revetment along Malibu Creek. Our organization previously commented on this project in 2005 (Appendix A) and our chief concerns remain the same.

As already emphasized by Heal the Bay, the project does not comply with Section 30236 of the Coastal Act:

> "Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain 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."

In fact, the project has not conducted a thorough study of bioengineering alternatives. Furthermore, the existing rip-rap may diminish habitat of local federally endangered species, the tidewater goby (*Eucyclogobius newberryi)* and southern steelhead trout (*Oncorhynchus mykiss*). The RCDSMM has been active in the conservation and management of the populations of tidewater gobies and southern steelhead trout within Malibu Creek and Lagoon since the lagoon restoration commenced in 1984.

ex. 13g

Tidewater Goby

The proposed rip-rap occurs within the lower portion of Malibu Creek, which is within the "LA-1: Malibu Lagoon" unit a 64-acre critical habitat unit designated by the U.S. Fish and Wildlife Service, outlined in the "Revised Designation of Critical Habitat for the Tidewater Goby; Final Rule" (Volume 73, No. 21). (Appendix C)

LA-1 is one of the two remaining extant populations of the tidewater goby within Los Angeles County, both of which have been designated as critical habitat units. The LA-1 unit contains the biological features that are essential to the conservation of the species, or its Primary Constituent Elements (PCEs). According to the Final Rule, the PCEs for this species are the following:

1. Persistent, shallow (in the range of about 0.1 to 2 m), still-to-slow-moving, aquatic habitat most commonly ranging in salinity from 0.5 ppt to about 10 to 12 ppt, which provides adequate space for normal behavior and individual and population growth;
2. Substrates (e.g., sand, silt, mud) suitable for the construction of burrows for reproduction;
3. Submerged and emergent aquatic vegetation, such as *Potamogeton pectinatus, Ruppia maritima, Typha latifolia,* and *Scirpus* spp. that provides protection from predators; and
4. Presence of a sandbar(s) across the mouth of a lagoon or estuary during the late spring, summer, and fall that closes or partially closes the lagoon or estuary, thereby providing relatively stable water levels and salinity.

Malibu lagoon contains PCEs 1, 2 and 3, although their precise location during any particular time period may change in response to seasonal fluctuations in precipitation and tidal inundation.

In June of 2005, the RCDSMM, in partnership with Heal the Bay, conducted a survey of tidewater gobies in Malibu Lagoon (see Appendix B) and observed over 400 individuals. A total of six sample sites were selected to provide an overview of all potential habitat types in the lagoon, except for the deep thalweg in the center (which was too deep to seine effectively). Sites conform to those proposed for continued post restoration monitoring, plus a known tidewater goby site upstream of the PCH bridge (TG1). Seining was conducted in conformance to the pre and post project monitoring plan protocol, as noted in the Draft Malibu Lagoon Monitoring Plan, the Lagoon Restoration and Enhancement Project Monitoring Plan, and the Lagoon Restoration and Enhancement Quality Assurance Project Plan.

Southern Steelhead Trout

The project site is also within federally designated critical habitat for the Southern California Evolutionary Significant Unit of endangered southern steelhead trout (Appendix D). Presence of individuals has also been well-documented by RCDSMM biologists upstream of the existing rip-rap along the west bank of Malibu Creek. Monthly snorkel surveys of Malibu Creek, conducted by the RCDSMM since 2001, have found that steelhead trout utilize pools along Malibu Creek up to the pool just below Rindge Dam.

Steelhead PCEs include:

1. Freshwater spawning sites with water quantity and qualityconditions and substrate supporting spawning, incubation and larval development.
2. Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.
3. Freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

4. Estuarine areas free of obstruction with water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater;
5. Nearshore marine areas free of obstruction with water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation;
6. Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

Conclusion

Section 7 of the Endangered Species Act (ESA) states that each federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. It requires the review of specific projects so as to avoid and minimize adverse impacts to federally-listed species, where another federal permit is required. The federal nexus created by the U.S. Army Corps of Engineers' issuance of a Regional General Permit for this project may trigger the need for a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS manages impacts to the tidewater goby and the NMFS manages anadromous species, including the southern steelhead trout. The Coastal Commission should ensure that both the USFWS and NMFS have reviewed the project in order to properly address these issues.

We request that the applicant be required to analyze bioengineering alternatives to the streambank stabilization along the existing rip rap structure. Bioengineering is a well-founded restoration method, encouraged by the Natural Resources Conservation Service (NRCS) in situations where it is a technically sound restoration method as a substitute for the more frequently used methods (rip-rap revetment, etc.) that are much less desirable from an environmental perspective. Bioengineering techniques have been proven to provide valuable fish and wildlife habitat, along with improving water quality rather than diminish it like traditional approaches.

The RCDSMM appreciates the chance to comment on this CDP application. We ask that the Coastal Commission requires the replacement of the existing rip rap with a bioengineered alternative, and deny the current application. Further analysis of more sustainable erosion control systems are necessary, and appropriate wildlife agency reviews/permits should be sought for federally endangered species impacts, if not already done so.

Sincerely,

Sandra Albers
Conservation Biologist
Resource Conservation District of the Santa Monica Mountains

ex. 13 g

APPENDIX A: RCDSMM Comment Letter 2005

RESOURCE CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

122 NORTH TOPANGA CANYON BOULEVARD TOPANGA, CALIFORNIA 90290
(310) 455-1030 FAX (310) 455-1172

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DAVID GOTTLIEB
WOODLAND HASTINGS

August 5, 2005

Raneika Brooks McClain
Associate Planner
City of Malibu
Planning Division
Attn: IS No. 03-003
23815 Stuart Ranch Road
Malibu, CA 90265

IS No. 03-003 ,3738 Cross Creek Road

Dear Raneika Brooks-McClain,

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) appreciates the opportunity to provide comments on IS No. 03-003 and Mitigated Negative Declaration No. 04-002 concerning the permanent placement and continued maintenance of an approximately 500-foot linear riprap revetment along Malibu Creek. These are our chief concerns:

1. Any unresolved enforcement issues with the Coastal Commission should be settled before the MND is certified

2. The document fails to include review by the USFWS who may require a permit for impacts to federally endangered species present at site: the Tidewater Goby and Southern Steelhead Trout.

3. The proposed ongoing maintenance of the riprap is an admission of failure. The riprap is already undercut; this type of creekside hard armoring is outdated and possesses a long history of failure and exacerbation of downstream erosion and sedimentation, in this case into endangered species habitat. This emergency stop-gap measure does not provide a sustainable and environmentally sound solution to future high water events.

4. Alternative erosion solutions, such as riprap removal and re-sloping with a deeply-rooted vegetated buffer, are not analyzed in the MND. As such, the MND is in violation of CEQA for not providing an analysis of an environmentally superior alternative.

5. The proposed addition of topsoil and plantings into gaps in the riprap will fail to allow root contact with the slope soil, resulting in shallow-rooted plantings which may easily die and/or wash away during flood events. Vegetation should be planted directly into re-contoured slope substrate (which requires riprap removal), thereby creating a strong root network to fortify bank against erosion. This is the most sustainable solution requiring the least maintenance and least impact to the Tidewater Goby and Steelhead Trout habitat.

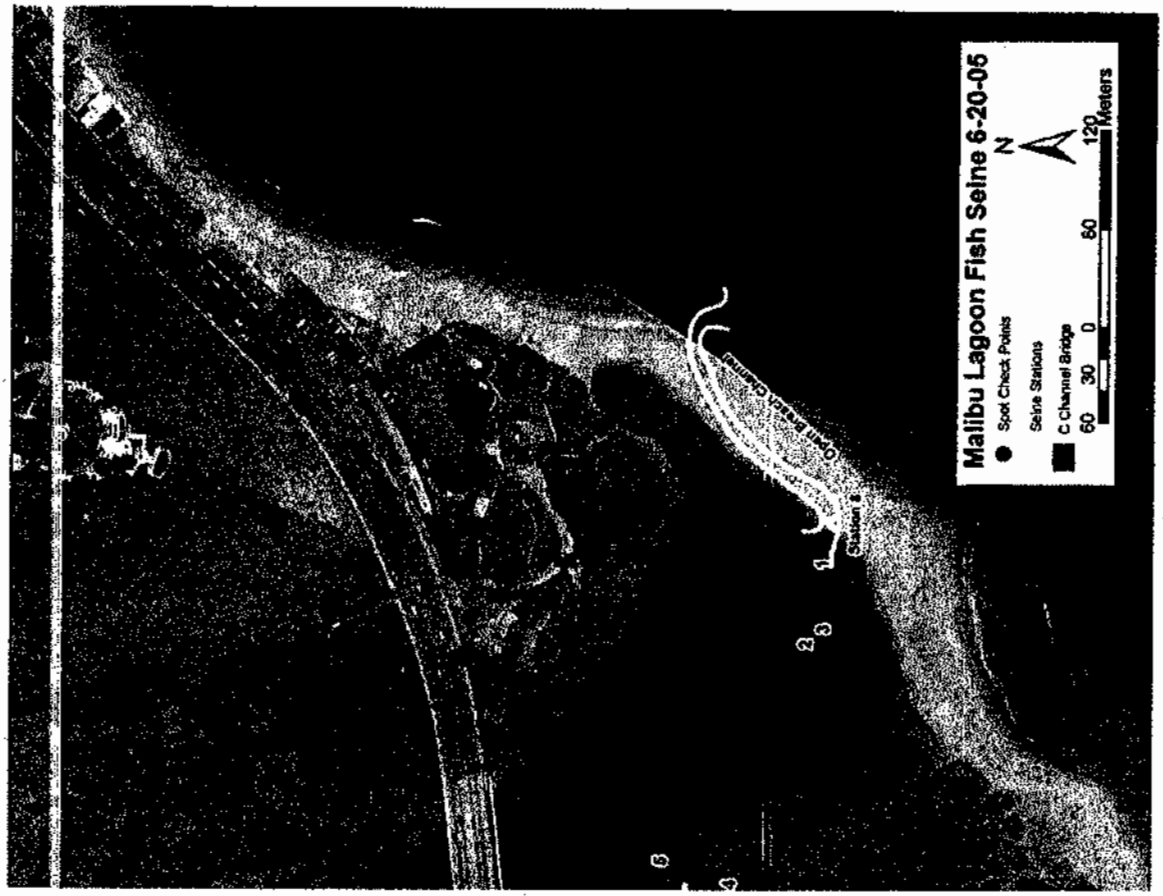
Thank you for listening to our concerns with this project. The RCDSMM asks Malibu to not approve the MND as it appears. Further analysis of more sustainable erosion control systems are necessary, appropriate wildlife agency permits

should be sought for federally endangered species and that any ongoing violations need to be resolved before CEQA approva

Respectfully,

Steve Williams
Conservation Biologist
Resource Conservation

ex. 13 g


Malibu Lagoon Fish Seine 6-20-05
Spot Check Points
Seine Stations
C Channel Bridge
60 30 0 60 120 Meters
N
Malibu Lagoon Channel
Station 1
1
2
3
6
9

ex. 13 g

one copy given to Hope

LAW OFFICES OF
GAINES & STACEY LLP
1111 BAYSIDE DRIVE, SUITE 150
CORONA DEL MAR, CALIFORNIA 92625

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FRED GAINES
SHERMAN L. STACEY
LISA A. WEINBERG
REBECCA A. THOMPSON
NANCI S. STACEY
KIMBERLY RIBLE
ALICIA B. BARTLEY

March 31, 2009

Th 9c

Commissioners
California Coastal Commission
45 Fremont Street, #2000
San Francisco, California 94105

Re: Application for Permit No. 4-09-013 (Mariposa Land Company)
Maintenance of Rock Protection along Malibu Creek, Malibu

Dear Commissioners:

On Wednesday, April 9, 2009, I will appear before you on behalf of Mariposa Land Company, the Applicant in Application No. 4-09-013, for the public hearing on its Application to maintain the existing rock bank protection along its property immediately north of Pacific Coast Highway on the west bank of Malibu Creek. The Staff Recommendation effectively denies the Application and requires the Applicant through Special Conditions to remove the existing rock bank protection, grade the bank of Malibu Creek, and replace the rock over a filter fabric on the newly graded bank. The net change for this extraordinary measure is a minor relocation of the rock at an unfeasible cost.

The rock bank protection has been in place for more than 10 years. No adverse effects from the existence of the rock bank protection have been observed or documented. The rocks were lawfully installed based upon an Emergency Permit issued by the Executive Director and appropriate Army Corps of Engineers procedures. The emergency arose in February of 1998 when significant heavy rainfall caused unanticipated erosion. The high waters of Malibu Creek removed up to 20 feet along the Applicant's property adjoining the Cross Creek Plaza Shopping Center.

Observing the extreme erosion on its property, the Applicant was concerned that it may have liability to the shopping center owner if it did not take reasonable steps to prevent further erosion to prevent the shopping center from being damaged. Before 1981 a property owner was protected from liability because the property owner owed no duty to adjoining owners to prevent damage from natural conditions. However, a California Supreme Court ruling in 1981 placed that protection in doubt. A property owner might owe a duty of care to assure that natural

Ex. 13h

conditions on its property do not damage adjoining property when those natural conditions can be reasonably corrected. *Sprecher v. Adamson* (1981) 30 Cal.3d 358. Unsure as to its duties and unwilling to risk liability, the Applicant elected to purchase and place rock to protect the bank at a cost of $60,000 rather than risk damage to the adjoining Shopping Center.

The rock was carefully placed by an experienced contractor and has functioned without failure, deterioration or harm for more than 10 years. Although comments in the Staff Report and by opponents claim that the rock was "unengineered" or "temporary", subsequent evaluation of the placement of the rock by professional engineers has found no basis on which to criticize the rock bank protection. An experienced contractor installed it without the benefit of the prior stamp of an engineer. This is not a basis for finding it inadequate. It is currently approved by engineers for the Applicant, the City of Malibu and Army Corps of Engineers. Moreover, the rock bank protection has successfully functioned as intended since installation. When installed, the Applicant certainly did not look upon the 1400 tons of rock as temporary.

The Applicant followed the proper procedures by seeking and receiving an emergency permit. This application is a follow up for that emergency permit. Before this application could be made, Staff required that the Applicant obtain numerous engineering and environmental studies and obtain approvals from the City of Malibu, California Department of Fish & Game and U.S. Army Corps of Engineers. Each of these agencies asked for additional work as did the Commission Staff. This took considerable time. Ultimately, all other agencies gave approval to maintain the rocks as existing.

Staff now recommends that the rock bank protection be removed only for the same rock to be put back in substantially the same location after limited grading of the bank and the placement of a filter fabric. The recommended mitigation by revegetation is the same as the Applicant proposes. The change proposed by Staff comes at a cost of more than $1,000,000. As will be shown below, taking the rock out (much of which is below water) and grading the bank is far more difficult, and causes substantially more environmental harm, than the original placement of the rock on the existing bank in 1998. It is not feasible for the Applicant to make such an expenditure to to protect the shopping center (which it does not own) while at the same time being required to intentionally excavate its own property.

1. **The Staff Agrees That Under the Coastal Act, the Applicant is Entitled to Protect the Malibu Creek Bank and that Rock is the Appropriate Method of Protection but the Staff Requires a Revision to the Project which is Not Feasible.**

The Staff and the Applicant are in agreement on the two critical points which support approval of a rock wall to prevent erosion. First, the erosion of the bank of Malibu Creek in the vicinity of the Shopping Center poses a serious risk to the fire lanes, septic disposal field and buildings of the Shopping Center. Second, the placement of rock on the bank is the least environmentally damaging alternative to protect the bank. Staff agrees that the rock placed by the Applicant provides protection to the bank. (See, Memorandum of Lesley Ewing, Staff

Report Exhibit 11.) Staff also agrees that the revegetation plan for mitigation proposed by the Applicant is reasonable. (See, Memorandum of Jonna Engel, Staff Report Exhibit 12.) The essential difference is whether the slope of the face of the rock can average 1.7 to 1 (the Applicant's position) or must be not less than 2 to 1 (the Staff position).

The establishment of a rock wall to protect the bank is permitted under Public Resources Code Section 30236 as a "flood control project 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." There is no dispute that the west bank of Malibu Creek north from the Pacific Coast Highway bridge has become subject to severe erosion over the past 35 years.

In the enclosed booklet under Tab 1 is a series of photographs from 1962, 1977, 1981 and 2000. In 1962, the course of Malibu Creek was essentially straight from the vicinity of the Cross Creek Road crossing to the Pacific Coast Highway bridge. (See also, Staff Report, p. 12-13.) The 1962 photograph also shows how much land lay between the course of Malibu Creek and the Shopping Center property line. Over the next 35 years, accretion on the west bank of Malibu Creek to the north and accretion on the east bank of Malibu Creek on the southern end of this course created a significantly curved watercourse. The curve moved the main channel into a direct line with the Applicant's property and the Shopping Center. Substantial rains in 1998 gave the Malibu Creek waters the power to erode the bank by 20 feet as the creek was forced to turn almost 90 degrees to go under Pacific Coast Highway bridge. The Staff agrees that the protection of the bank is necessary to protect existing development. (Even if the Shopping Center were not threatened, the Applicant has a right to protect its own land from erosion. To the extent the Coastal Act, or the Commission in administering the Coastal Act purports to prohibit such protection, results in a taking of the Applicant's property by the State without compensation.)

The Staff also agrees that no method for protecting existing structures will work and is feasible other than a rock bank protection. However, the Staff Recommendation, at extraordinary cost which is not feasible, requires that the rock be removed and then put back again with very small change in the final result. Here the alternative design in the Staff Recommendation fails to meet the requirements of Section 30236 that the alternative design be "feasible". Feasible is defined in Public Resources Code Section 30108 as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account environmental, economic, social and technological factors." As detailed below, the adverse environmental effects of the Staff Recommendation, the economic demand upon the Applicant and the technological difficulty of dewatering the site in order to carry out the Staff Recommendation, all demonstrate that the Staff Recommendation is not feasible.

2. **The Staff Recommendation is Not the Least Environmentally Damaging Alternative.**

The Staff and the Applicant disagree on whether maintaining the rock bank protection as the Applicant proposes, or removing and then replacing the rocks as the Staff recommends, is the least environmentally damaging alternative. By Special Conditions, the Staff wants the existing rock bank protection to be removed, the bank graded back to a slope not more than 2 to 1, a filter blanket placed over the newly exposed soils and the rocks replaced. Mitigation with willow and other planting already proposed by the Applicant is also required.

Under the Coastal Act, the Commission can only adopt the Staff alternative if it finds that it is both feasible and the least environmentally damaging alternative. The Staff Report has little analysis of the impacts of its proposal and is inadequate as a CEQA document. The evidence shows that leaving the existing rock bank protection in place and mitigating with a revegetation plan as proposed by the Applicant is the least environmentally damaging alternative. This is supported by the reports and studies prepared by the Applicant's engineers and ecologists and by common sense.

The evidence will not support the Staff Recommendation. A coffer dam along a 500 foot portion of Malibu Creek, pumping out the water to allow access to remove the rocks, removal of the rocks, grading of the bank, placing a filter fabric and replacing the rocks only a few feet away from where they were before removal, with the same mitigation the Applicant proposes, is **not** the least environmentally damaging alternative.

a. **The Staff Alternative Creates Adverse Environmental Effects and an Engineering Solution that will be Less Effective.**

The Staff Alternative is based upon a theory that having the rocks at a slope not greater than 2 to 1 will be more like a natural bank and will enhance the potential success of the mitigation measures. The Staff claims that the majority of the rock is placed at 1 to 1 slope angle. This figure was taken from an estimate based on personal observation by a consulting biologist in 2000. This observation was demonstrated to be inaccurate, but it is cited repeatedly, and wrongly, as true. In 2008, the staff required a detailed survey of the rock bank protection. This was performed by David Grimes, a licensed surveyor with Grimes Engineering. The survey showed that the majority of the rock was laid at an angle closer to 1.7 to 1 with the steepest at 1.3 to 1 and the least at 2.1 to 1. Engineer David Jaffe made the slope calculations which are shown on Applicant's Exhibit, Tab 2. A comparison of the Staff Calculation of slope as shown on Staff Report Exhibit 6 is contained on the engineer's calculations and in each case shows the Staff calculation to have exaggerated the slope of the existing rock.

i. **Removal, Grading and Replacement of the Rock will Have Adverse Environmental Effects.**

To remove the rock, grade the bank, and replace the rock as required by the Staff Recommendation will have adverse environmental effects and will risk other significant adverse environmental effects which the Staff Report fails to recognize or analyze. The Commission must understand what it is approving if it accepts the Staff recommendation. The existing rocks will need to be removed and stockpiled. Half of the rocks are below the normal waterline and cannot be removed without removing the water from the area of work. In order to have the area of work accessible, it is necessary to have a coffer dam built of sheet pilings within Malibu Creek parallel to the shore, about 20 feet from the bottom of the rocks. A pile driver suspended from a crane or backhoe would drive piles into the creek bed to create the coffer dam.

Once the coffer dam is in place, the water trapped behind the cofferdam would need to be pumped out over the cofferdam and back into the Creek and Malibu Lagoon. A coffer dam cannot prevent leakage so pumps will necessarily operate continuously throughout the time of the work, estimated to be at least 6 weeks. From the top of the bank, equipment would lift the rocks (with a median weight of 4 tons each) and carry them to a location to stockpile. Lifting the rocks is far more difficult than placing them and often requires massive chains manually set around each rock. With chains in place, either backhoes or cranes are necessary to lift the rocks.

Once the rocks have been removed, large backhoes would grade back the bank to the Staff's desired 2 to 1 slope. Then a filter blanket would be laid over the bank and the rocks would be returned. In order to avoid damage to the filter blanket, placing the rocks is again more difficult than the original 1998 placement. Willow plantings through holes cut in the filter blanket would then be done as mitigation. The coffer dam would be removed. This is generally done by vibrating the piles to loosen the piles from embedding in the creek bottom. An illustration of the elements necessary to carry out the Staff Recommendation is included as Applicant's Exhibit, Tab 3, where the coffer dam, various heavy equipment and dewatering pumps are shown.

The Staff Report does nothing to analyze the environmental effects of this recommended alternative. The Staff Report brushes off the adverse environmental effects with a few sentences acknowledging, but not analyzing, these adverse effects. See, Staff Report, p. 25. The reasonably foreseeable adverse effects are as follows.

First, the laid back configuration of the rocks will increase sediment transport potential as compared to the existing configuration, thereby eroding the creek bottom at the base of the slope. PACE Engineering conducted a SAM Sediment Hydraulic analysis based on Army Corps of Engineers models and determined that the change recommended by the Staff would increase the transport potential for sediment passing the location. This allows sediment to be removed without replacement, resulting in a net deepening adjoining the rocks. It will also increase the potential for sediment entering the Malibu Lagoon, an adverse effect.

Second, the laid back configuration of the rocks will increase flood potential because it does not contain the creek waters as effectively. PACE Engineering conducted a HEC-RAS (Corps of Engineers River Analysis System) analysis of the change from laying back the slope even the small degree required by the Staff Recommendation. The analysis showed that there would be an increase in the potential for flooding beyond the rocks of up to 0.9 feet. (See Applicant's Exhibit, Tab 4.)

Third, In addition to the permanent increase in sediment transport potential, installation of the coffer dam, even with carefully designed BMP's, and reduction of the width of the creek, will adversely affect the sediments carried in the stream. Dewatering and then removal of the coffer dam by vibration will have an additional effect. The addition of fine sediments to Malibu Lagoon will affect water quality and decrease water infiltration through the sand bar. This may place the sand bar in jeopardy of premature breaching as water builds up behind the bar.

Fourth, there are adverse biological impacts to engendered species. The tidewater goby has been transplanted to the Malibu Lagoon and estuary where it had a natural habitat. Its range extends up to the location of the rocks. Without any consultation with the U.S Fish & Wildlife Service (which administers the Endangered Species Act), Special Condition No. 7 proposed by Staff purports to authorize a "qualified resource specialist" to capture and relocate any tidewater goby found to exist. This is unlawful without an incidental take permit from U.S. Fish & Wildlife Service since the Endangered Species Act prohibits not only killing, but harassing an endangered species.

Capturing any tidewater goby may prove difficult as the tidewater goby tends to burrow into the bottom, or seek shelter among rocks, when disturbed. A week of pile driving and a week of pile removal, four weeks of dewatering, operation of heavy equipment causing additional vibration, underwater noise, potential increased siltation of the Malibu Lagoon and other impacts inherent in carrying out the Staff Recommendation are all reasonably foreseeable to have a negative impact on the tidewater goby. Yet the Staff Report includes no analysis of those impacts on the tidewater goby or its critical habitat.

Fifth, in addition to the tidewater goby, the steelhead trout has been identified as an endangered species and the Malibu Lagoon and estuary as a protected habitat. The same construction requirements have the potential to affect steelhead trout, although their presence in the waters of Malibu Creek and Lagoon, is less documented than the tidewater goby. Again, the Staff concludes without consultation or analysis that constructing the Staff alternative design will have no effect on the steelhead trout or its habitat.

Sixth, no analysis of the impact on bird nesting has been done at all. The Applicant is required to do all of its work in April or May. (See Special Condition No. 5a.) No analysis of the effect of the work on bird nesting appears in the Staff Report.

Seventh, no analysis of the effects of the considerable heavy equipment necessary to carry out the project (including backhoes, cranes, pumps, trucks and other equipment) operating for many weeks in a sensitive location adjoining the creek, has been done. Simply the requirement of BMP's does not substitute for an analysis of the risk of adverse environmental effects. Surprisingly, Special Condition 5c prohibits construction equipment or activity which would have any impact on environmentally sensitive habitat areas, streams, wetlands or their buffers. Special Condition No. 5c effectively prohibits the Staff Recommendation because (a) 4 ton boulders cannot be removed without heavy construction equipment, (b) a coffer dam in the creek cannot be installed and removed without impacting the stream, (c) the creek bank cannot be graded to a 2 to 1 slope without heavy equipment, and (d) the rock bank protection cannot be replaced without heavy equipment. The Applicant can no more carry out the Staff Recommendation and comply with Special Condition No. 5c than the jewish slaves of pharaoh in Egypt could build bricks without straw. The simple difficulty of implementing Special Conditions Nos. 2, 5, 6 and 7 should inform the Commission that extensive risks of adverse environmental effects have simply been ignored.

ii. **The Benefits from Removal and Replacement of the Rocks Claimed by the Staff Do Not Arise.**

The staff claims a number of benefits arise from the change it recommends. First, the Staff Report says that it will protect Malibu Creek from disruption of habitat values, restore biological productivity and water quality to maintain optimum aquatic populations. (Staff Report, p. 26.) There is no evidence that the existing rocks disrupt habitat values, nor that removal and replacement of the rocks results in any change to habitat. There is no evidence that there is any effect of the existing rocks on biological productivity or water quality or that the removal and replacement of rocks restores anything that is affected by the existing rocks. Finally, there is no evidence that implementing the Staff Recommendation has any effect on "optimum aquatic populations".

The Commission cannot analyze this project by ignoring that the rocks that presently exist, do exist. This is not a violation where the Commission assumes that the project has not been implemented. This is a lawfully installed protection which the Applicant seeks to keep. Therefore, the comparison is not between what might have existed if the rocks had not been placed as they are today and the Staff Recommendation. The comparison must be between the rocks today and the changes the Staff Recommendation would require. If the rocks today have no adverse water quality, biological productivity, or disruption of habitat values (as was found by the City of Malibu under CEQA), then changing the project to what the Staff recommends does not "restore" biological productivity which was never lost, "restore" water quality which was not affected, protect from "disruption" of habitat values that were never disrupted, or assure "optimum aquatic populations" which were never reduced.

The real substance of what the Staff claims as benefits is limited to the alleged potential for the willows planting among the rocks to be more successful. (See Staff Report, Exhibit 12, page 2.) The balance of the revegetation plan is acceptable to the Staff, only the willows are claimed to benefit from the change in slope. Larry Lodwick of Impact Sciences disagrees and states that the willow cuttings placed among the existing rocks will be just as effective. (See Applicant's Exhibit, Tab 5).

The Staff also claims that the removal and replacement of rocks will reduce turbidity because of the filter blanket. However, there is no evidence that the existing rocks have caused any turbidity which needs to be reduced. To create additional turbidity, the existing rocks would have to suffer "piping" which is the erosion of soils behind the rocks. In the 10 years that the rocks have been in place, the engineers and biologists have not found any piping in the existing condition. Removing and replacing the rocks would increase turbidity from pile driving, grading and dewatering. No amount of best management practices can avoid this. The filter blanket on the newly graded soils is biodegradable and will be laced with holes for the willows. Ultimately, the Staff Recommendation reproduces most of the existing conditions.

iii. **Leaving the Existing Rocks in Place has No Adverse Environmental Effect.**

The Staff required that the Applicant obtain approval from the City of Malibu and that the City of Malibu evaluate the potential environmental effects under CEQA. The City did so and concluded that maintaining the existing rocks posed no risk of significant adverse environmental effect. Mitigation with vegetation replanting and control (with which the Impact Sciences plan is consistent) was required.

The Applicant's proposal to leave the existing configuration of rocks in place has none of the adverse effects that taking out the rock and replacing it would have. Army Corps of Engineers and Department of Fish & Game have both permitted the rocks to remain as they are. The willow planting mitigation proposed by the Applicant is identical to that proposed by the Staff. The Applicant will accept the performance conditions for the mitigation plan. The Staff can point to no evidence that leaving the rocks as they are has any adverse environmental effect.

iv. **The Changes Recommended by the Staff Result in Minimal Net Change.**

In the end, the Commission must be concerned with what has been gained from the tremendous effort required to implement the Staff Recommendation. Behind Tab 2 is a series of 7 cross-sections of the existing wall and of the effect of reducing the bank to a 2 to 1 slope prepared by Engineer Jaffe based on the Grimes survey. The existing wall lies at slopes from 1.3 to 1 to 2.1 to 1. The average is 1.7 to 1. This is not significantly different from the Staff requirement. The average distance that the Staff Recommendation would move the top of the rocks back from the creek is 4.3 feet. The average distance at the normal waterline is 26 inches.

The maximum distance at any point is 10.9 feet. All of this tremendous work required by the Staff moves the top of the rocks moved an average of 52 inches. It seems almost axiomatic that such a small change has no real environmental benefit. When weighed against the adverse environmental effects, the Commission should see that a reasonable mind would simply say the existing rocks should stay in place.

b. **It is Unreasonable to Require the Applicant to Assume the Risk of a Design that Its Engineer Believes will be Less Adequate.**

If the Staff Recommendation is adopted, Special Condition No. 1 requires that the Applicant assume the risk of the design recommended by the Staff and indemnify the Commission. This is unreasonable. The Applicant is prepared to assume the risk of the design which is recommended by his engineers. But when the Staff changes that design to one which the Applicant's engineers claim will increase the potential for flooding over the rock wall, it is not reasonable to make the Applicant take responsibility for a design which is less effective.

c. **It is Unreasonable to Expect that the Applicant Can Obtain Other Agency Approvals in less than 5 years.**

Having required a different engineering design, Special Condition No. 8 requires that the Applicant obtain all of the other necessary approvals from other agencies. This will now be a far more extensive process as other agencies are unlikely to consider the work necessary to implement the Staff Recommendation to be as benign as the Staff considers it. These other necessary approvals would include permits from and/or consultation with at least the following agencies: U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, National Marine Fisheries Service, Department of Fish & Game, Regional Water Quality Control Board, Department of Parks & Recreation, and City of Malibu.

As an example, the Commission should look at its own process. The Application was finally accepted as complete by the Staff on May 21, 2008. No staff report was prepared until January 22, 2009. The Applicant asked for its one continuance by right which the Staff could not agree to because the February meeting was the last meeting under the Permit Streamlining Act. In order to avoid the conflict, the Applicant and the Staff agreed to a withdrawal and new application. Even if the Commission takes action on April 9, 2009, it will have taken 11 months. Other agencies move just as slowly.

Commissioners should consider that by the time all of the other permits have been obtained, and after substantial expenditure by the Applicant, the revegetation plan and the willow cuttings in the existing rocks would be mature and complete. Impact Sciences has done a projection of the revegetation plan compared to the present circumstances which is Applicant's Exhibit, Tab 6. The Commission cannot hold the Applicant responsible for the lack of a revegetation plan to date because revegetation was not a part of the emergency permit and would have been unlawful without the Commission action on this Application.

The Commission should also consider the costs involved. PACE Engineering estimate that implementing the Staff Recommendation (without the costs of processing other necessary permits) will exceed $1,000,000. The existing rocks cost $60,000 to purchase and place. The applicant has already spent more than twice that amount on engineering and environmental studies. The Staff Recommendation places the burden on the Applicant to seek many other permits at a very high cost over a period of several years. This adds to the infeasible aspect of the Staff Recommendation.

3. **The Position of Heal the Bay, Baywatchers and Department of Parks & Recreation that a "Flood Wall" behind a "Soft" Protection of Soil and Plants has No Evidence to Support It.**

Heal the Bay, Baywatchers and the Department of Parks & Recreation each have opposed both the Application and the Staff Recommendation. The common thread of each opposition is that some form of "bioengineered" soft planting on a 3 to 1 slope will successfully protect the bank and the structures beyond the bank. No evidence is offered that such a "soft" form of protection will successfully resist the erosive forces of water as it is turned almost 90 degrees from the direction at which it flows directly at the Mariposa Land to go beneath the Pacific Coast Highway bridge. The Commission's action must be based upon fact and science, not hope and desire.

Heal the Bay and Baywatchers both suggest that the protection of the Shopping Center should be created by a "flood wall". No description of what a "flood wall" requires is given. In fact, a flood wall would be a vertical wall that would need foundations beneath the lowest water level of the creek and extend up to above flood level height. It needs foundations where erosion will not let the wall just fall over one day. There is no question that erosion of the "soft" bank solution will occur. The Applicant's property is on the outside curve of a sharp river bend which no amount of "soft" engineering will ever resist. Outside curves of rivers erode to steep, sharp banks. Inside curves accrete with deposits and push the outside curve even sharper. The pictures under Tab 1 show this inexorable process at work. As the owner of all of the relevant property, if State Parks really wanted to limit erosion on the west bank, it would remove major accretion from the east bank that forces the flow to erode the west bank.

Once the creek waters have eroded the soils in front of the wall (which is certain to happen), what would remain is a high (approximately 14 feet) vertical, concrete wall, with no plants, no soil and no mitigation. Somehow, Heal the Bay and Baywatchers recommend this as a less environmentally damaging alternative. Commission Staff agrees that the alternative does not meet the Coastal Act. Of course, all the environmental damage from removing the existing rock (coffer dam, dewatering, etc.) will occur. It is hard to see how allowing erosion of the entire bank back to a concrete "flood wall" causes less environmental damage.

The opponents' alternative also requires that all of the Applicant's land be eroded away. It is hard to see how this benefits the water quality or the Malibu Lagoon. Those eroded sediments have only one place to go. Only the Malibu Lagoon is downstream. The sediments have no other locations for deposition. Having spent so much effort to restore the Malibu Lagoon, it is surprising that State Parks courts erosion of new sediments to fill it in again.

4. **The Applicant is Prepared to Accept Suitable Special Conditions.**

The Applicant has prepared Special Conditions which would be appropriate if the Commission agrees to approve the maintenance of the rocks in the present location. (See, Applicant's Exhibits, Tab 7.) These Special Conditions are based upon the Special Conditions contained in the Staff Report, eliminating those that reflect requirements based upon the removal, grading and replacement of the rock.

The Applicant asks that the Commission adopt an amending motion to the motion recommended by the Staff and approve Permit No. 4-09-013 subject to the Special Conditions behind Tab 7.

Sincerely,

SHERMAN L. STACEY

SLS/sh

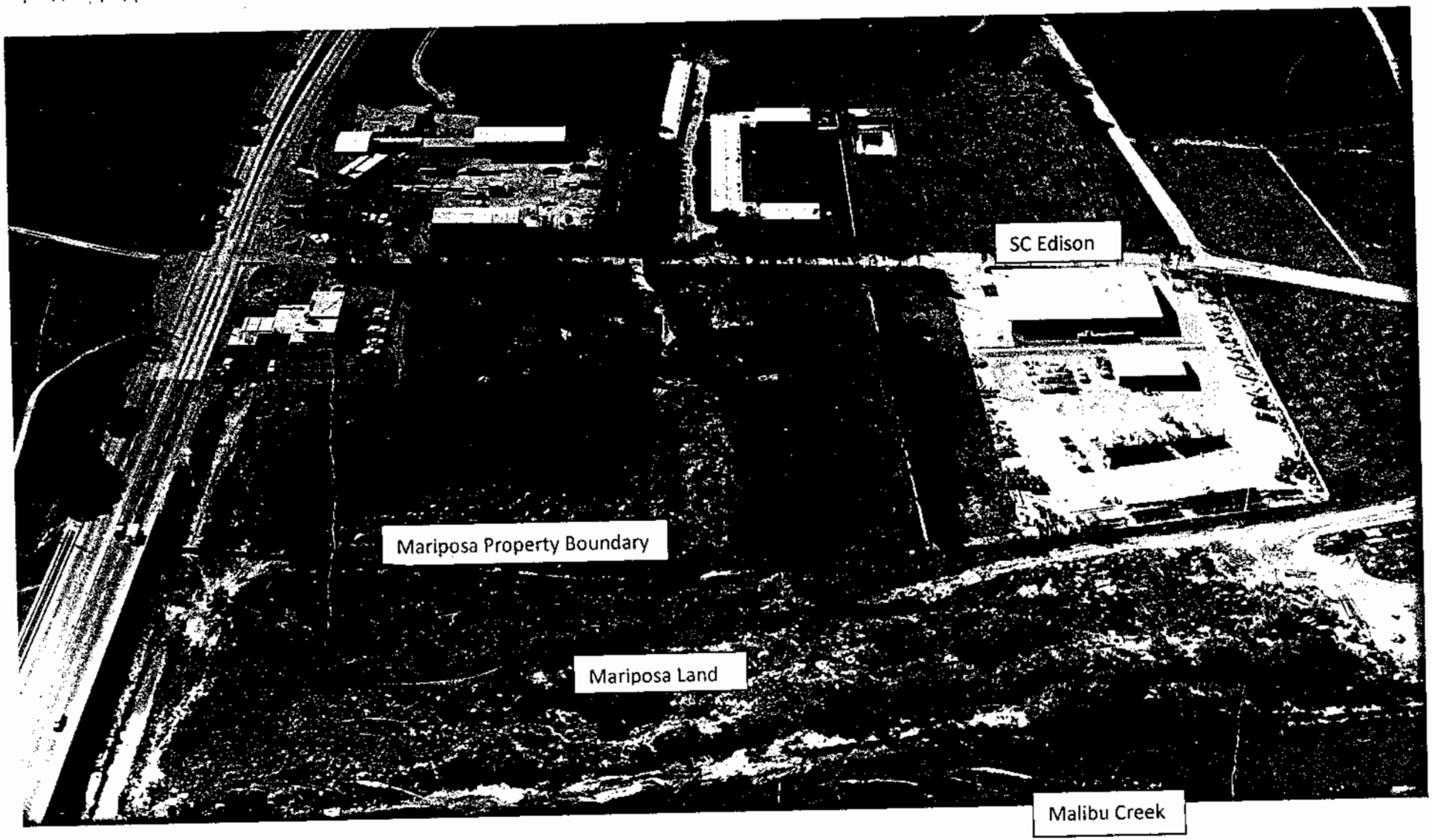
cc: All Commissioners and Alternates
Ventura Commission Office
Mr. Grant Adamson

APPLICATION FOR PERMIT NO. 4-09-013 (MARIPOSA Land Company)

California Coastal Commission

Applicant's Exhibits

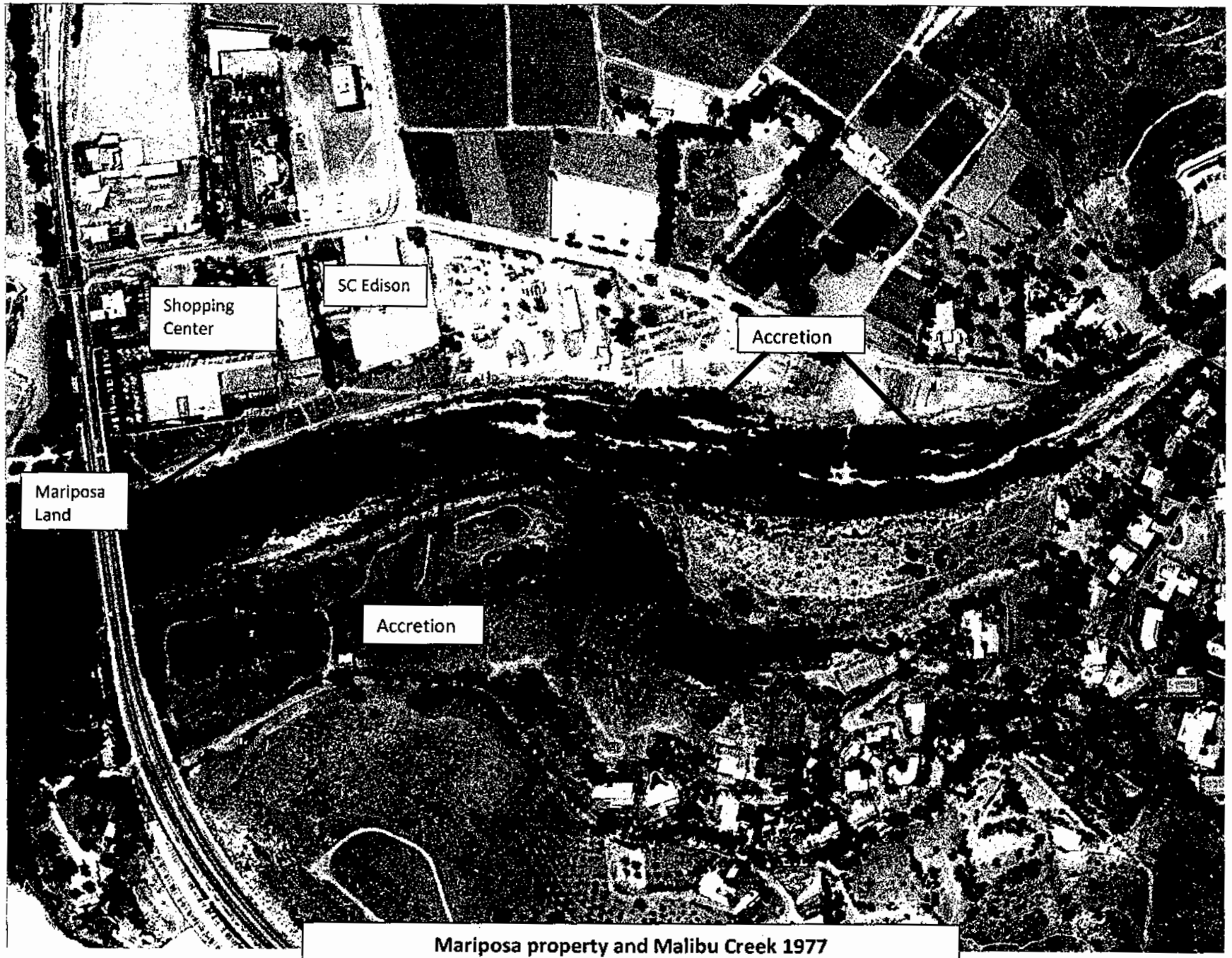
1. Sequence of 1962, 1977, 1981 and 2000 photographs of site showing conditions.
2. Existing and Staff Recommendation Slope Comparison Analysis by David Jaffe, Professional Engineer.
3. Illustration of Method of Work Necessary to Carry Out Staff Recommendation including Coffer Dam, Pile Driver, Backhoe, Trucks, etc.
4. Letter from PACE Engineering regarding flooding impacts from Staff Recommendation design.
5. Letter from Impact Sciences regarding revegetation of Malibu Creek bank.
6. Illustration of existing and future conditions after implementation of Impact Sciences Revegetation Mitigation Plan.
7. Applicant's Proposed Substitute Motion and Special Conditions.



Malibu creek at PCH 1962

Creek along Mariposa Land is straight and land is wide.

EXHIBIT 1

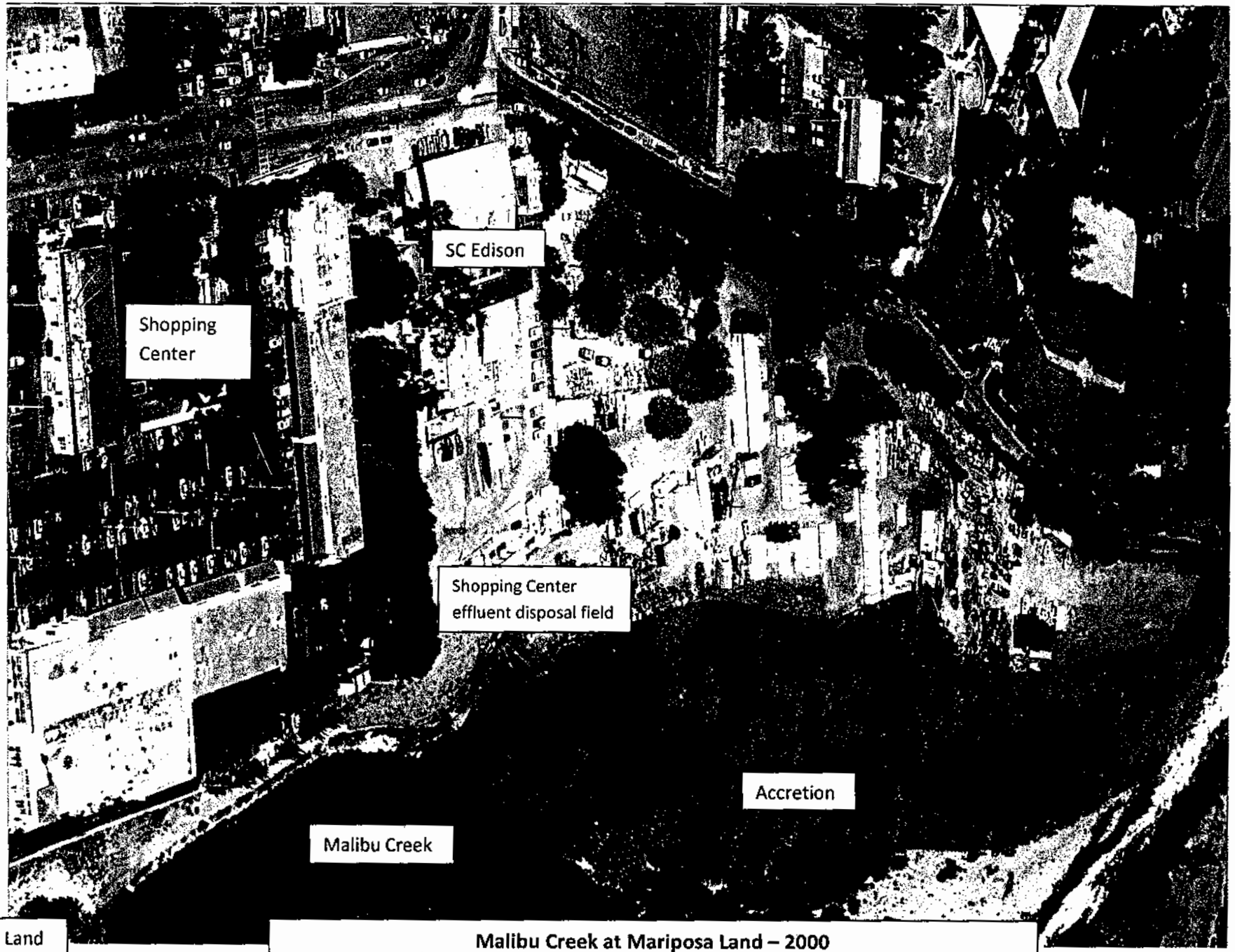


Mariposa property and Malibu Creek 1977

Accretion along the river banks is curving the river to erode the

Malibu Creek along Mariposa Land – 1981

Increased Accretion moves the river course more directly at Mariposa

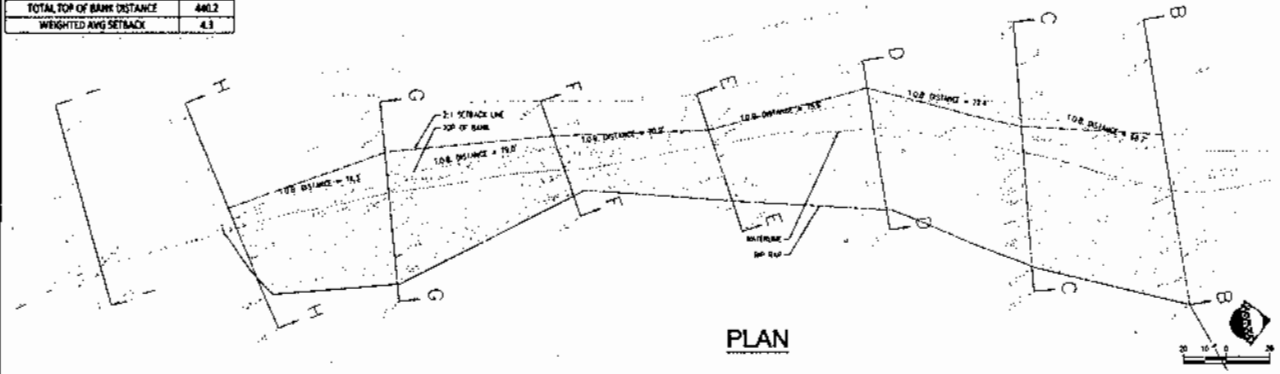


Malibu Creek at Mariposa Land – 2000

River Course now makes 90 degree bend abutting Mariposa Land

Only the existing rock protection prevents erosion of the adjoining shopping center and its newly built effluent disposal field

SECTION	2:1 SETBACK	AVG SETBACK	DIST
B-B	6.5	5.4	68.7
C-C	-3.8	1.3	72.4
D-D	6.4	3.3	75.6
E-E	-0.3	2.5	70.2
F-F	6.9	8.5	79.0
G-G	10.9	8.1	74.3
H-H	5.2		
TOTAL TOP OF BANK DISTANCE			440.2
WEIGHTED AVG SETBACK			4.3



PLAN

SECTION VIEW "B-B"
LOOKING NORTHERLY
SCALE: 1"=10'

SECTION VIEW "C-C"
LOOKING NORTHERLY
SCALE: 1"=10'

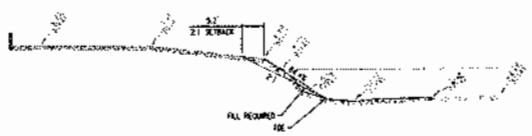
SECTION VIEW "D-D"
LOOKING NORTHERLY
SCALE: 1"=10'

SECTION VIEW "E-E"
LOOKING NORTHERLY
SCALE: 1"=10'

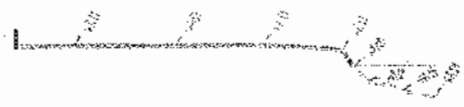
SECTION VIEW "F-F"
LOOKING NORTHERLY
SCALE: 1"=10'

SECTION VIEW "G-G"
LOOKING NORTHERLY
SCALE: 1"=10'

SECTION VIEW "H-H"
LOOKING NORTHERLY
SCALE: 1"=10'



SECTION VIEW "I-I"
LOOKING NORTHERLY
SCALE: 1"=10'



ENGINEER'S SEAL (SLOPE STUDY ONLY):

GRIMES SURVEYING & MAPPING, INC.
5245 HUNTINGTON DRIVE SOUTH LOS ANGELES, CALIFORNIA 90032 (323)223-1011

SURVEY OF:

MALIBU CREEK

FILE NO. 7008184 SCALE: 1"=10' DATES SURVEYED: SEPTEMBER 16, 2008 - SEPTEMBER 25, 2015 MALIBU, CALIFORNIA

SHEET 2 OF 2 SHEETS

SURVEYOR'S SEAL:

134

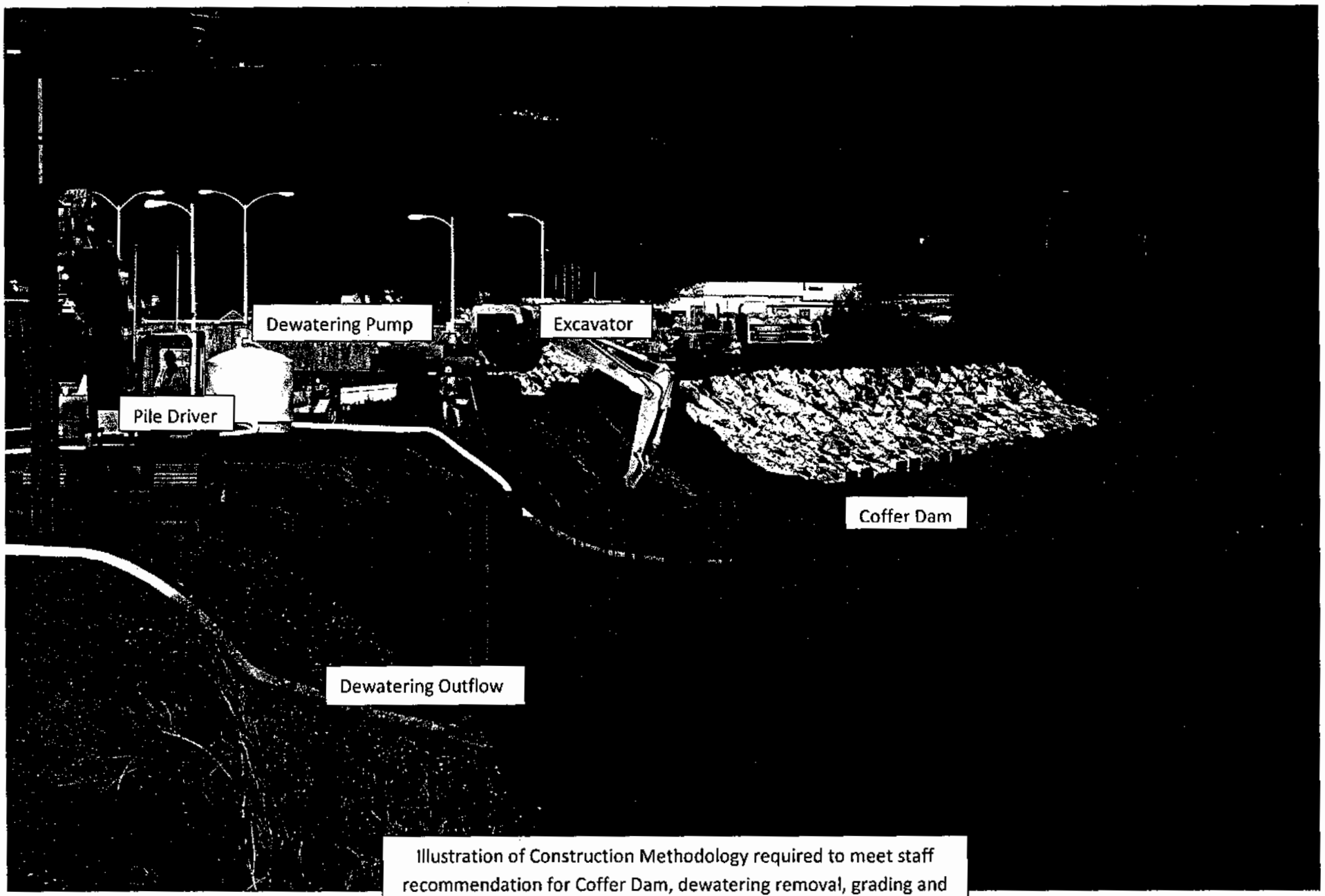


Illustration of Construction Methodology required to meet staff recommendation for Coffer Dam, dewatering removal, grading and replacement of rock.

EXHIBIT 3

134

PACE
Advanced Water Engineering

March 24, 2009

Grant H. Adamson
Vice President
Mariposa Land Corporation
23852 Pacific Coast Hwy. #368
Malibu, CA 90265
Phone (310) 456-3230

Fax (310) 456-3182

Re: Malibu Creek Bank Restoration
Change in Depth for the Proposed Coastal Commission Improvements # 7856E

Dear Grant,

Attached, please find the results of the existing and proposed conditions HEC-RAS model of lower Malibu Creek. The model output for flow depth is shown in Table 1.

Please recall that the existing conditions model examines the hydraulics of the Creek during the 100-year event with the creek geometry in its present state. The proposed conditions geometry reflects the changes requested by CCC and represents the 2:1 side-slope on the west bank upstream of the HWY 101 Bridge. The revised slope is approximately 500 ft in length.

The results of the modeling indicate that, on average, the depth of flow during the 100-year discharge event will increase by 0.1 ft for the study reach as a whole, and with a 0.9 ft maximum water surface elevation increase.

It is important to note that the overbank area of the project site, as well as the adjacent property presently exists in the FEMA flood zone AO (Depth 2) indicating shallow flooding up to 2 ft (see enclosed FIRM panel 1541F). An increase of flow depth at this location has the potential to exacerbate flooding in the presently mapped location and adjacent to the project site.

Please feel free to contact me with any questions or comments regarding this project.

Sincerely,

David A. Jaffe, PhD, PE
Project Manager

DAJ/AS

P:\7856E\5-Administrative\Letters\Out\Adamson, Grant - Change in Depth 03-24-09.doc

EXHIBIT 4

Table 1: Lower Malibu Creek Existing and Proposed (CCC) Depth (ft) by Section			
Section	Depth (ft)		Δ
	Existing	Proposed	
2100	17.5	17.6	0.2
2070.36*	17.3	17.4	0.2
2040.73*	17.0	17.1	0.2
2011.1	15.9	16.1	0.2
2006.1	16.0	16.2	0.2
2001.1	15.9	16.1	0.1
1984.25*	15.9	16.0	0.1
1967.4*	15.8	15.9	0.1
1950.55*	15.7	15.9	0.1
1933.7*	15.7	15.8	0.1
1916.85*	15.7	15.8	0.1
1900	15.6	15.7	0.1
1883.33*	15.6	15.6	0.1
1866.66*	15.6	15.7	0.1
1850.*	15.7	15.8	0.1
1833.33*	15.8	15.9	0.1
1816.66*	15.8	16.0	0.1
1800	15.9	16.0	0.1
1783.33*	15.8	15.9	0.1
1766.66*	15.7	15.8	0.1
1750.*	15.5	15.6	0.1
1733.33*	15.4	15.5	0.1
1716.66*	15.2	15.3	0.1
1700	14.9	15.1	0.2
1683.33*	14.7	14.9	0.2
1666.66*	14.5	14.6	0.2
1650.*	14.3	14.3	0.0
1633.33*	14.2	14.0	-0.1
1616.66*	14.1	13.4	-0.6
1600	14.0	13.5	-0.5
1586.8*	13.9	13.5	-0.4
1573.6	13.8	13.5	-0.3
1568.5	13.8	13.5	-0.3
1563.2	12.7	12.7	0.1
1531.6*	11.3	12.2	0.9
1500	11.3	11.8	0.5
1400	11.0	11.2	0.2
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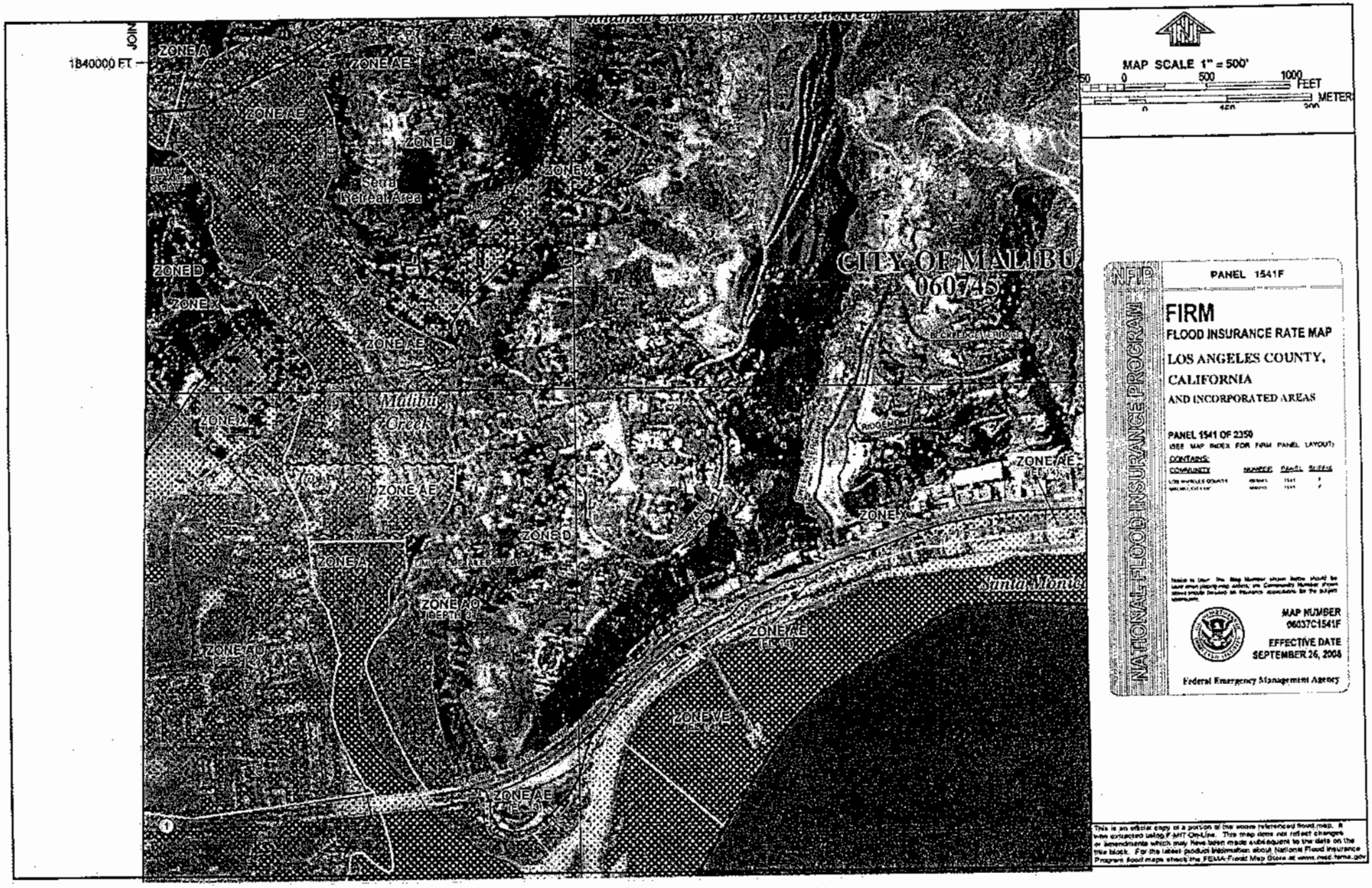
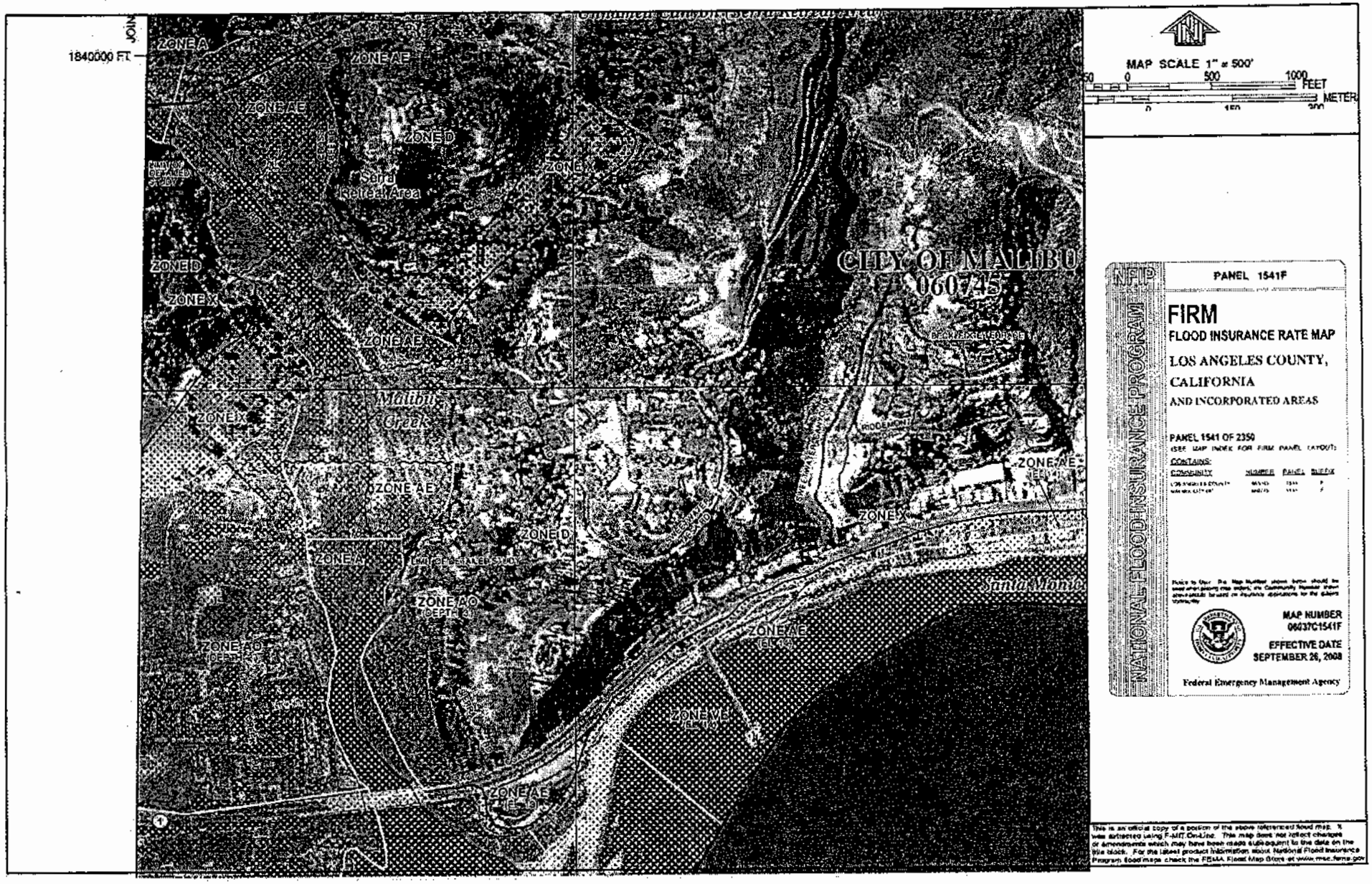
		Average=	0.1
		Maximum=	0.9

PACE


1840000 FT
ZONE A
ZONE AE
ZONE AE
ZONE D
State Retreat Area
ZONE X
ZONE D
ZONE X
ZONE AE
CITY OF MALIBU
060745
Malibu Creek
ZONE X
ZONE AE
ZONE AE
ZONE D
ZONE X
ZONE A
ZONE AO
DEPTH 3
Santa Monica
ZONE AE
ZONE AO
ZONE VE
ZONE AE
MAP SCALE 1" = 500'
50 0 500 1000 FEET
0 150 300 METER
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 1541F
FIRM
FLOOD INSURANCE RATE MAP
LOS ANGELES COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 1541 OF 2350
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
MAP NUMBER
06037C1541F
EFFECTIVE DATE
SEPTEMBER 26, 2008
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

134 (4)


1840000 FT
ZONE A
ZONE AE
ZONE AE
ZONE D
Santa Monica Mountains Reservation Area
Serra Retreat Area
ZONE D
ZONE X
ZONE AE
CITY OF MALIBU
060745
ZONE X
Malibu Creek
ZONE AE
ZONE D
ZONE A
ZONE AO
ZONE AO
ZONE AE
ZONE X
ZONE AE
ZONE AE
Santa Monica
ZONE VE
ZONE AE
MAP SCALE 1" = 500'
0
500
1000
FEET
METER
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134 (4)

IMPACT SCIENCES | 20 YEARS

February 23, 2009

Grant Adamson
Mariposa Land Company
PO Box 2485
Malibu, California 90265

Attn: Grant Adamson

Re: Comments regarding revegetation of the Malibu Creek bank

Dear: Mr. Adamson:

I have reviewed the January 9, 2009 letter from Dr. Jonna Engle to Deanna Christensen of the Coastal Commission regarding the vegetation restoration plan prepared by Impact Sciences for your property. The second paragraph of her letter states that "vegetation has been able to naturally recruit among the rip rap. However, plants are unable to establish on the majority of the rip rap which stand at a steep 1:1 slope angle. It is my opinion that the stream bank restoration would be more successful if the proposed rip rap were to be laid back at a lesser slope angle, such as 2:1, which is more typical for vegetated rip rap bank stabilization designs."

The 1:1 slope was a figure mentioned prior to the survey by Edward P. Sternagle, a licensed surveyor, who determined the true slope, which in part is closer to a 1.7:1 angle. What Dr. Engle did not mention is that the mulefat shrubs that revegetated part of the stream bank are in areas that received sufficient sunlight for the seedlings to become established. The angle of the slopes and the depth of the rip rap in other parts of the stream bank preclude sunlight from penetrating to where seedlings might germinate, thereby not allowing the seedlings to photosynthesize, the process whereby the nutrients are produced for the developing seedlings.

The proposed willow cuttings should be sufficiently long to extend beyond the rip rap thereby allowing developing leaves to be exposed to sunlight, and undergo photosynthesis. The use of cutting would speed up and ensure success of the stream bank revegetation.

The letter also states that "placement of a bottom layer of fabric filter under the rip rap would reduce soil piping and turbidity from high flow events." As the rip rap has been stable for the 10 years since installation, without any sign of soil piping or turbidity, the need for this fabric is questionable. The placement and rooting of willow

EXHIBIT 5

cuttings should only increase stream bank stability. However, if the stable slopes are altered with the rip rap removed and the bank cut back, fabric filter would be required to control soil piping and reduce siltation caused by this new disturbance.

In conclusion, Malibu Creek's banks, where rip rap has been for the past 10 years, can be successfully revegetated if willows are installed in a manner that allows the plants access to the soil to root, stabilize the soil, and obtain nutrients. Furthermore, the manner of installation should permit access to sunlight for photosynthesis, without disturbing the stable banks currently present.

Very truly yours,
IMPACT SCIENCES, INC.

Larry Lodwick

Larry Lodwick
Associate Principal

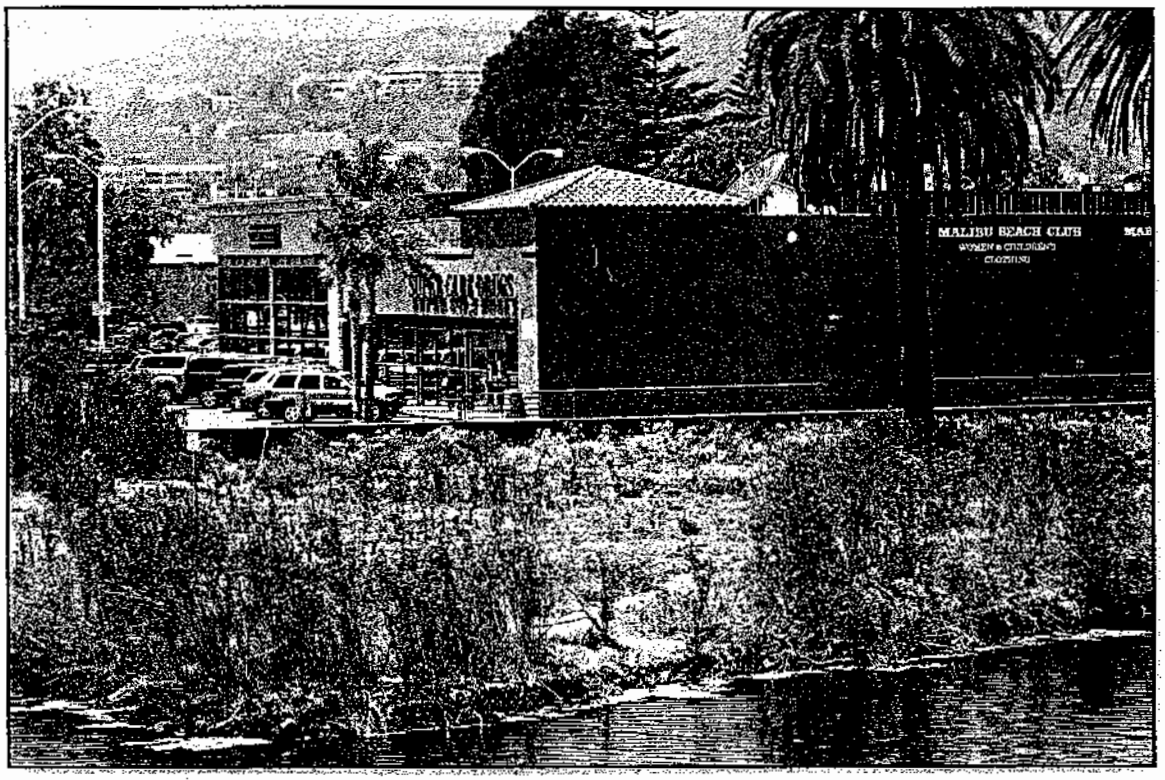


Photo 1 – South end of site

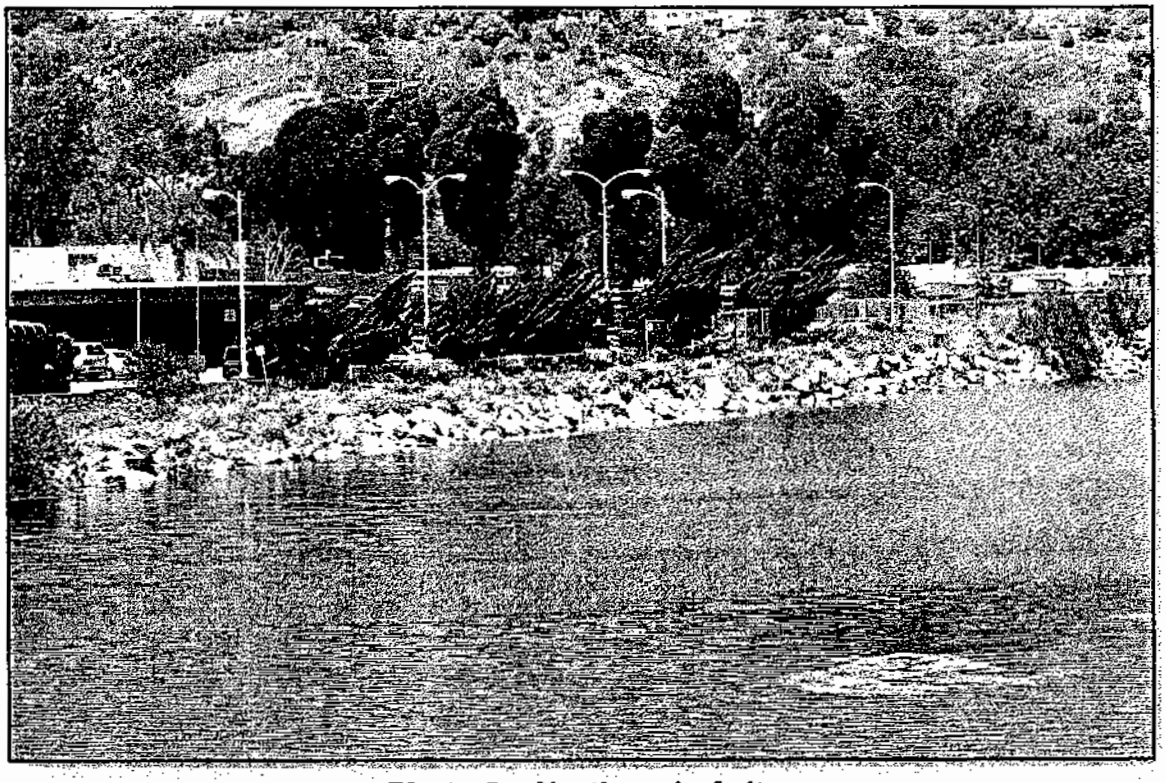


Photo 2 – North end of site

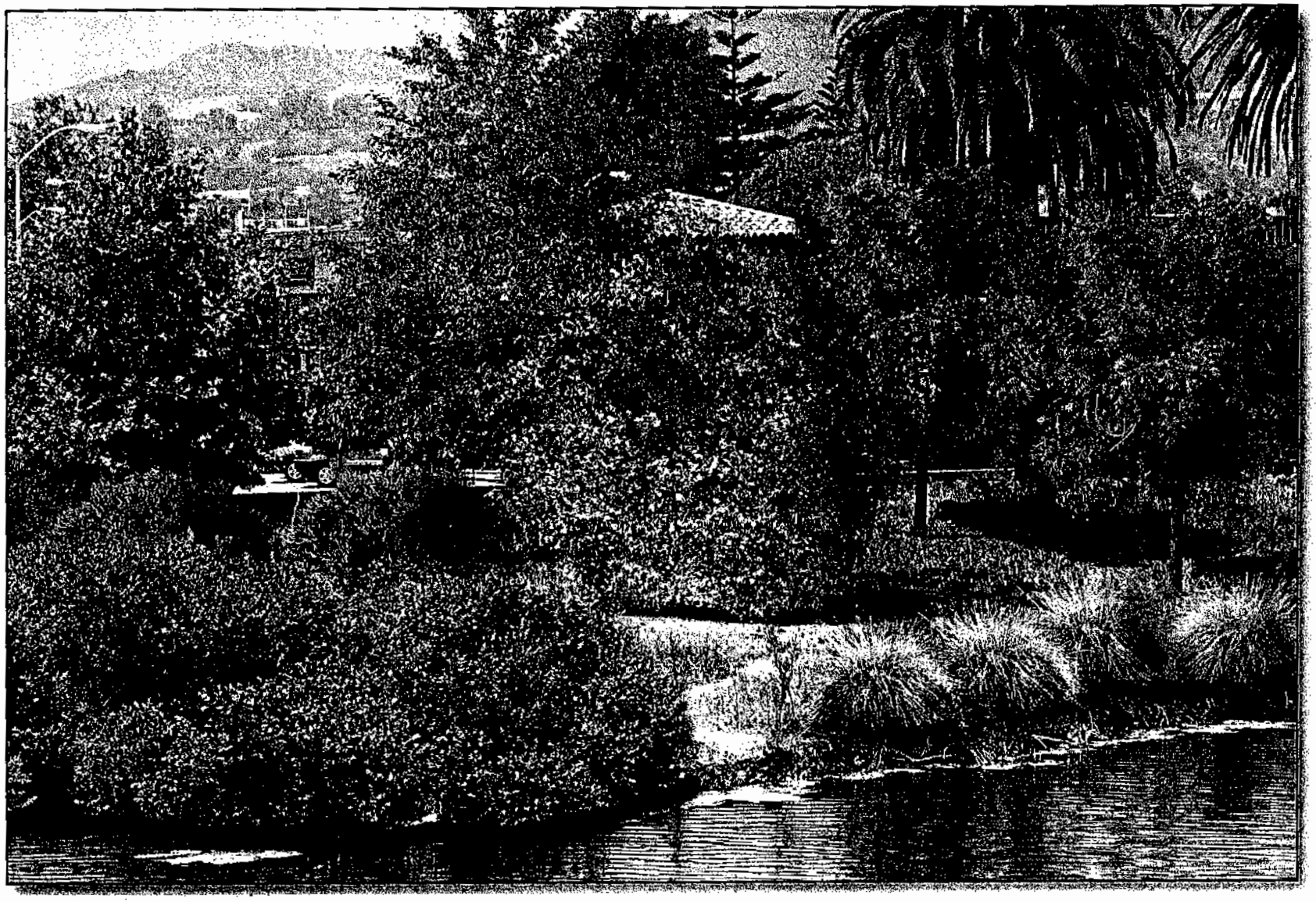
SOURCE: Impact Sciences, Inc. – August 2007

FIGURE 3

EXHIBIT 6

Photographs Depicting Current Site Conditions

908-001-08/07

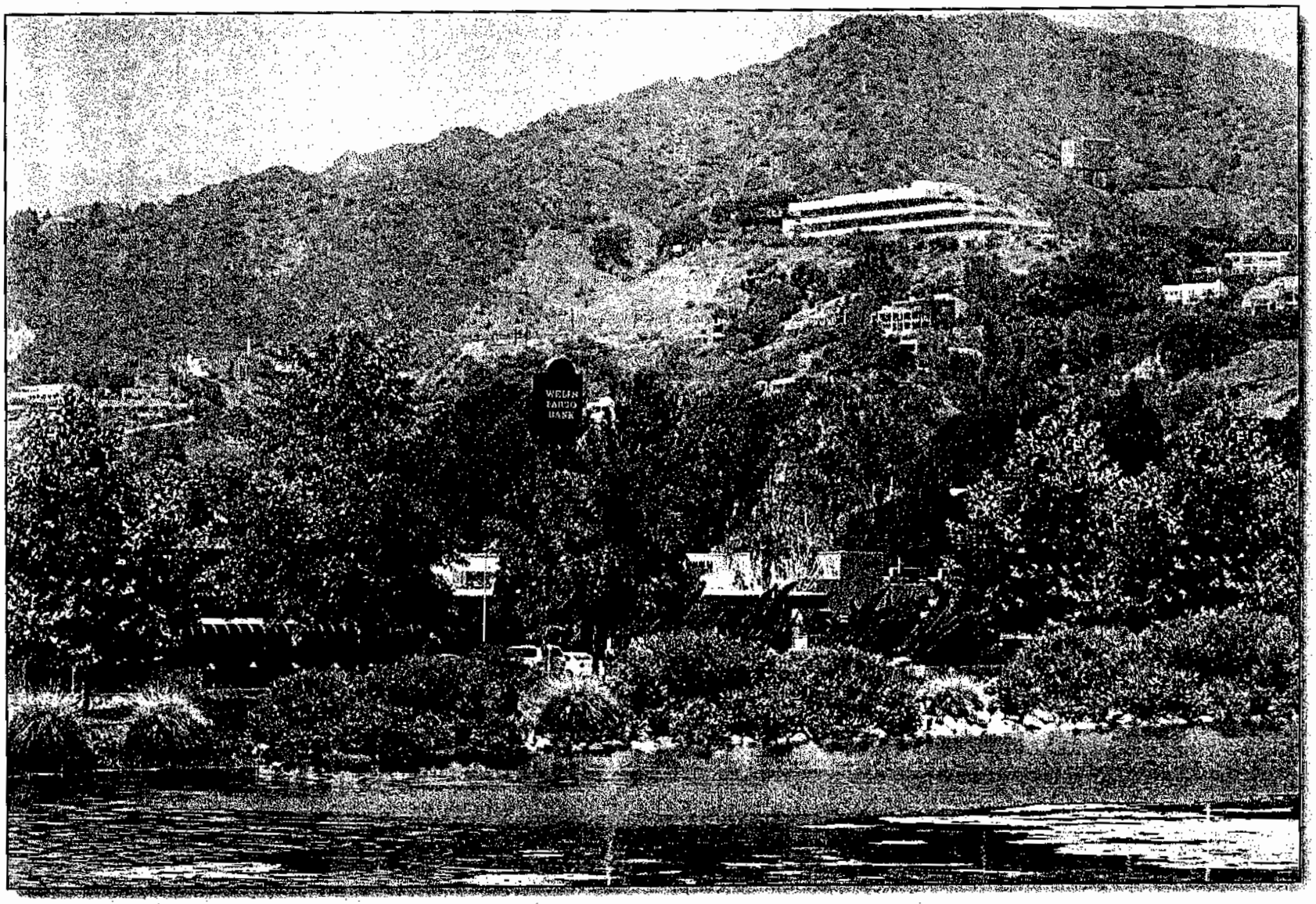


SOURCE: Impact Sciences - July 2007

FIGURE 6

Photograph Simulation of Mitigation (Year 5) – South End of Site

908-001•07/07



SOURCE: Impact Sciences - August 2007

FIGURE 7

Photograph Simulation of Mitigation (Year 5) – North End of Site

908-001-08/07

MOTION

I move a substitute motion approve to the Applicant's proposed development subject to the Standard Conditions and the Special Conditions set forth below and to adopt revised findings in support of such decision on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will be 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 10 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.

SPECIAL CONDITIONS

1. Assumption of Risk

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

2. Revegetation Implementation and Monitoring

By acceptance of this permit, the applicant agrees to implement the approved "Vegetation Restoration Plan" (Impact Sciences Inc.). The plan shall be carried out under the direction of qualified biologist or resource specialist. Successful site restoration shall be determined if the revegetation of native plant species on site is

adequate to provide 90% coverage by the end of the five (5) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation.

The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting/revegetation work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planning/revegetation work.

Five years from the initial planting completion date, the applicant shall submit for the review and approval of the Executive Director, a Revegetation monitoring Report, prepared by a qualified biologist or resource specialist, that certifies whether the on-site revegetation is in conformance with the revegetation plan approved pursuant to Special Condition 3 and has been implemented consistent with, and restoration has been successful as defined by, this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

3. Maintenance Activities and Future Alterations

The permittee shall maintain the permitted bank protection in its approved state. Any change in the design of the project or future addition/reinforcement of the approved structure beyond exempt maintenance as defined in Public Resources Code section 30610(d) and Section 13252 of Title 14 of the California Code of Regulations to restore the structure to its original condition as approved herein will require a coastal development permit. However, if (after inspection) it is apparent that the repair and maintenance is necessary, the permittee shall contact the Executive Director to determine whether a coastal development permit or an amendment to this permit is legally required, and, if required, shall subsequently apply for a coastal development permit or permit amendment foe the required maintenance.

4. Deed Restriction

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2)imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the

event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

5. Site Inspection

A. By acceptance of this permit, the applicant irrevocably authorizes, on behalf of itself and its successors-in-interest with respect to the subject property, Coastal Commission staff and its designated agents to enter onto the property to undertake site inspections for the purpose of monitoring compliance with the permit, including the special conditions set forth herein, and to document their findings (including but not limited to, by taking notes, photographs, or video), subject to Commission staff providing 24 hours advanced notice to the contact person indicated pursuant to paragraph B prior to entering the property, unless there is an imminent threat to coastal resources, in which case such notice is not required. If two attempts to reach the contact person by telephone are unsuccessful, the requirement to provide 24 hour notice can be satisfied by voicemail, email, or facsimile sent 24 hours in advance or by a letter mailed three business days prior to the inspection. Consistent with this authorization, the applicant and its successors: (1) shall not interfere with such inspection/monitoring activities and (2) shall provide any documents requested by the Commission staff or its designated agents that are relevant to the determination of compliance with the terms of this permit.

B. ***Prior to issuance of the Coastal Development Permit***, the applicant shall submit to Commission staff the email address and fax number, if available, and the address and phone number of a contact person authorized to receive the Commission's notice of the site inspections allowed by this special condition. The applicant is responsible for updating this contact information, and the Commission is entitled to rely on the last contact information provided to it by the applicant.

6. Condition Compliance

Within 180 days of Commission action on this coastal development permit application, or within such time as the Executive Director may grant for good cause, the applicant shall Satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions Chapter 9 of the Coastal Act.

FORM FOR DISCLOSURE OF EX PARTE COMMUNICATION

Date and time of communication:
(For messages sent to a Commissioner by mail or facsimile or received as a telephone or other message, date time of receipt should be indicated.)

January 29, 2009, 2:00 pm

Location of communication:
(For communications sent by mail or facsimile, or received as a telephone or other message, indicate the means of transmission.)

Conference Phone Call

Person(s) initiating communication:

Sherman Stacey, Gaines and Stacey

Person(s) receiving communication:

Bonnie Neely

Name or description of project:

Feb Coastal Agenda Items:
Th2.6a – 4-98-24 - Mariposa Land Co. Application, Malibu, LA County

Detailed substantive description of content of communication:
(If communication included written material, attach a copy of the complete test of the written material.)

Mr. Stacey, representing the applicant, explained that the project was a creek bank protection installed under emergency permit 10 years ago. Staff was recommending removing and reconfiguring the rock protection to a lesser slope by grading the bank but applicant objected because existing rocks gave better protection, there was an acceptable mitigation plan, and reconfiguring the slope would cause environmental damage over a large area. Stacey said the project has been approved by City, Army Crops, RWQCB, and Fish and Game. Staff recommendation would also split applicant's property without access. Removing and reconfiguring caused great damage for little benefit.

Date: January 29, 2009

Signature of Commissioner

If the communication was provided at the same time to staff as it was provided to a Commissioner, the communication is not ex parte and this form does not need to be filled out.

If communication occurred seven or more days in advance of the Commission hearing on the item that was the subject of the communication, complete this form and transmit it to the Executive Director within seven days of the communication. If it is reasonable to believe that the completed form will not arrive by U.S. mail at the Commission's main office prior to the commencement of the meeting, other means of delivery should be used, such as facsimile, overnight mail, or personal delivery by the Commissioner to the Executive Director at the meeting prior to the time that the hearing on the matter commences.

If communication occurred within seven days of the hearing, complete this form, provide the information orally on the record of the proceedings and provide the Executive Director with a copy of any written material that was part of the communication.

Coastal Commission Fax: 415 904-5400

Exhibit 14
4-09-013 (Mariposa)
Ex Parte Communications

FORM FOR DISCLOSURE OF EX PARTE COMMUNICATIONS

JAN 30 2009

Name or description of project, LPC, etc.: 4-98-024

Date and time of receipt of communication: 1/27/09 10:15am

Location of communication: 7727 Herschel Ave, La Jolla

Type of communication (letter, facsimile, etc.): Meeting

Person(s) initiating communication: Sherman Stacey

Detailed substantive description of content of communication:
(Attach a copy of the complete text of any written material received.)

Stacey represents applicant. Stacey explained that project was a creek bank protection installed under emergency permit 10 years ago. Staff was recommending removing and reconfiguring the rock protection to a 2 to 1 slope. Applicant objected because existing rocks gave better protection and reconfigured slope would have greater damage over a greater area. Staff recommendation would also split Applicants property without access.

1/28/09
Date

Signature of Commissioner

If the communication was provided at the same time to staff as it was provided to a Commissioner, the communication is not ex parte and this form does not need to be filled out.

If communication occurred seven or more days in advance of the Commission hearing on the item that was the subject of the communication, complete this form and transmit tit to the Executive Director within seven days of the communication. IF it is reasonable to believe that the completed form will not arrive by U.S. mail at the Commission's main office prior to the commencement of the meeting, other means of delivery should be used, such as facsimile, overnight mail, or personal delivery by the Commissioner to the Executive Director at eh meeting prior to the time that the hearing on the matter commences.

If communication occurred within seven days of the hearing, complete this form, provide the information orally on the record of the proceeding and provide the Executive Director with a copy of any written material that was part of the communication.

FORM FOR DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project, LPC, etc.: Application No. 4-09-013

Date and time of receipt of communication: March 12, 2009 – 11:30 am

Location of communication: Two Portola Plaza, Monterey

Type of communication (letter, facsimile, etc.): Meeting

Person(s) initiating communication: Sherman Stacey

Detailed substantive description of content of communication:

(Attach a copy of the complete text of any written material received.)

Stacey stated that he represented the Applicant. Stacey described that the applicant had installed a rock protection along Malibu Creek in 1998 under an emergency permit. Stacey described that the Staff supported rock protection but wanted the applicant to remove the rock, regrade the bank and replace the same rock in the same location at a flatter slope. Stacey said that the existing bank protection had no adverse impacts which the changes recommended by Staff would mitigate. Stacey stated that the only real claim made by Staff is that willow replanting among the rocks would be potentially more successful if the rocks were changed than it might be with the rocks in the present location. Stacey said that carrying out the Staff Recommendation would have adverse environmental effects by requiring construction within the creek and impacts on endangered species. Stacey stated that the evidence would show that leaving the existing rocks in place with the mitigation proposed by the applicant was the least environmentally damaging alternative. Stacey said that he would deliver written argument and evidence to all commissioners prior to the hearing.

3-30-09
Date

Signature of Commissioner

If the communication was provided at the same time to staff as it was provided to a Commissioner, the communication is not ex parte and this form does not need to be filled out.

If communication occurred seven or more days in advance of the Commission hearing on the item that was the subject of the communication, complete this form and transmit it to the Executive Director within seven days of the communication. IF it is reasonable

ex. 14

to believe that the completed form will not arrive by U.S. mail at the Commission's main office prior to the commencement of the meeting, other means of delivery should be used, such as facsimile, overnight mail, or personal delivery by the Commissioner to the Executive Director at eh meeting prior to the time that the hearing on the matter commences.

If communication occurred within seven days of the hearing, complete this form, provide the information orally on the record of the proceeding and provide the Executive Director with a copy of any written material that was part of the communication.

ex. 14

FORM FOR DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project, LPC, etc.:	Mariposa Land Company Permit No. 4-09-013
Date and time of receipt of communication:	6/24/09 2:00pm
Location of communication:	3335 Cliff Drive, Santa Barbara, CA
Type of communication (letter, facsimile, etc.):	Meeting
Person(s) initiating communication:	Sherman L. Stacey

Detailed substantive description of content of communication:
(Attach a copy of the complete text of any written material received.)
Stacey stated that the rock protection along Malibu Creek was brought back after a Commission continuance. Stacey referred to correspondence previously sent to all Commissioners. Stacey stated that the applicant opposed the staff recommendation and wanted to leave the rocks in place with a planting plan for mitigation. Stacey stated that the Staff Recommendation to remove and then put back the rocks caused significant adverse effects for no material benefit.

7-5-09
Date

Signature of Commissioner

If the communication was provided at the same time to staff as it was provided to a Commissioner, the communication is not ex parte and this form does not need to be filled out.

If communication occurred seven or more days in advance of the Commission hearing on the item that was the subject of the communication, complete this form and transmit tit to the Executive Director within seven days of the communication. IF it is reasonable to believe that the completed form will not arrive by U.S. mail at the Commission's main office prior to the commencement of the meeting, other means of delivery should be used, such as facsimile, overnight mail, or personal delivery by the Commissioner to the Executive Director at eh meeting prior to the time that the hearing on the matter commences.

If communication occurred within seven days of the hearing, complete this form, provide the information orally on the record of the proceeding and provide the Executive Director with a copy of any written material that was part of the communication.