

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
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Commission Action:



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STAFF REPORT: PERMIT AMENDMENT

APPLICATION NO.: 5-83-004-A1

APPLICANT: Quaker Corporation

AGENT: Sherman Stacey

PROJECT LOCATION: Piuma Road (east of Cold Canyon Road), Monte Nido Area
(Los Angeles County)

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED: Division of 102 acres into 22
one acre lots for residential use.

DESCRIPTION OF AMENDMENT: Delete 55 ft. high detention basin approximately one
acre in size from the approved plans; enlarge two existing 48 inch diameter culverts with two
new 12 ft. wide x 6 ft. high and 14 ft. wide x 7 ft. high double box culverts; reduce proposed
grading by 10,660 cu. yds. for a total of 67,480 cu. yds. of grading; and modify special
condition 4(d) to specifically prohibit grading only during the rainy season (November 1 -
March 31).

LOCAL APPROVALS RECEIVED: Los Angeles County Department of Public Works
Approval in Concept.

SUBSTANTIVE FILE DOCUMENTS: Culvert Upgrade Engineering Assessment Letter
by B & E Engineers dated 2/5/98; Letter to applicant from Department of Parks and
Recreation dated 4/2/97; and Coastal Development Permit 4-94-059 (LACDPW).

PROCEDURAL NOTE: The Commission's regulations provide for referral of permit
amendment requests to the Commission if:

- 1) *The Executive Director determines that the proposed amendment is a material change,*
- 2) *Objection is made to the Executive Director's determination of immateriality, or*
- 3) *The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.*

If the applicant or objector so requests, the Commission shall make an independent
determination as to whether the proposed amendment is material. 14 Cal. Admin. Code
13166.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission determine that the proposed development with the proposed amendment, subject to seven (7) special conditions regarding a riparian revegetation and mitigation program, biological monitor during construction, post construction biological and hydrological monitoring, revised special condition for underlying permit, material/design specifications, required approvals, and assumption of risk, is consistent with the requirements of the Coastal Act.

The underlying coastal development permit allows for the subdivision of a 102 acre lot to create 22 one acre lots with an offer to dedicate the remaining portion of the property to a public or private non-profit agency. This permit also provided for the grading of roads and residential lots, as well as, the construction of a detention basin immediately upstream from the proposed culvert replacements. The detention basin would consist of a 55 ft. high, 240 ft. wide earthen dam which would be faced in concrete (on the inner side of the basin) and occupy approximately one acre of land which has been previously offered for dedication to a private or public non-profit agency.

The applicant proposes to amend their permit delete the 55 ft. high detention basin from the approved plans; replace two existing 48 inch diameter culverts with two new 12 ft. wide x 6 ft. high and 14 ft. wide x 7 ft. high double box culverts; reduce proposed grading by 10,660 cu. yds. for a total of 67,480 cu. yds. of grading; and modify special condition 4(d) to specifically prohibit grading only during the rainy season (November 1 - March 31).

The Commission has previously approved the replacement of the two existing culverts at the subject site under Coastal Development Permit 4-94-059 (which allowed for the replacement and enlargement of 23 culverts within the Santa Monica Mountains) which was issued to the Los Angeles County Department of Public Works on September 26, 1994. The culvert upgrades approved at the current subject site included the removal of the existing 48 inch diameter culverts and installation of two new box culverts 16 ft. wide x 8 ft. high. However, the County did not implement the culvert replacement at the subject site.

The subject site is located within the Malibu/Cold Creek Resource Management Area and is directly adjacent to State Park land. The culvert enlargements will be located where a blue line stream, as designated by the United States Geologic Service, crosses under Piuma Road in two locations. A portion of the Backbone trail is located on the project site adjacent to the proposed upstream culvert upgrade. The proposed culvert enlargements will have some potential adverse impacts to habitat resources for which mitigation will be required by special conditions 1, 2, and 3 (riparian habitat revegetation and construction and post construction monitoring). However, the construction of the previously approved detention basin (which would require more extensive alteration and construction within the stream channel) would result in greater impacts to habitat and visual resources than the proposed replacement of the culverts.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions.

The Commission hereby **approves** the amendment to the coastal development permit, on the grounds that as modified, the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, 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 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

NOTE: All standard and special conditions attached to the previously approved permit remain in effect.

II. Special Conditions

1. Riparian Revegetation and Mitigation Program

Prior to the issuance of the permit amendment, the applicant shall submit for the review and approval of the Executive Director, a detailed revegetation Program for all areas disturbed by grading and construction activities and a riparian mitigation plan for riparian habitat permanently displaced due to the installation of the proposed culverts. These plans shall be prepared by a qualified resource specialist, arborist, or biologist and shall include, but not be limited to, the following:

- a. **Preliminary Biological Survey** which includes a description of the site, its native habitat, climate, and a list of the existing vegetation, including all oak trees, regardless of caliper size or height, located at each culvert site. These species and their locations shall be clearly marked on the site plans of the individual sites. This survey shall include photographs of each proposed culvert site taken from pre-designated photo locations (annotated to a copy of the site plans). The same photo sites shall be used throughout the restoration and monitoring phase to provide a visual status of project progress.
- b. **Revegetation and Mitigation Plans** that presents the objectives of the revegetation and mitigation plans and a detailed description of the of how revegetation and mitigation is to be implemented (including a schedule of planting activities, a final list of plant materials and description of planting methods to be used). The revegetation and mitigation plan shall include a description of all temporary and permanent impacts which have occurred to the riparian habitat due to construction activities or the physical occupation of riparian habitat by the

culverts or wing walls and shall include a site plan for areas of temporary or permanent loss of riparian habitat. The mitigation plan shall provide for the replacement of all oak trees destroyed or damaged by construction activities at a 10:1 ratio and the replacement of riparian habitat permanently displaced by the proposed culverts and wing walls at a 3:1 ratio. The mitigation areas shall be delineated on a site plan and shall be located on or immediately adjacent to the project site.

- c. A **Monitoring Program** shall be implemented which monitors the project for compliance with the guidelines and performance standards listed in the proposed revegetation and mitigation plan. The applicant shall submit on an annual basis a written report, prepared by a monitoring resource specialist indicating the success or failure of the restoration project. This report shall include further recommendations and requirements for additional restoration activities in order for the project to meet the criteria and performance standards listed in the proposed restoration plan, and technical specifications. These reports shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) indicating the progress of recovery at each of the sites.

At the end of a five year period, a final detailed report shall be submitted for review and approval of the Executive Director. If this report indicates that the restoration project has in part, or in whole, been unsuccessful, based on the approved performance standards, the applicant shall be required to submit a revised or supplemental program to compensate for those portions of the original program which were not successful. The revised, or supplemental restoration program shall be processed as an amendment to this Coastal Development Permit.

2. **Biological Monitoring During Construction**

Prior to the commencement of construction the applicant shall retain the services of an independent biological consultant or arborist with appropriate qualifications, acceptable to the Executive Director, to monitor all construction activities relating to the installation of the culverts. In addition, the property line between State Parks land and the subject site shall be clearly staked. Protective fencing shall be used around all oak trees which may be disturbed during the installation of the culverts. The consultant shall immediately notify the Executive Director if unpermitted activities occur, or if habitat is removed beyond the scope of the work permitted by this permit. This monitor shall have the authority to require the applicant to cease work should any breach in permit or agreement compliance occur, or if any unforeseen sensitive habitat issues arise.

3. **Post Construction Biological & Hydrological Monitoring**

Once construction has been completed, the applicant shall retain the services of a qualified biological consultant or arborist and hydrologist subject to approval by the Executive Director. These consultants shall examine both of the culvert sites, and downstream areas, immediately after the first rains following construction completion at

each site, and annually after each rainy season for a period of 5 years. Following each inspection, the consultants shall prepare a report for the review and approval of the Executive Director which shall include any adverse impacts caused by the culvert enlargements, such as increased downstream erosion, increased risks to life or property, impacts to public access along the Backbone Trail, or degradation or damage to sensitive resources. If the new culverts should fail in any way with regards to the above mentioned concerns, the consultants shall make recommendations on the methods required to mitigate against further failure. The applicant shall be required to make these design changes and shall submit an amendment to this permit for the retrofitting of the culverts in question. Furthermore, once construction has been completed, the applicant shall submit for the review of the Executive Director, an annual report for a period of five years addressing the effectiveness of the culverts and velocity reducing structures in minimizing stream channel erosion, resource impacts of any erosion and recommendations for mitigating any erosion of the stream channel. Should significant erosion occur as a result of the enlargement of the culverts, the applicant, through acceptance of this permit, shall assume responsibility for the remediation of any downstream erosion.

4. Revised Special Condition 4 of CDP 5-83-004- Deed Restriction

Prior to the issuance of permit this amendment, the applicant shall submit evidence of recordation of a deed restriction, the form and content which has been approved by the Executive Director. The document which shall run with the land binding all successors and assigns and shall be recorded free of prior liens and encumbrances ~~except tax liens and these encumbrances which~~ that the Executive Director determines may do not affect these restrictions, and which shall bind the applicant and all successors in interest the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required and ~~The deed restriction shall provide that all development proposed for each lot shall be subject to a coastal development permit from the Commission or its successor agency and shall conform to the following requirements unless specifically altered by the Commission or its successor agency:~~

(a) The location of all grading shall be limited to the building pad areas identified on Exhibit 3 except where revised in the plans submitted under Condition 3;

(b) No structures shall be allowed within 50 ft. of blue line streams, or within 50 ft. of riparian habitat, whichever is greater, as identified on the approved plans pursuant to Condition 3; blue line stream crossings (lots 20-22) for driveways shall be accomplished by bridging rather than concrete culverts;

(c) No structures shall be allowed within 50 ft. of any property owned by the state of California on lots 17 and 20 and within 75 ft. of the identified ridge line on lots 10 and 11;

(d) All grading shall be prohibited during the rainy season (November 1- March 31) ~~limited to spring and summer months, to allow for revegetation prior to the rainy season;~~ all cleared and graded areas shall be revegetated with drought, fire, and erosion resistant native species;

(e) No oak trees over 8 inches in diameter shall be removed and all grading shall minimize encroachment into the dripline of mature oaks identified pursuant to Condition 3; any driveways located within the dripline of mature oaks shall be constructed with pervious materials;

(f) Building materials and colors and landscaping shall be used to minimize adverse impacts to public views and to blend with the surrounding environment to the maximum extent possible; and

(g) Landscaping shall be installed to serve as a visual buffer to screen residential development from the Backbone Trail.

5. Material/Design Specifications

All exposed surfaces of the final culvert enlargements, such as abutments or wing walls, shall be designed to include, or mimic, the native materials and appearance of the natural environment.

6. Required Approvals

Prior to the commencement of work, the applicant shall provide to the Executive Director of the Commission; Los Angeles County Environmental Review Board Approval, a copy of a valid U.S. Army Corp of Engineers permit, California Regional Water Quality Board approval, California Department of Fish & Game Streambed Alteration Agreement, and/or letters of permission, or evidence that such approvals are not required.

7. Applicant's Assumption of Risk

Prior to the issuance of the permit amendment, the applicant as landowner shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazard from erosion or flooding and the applicant assumes the liability from such hazards; and (b) that the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission and its advisors relative to the Commission's approval of the project for any damage due to natural hazards. The document shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

III. Findings and Declarations.

A. Project Description and Background

The applicant is requesting an amendment to their permit to delete the 55 ft. high detention basin from the approved plans; enlarge two existing 48 inch diameter culverts with two new 12 ft. wide x 6 ft. high and 14 ft. wide x 7 ft. high double box culverts; reduce proposed grading by 10,660 cu. yds. for a total of 67,480 cu. yds. of grading; and modify special condition 4(d) to specifically prohibit grading only during the rainy season (November 1 - March 31).

The subject site is a 102 acre parcel which the Commission previously approved for the subdivision of 22 one acre lots with an offer to dedicate the remaining portion of the property to a public or private non-profit agency. This permit also provided for grading of roads and residential lots, as well as, the construction of 55 ft. high earthen dam detention basin. Although, the detention basin has not yet been constructed and grading activities for the building pads have not been completed, this permit is considered to be vested as a substantial amount of grading for the roads and building pads has been previously carried out. The subject site is located on Piuma Road (directly east of Cold Canyon Road in the Monte Nido area of Malibu) and is adjacent to State Parks land (Exhibit One). In addition, the subject site is located within the Malibu/Cold Creek Resource Management Area. The culvert enlargements will be located where Little Dark Creek, which is designated by the United States Geologic Service as a blue line stream, crosses under Piuma Road in two locations. A portion of the Backbone trail is located on the project site adjacent to the proposed upstream culvert upgrade at mile marker (m.m.) 1.19. Surrounding residential development is low density residential and is designated by the Malibu/Santa Monica Mountains Area Plan as a mixture of 10 acres/unit and 20 acres/unit.

The Commission previously approved the replacement of the two existing culverts at the subject site under Coastal Development Permit 4-94-059 which was issued to Los Angeles County Department of Public Works on September 26, 1994. Coastal Development Permit 4-94-059 allowed for the replacement and enlargement of 23 culverts in the Topanga Canyon, Las Flores Canyon, and the Malibu/Cold Creek watersheds. The culvert upgrades approved at the subject site included the removal of the two existing 48 inch diameter culverts and installation of two new box culverts 16 ft. wide x 8 ft. high. Although the County did replace culverts at the other locations approved by Coastal Development Permit 4-94-059, the replacement of the two existing culverts at the subject site was never carried out.

The detention basin was originally required by the County as a standard flood control measure. The detention basin would consist of a 55 ft. high, 240 ft. wide, earthen dam which would be faced in concrete and occupy approximately one acre of land which has been offered for dedication to a private or public non-profit agency. Los Angeles County has since revised its requirements regarding flood control measures. In this situation, the County Department of Public Works has recommended and approved the elimination

of the one acre detention basin with the requirement that the applicant construct the culvert improvements previously proposed by the County under Coastal Development Permit 4-94-059. In response to concerns by the Department of Parks and Recreation, the culvert upgrades have been significantly downsized and re-designed so as to not intrude onto park land. All work for the currently proposed project, including staging activities for construction, will be completely carried out within the County road right-of-way and the applicant's property. As such, no part of the proposed project will extend onto State Park land.

The applicant is also proposing to reduce the amount of grading allowed by the original approved plans by 10,660 cu. yds. and modify special condition 4(d) of the underlying permit. The original grading plan approved for Coastal Development Permit 5-83-004 allowed for 78,140 cu. yds. of grading (40,775 cu. yds. of cut and 37,365 cu. yds. of fill). The proposed modification will allow for a reduction in grading of 16,900 cu. yds. fill and 6,160 cu. yds. cut due to the deletion of the originally proposed debris basin and an addition of 10,225 cu. yds. fill and 2,175 cu. yds. cut for the building pads for a total amount of grading of 67,480 cu. yds. (36,790 cu. yds. cut and 30,690 cu. yds.). Further, although the applicant is proposing a greater amount of cut than fill, the applicant's engineering consultant has calculated (based on previously conducted excavation on site), due to soil shrinkage and the presence of rocks, that no export of material will be necessary. The increased amount of grading for the building pads, which will be distributed among all 22 proposed building pads, will not result in a significant change to the approved grading plan and will serve to balance the actual cut and fill amounts of the total grading.

In addition, special condition 4(d) of Coastal Development Permit 5-83-004 will be modified by this amendment to more specifically prohibit grading during the rainy season (November 1 - March 31). Special condition 4(d) limits grading to spring and summer months to minimize sedimentation of Little Dark Creek which serves as a tributary to Dark Creek and Cold Creek. In past permit actions in the Santa Monica Mountains, the Commission has ordinarily restricted grading activities during the rainy season (November 1 - March 31). In addition, this amendment will also allow for more favorable coordination of revegetation efforts with the beginning of the rainy season.

C. Hazards

Section 30253 of the Coastal Act states:

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 landforms along bluffs and cliffs.***

The proposed development is located in the Santa Monica Mountains, an area which is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and flooding. Fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wild fires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property. Erosional processes are often accelerated due to the loss of vegetative cover following a fire. This increase in erosion may result in a corresponding increase of eroded sediment which reaches stream channels, increasing the volume of the stream flow and the potential for flooding. In addition, section 30235 of the Coastal Act requires that new development minimize risk to life and property in areas of high geologic, flood, and fire hazard, and assure structural stability and structural integrity.

To assist in the determination of whether a project is consistent with section 30253 of the Coastal Act, the Commission has, in past Malibu coastal development permit actions, looked to the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) for guidance. The Malibu LUP has been found to be consistent with the Coastal Act and provides specific standards for development along the Malibu coast and within the Santa Monica Mountains. For instance, Policies 82 and 85, in concert with the Coastal Act, provide that grading shall be minimized and that all earthmoving operations within environmentally sensitive habitat areas and significant watersheds shall be prohibited between November 1 and March 31. Policy 79 provides that major flood control improvements which limit water flow should be avoided.

Coastal Development Permit 5-83-004 allows for the subdivision of a 102 acre lot into 22 one acre lots and one open space lot with grading for roads and residential lots, as well as, the construction of 55 ft. high earthen dam detention basin. The applicant is now proposing to amend Coastal Development Permit 5-83-004 to allow for the deletion of the detention basin, replacement of the existing culverts under Piuma Road with larger culverts, modify the amount of permitted grading, and modify special condition 4(d) to more specifically prohibit grading during the rainy season (November 1 - March 31).

The modifications to the approved grading plan are minor in nature and will result in a reduction in the total amount of grading from 78,140 cu. yds. (40,775 cu. yds. cut and 37,365 cu. yds. fill) to a new total of 67,480 cu. yds. (36,790 cu. yds. cut and 30,690 cu. yds. fill). These modifications will allow for a reduction in grading of 16,900 cu. yds. fill and 6,160 cu. yds. cut due to the deletion of the originally proposed debris basin and an addition of 10,225 cu. yds. fill and 2,175 cu. yds. cut for the building pads for a total amount of grading of 67,480 cu. yds. (36,790 cu. yds. cut and 30,690 cu. yds.). Further, although the applicant is proposing a greater amount of cut than fill, the applicant's engineering consultant has calculated (based on previously conducted excavation on site), due to soil shrinkage and the presence of rocks, that no export of material will be necessary. The increased amount of grading for the building pads, which will be distributed among all 22 proposed building pads, will not result in a significant change to

the approved grading plan and will serve to balance the actual cut and fill amounts of the total grading.

In addition, the applicant has requested that special condition 4(d) of Coastal Development Permit 5-83-004 be modified to more specifically prohibit grading during the rainy season (November 1 - March 31). Special condition 4(d) limits grading to spring and summer months to ensure grading does not occur during the rainy season which could result in erosion of the site and sedimentation of nearby creeks. In past permit actions in the Santa Monica Mountains, the Commission has ordinarily restricted grading activities during the rainy season (November 1 - March 31). In addition, this amendment will also allow for more favorable coordination of revegetation efforts with the beginning of the rainy season. The proposed amendment will not lessen the intent of the original condition which was required to minimize erosion during construction activities and will be in conformance with the Coastal Act, LUP, and past Commission action. As special condition 4(d) of the underlying permit required the recordation of a deed restriction, Special condition four (4) of this amendment requires that the applicant modify this deed restriction in conformance with this amendment.

Coastal Development Permit 5-83-004 allows for the construction of a detention basin immediately upstream from the proposed culvert replacements. The detention basin would consist of a 55 ft. high, 240 ft. wide earthen dam which would be faced in concrete (on the inner side of the basin) and occupy approximately one acre of land which has been previously offered for dedication to a private or public non-profit agency. The applicant is now proposing to amend Coastal Development Permit 5-83-004 to delete the one acre debris basin from the approved plans and replace the two existing 48" diameter culverts under Piuma Road with two new larger (12 ft. wide x 6 ft. high and 14 ft. wide by 7 ft. high) double box culverts. The detention basin was originally proposed to comply with Los Angeles County flood control requirements. Since the permit was issued, Los Angeles County has revised its requirements regarding flood control measures. In this situation, the County Department of Public Works has recommended and approved the replacement of the existing 48" culverts with larger culverts rather than the use of a one acre detention basin.

In the case of the subject site, the construction of the detention basin would result in greater impacts to the habitat than the replacement of the culverts. The construction of the detention basin would require more extensive alteration and construction within the stream channel. In addition, the Commission notes that detention basins serve to inhibit the transport of sediment and sand to coastal areas resulting in reductions to littoral sand transport along the coast and the subsequent erosion of sandy beaches. Further, a detention basin would require continued maintenance (the use of construction equipment and the construction of a maintenance roads) to periodically "empty" the sediment and sand from the basin which would have ordinarily been transported to the ocean through natural fluvial processes.

The applicant's engineering consultant has calculated that the peak stream flow for the project site is 1560 cu. ft. per second during a maximum storm event (maximum storm

event is based on storm of 50-year frequency as required by Los Angeles County Department of Public Works). The proposed 12 ft. x 6 ft. and 14 ft. x 6 ft. culvert upgrades have been designed to meet the calculated peak stream flow. The existing 4 ft. diameter pipe culverts have a capacity of 168 cu. ft. per second or only 11% of the design peak flow. As such, the two proposed culvert improvements will be adequate to accommodate peak flow capacity of the subject stream.

The California Department of Parks and Recreation also supports the deletion of the detention basin stating in a letter dated 4/2/97, that the construction of a detention basin "is unacceptable to all concerned...such a basin would have major impacts on the area." However, the Department of Parks and Recreation has also raised concerns regarding downstream erosional effects which may result from the proposed culvert replacements. The Department of Parks and Recreation has not submitted any evidence regarding the potential increase in erosional effects from the replacement of the existing culverts with larger culverts. The Department of Parks and Recreation has asked that the culverts be reduced in size and has suggested that a series of small check dams might be a feasible alternative. In response to State Park's concerns, the applicant has reduced the proposed size of the new culverts from two 16 ft. x 8 ft. culverts to a 12 ft. x 6 ft. and 14 ft. x 7 ft. respectively. Further, the applicant's engineering consultant has stated in his letter dated 2/5/98, that:

No small check dams are going to materially impede this level of flow which would simply overwhelm each dam with erosive effects below each dam. Further, check dams are not a preferred alternative from an environmental point of view. The check dams would cause substantially greater alteration of the streambed than even the originally approved debris basin dam.

Further, the use of check dams would require that sediment and debris be periodically removed from behind each individual dam resulting in substantial alteration of the streambed. The series of check dams would also extend farther upstream than the originally proposed debris basin and would require the extension of maintenance roads to service the individual basins and would result in greater adverse impacts to the riparian habitat and would be less effective in controlling flooding than either the detention basin or the culvert enlargements.

In regards to downstream effects, the detention basin would effectively trap sediment and debris while reducing the velocity of the creek during normal activity. However, the applicant's engineer has indicated that velocity would not be reduced during periods of peak flow stating that:

The peak volume and velocity of the water of the seasonal stream would not have been altered by the debris basin except that the water, free of most sediment and debris, would have been discharged from the debris basin. Downstream erosion is more likely to occur with the discharge of this sediment free water which has a "hungry water effect" on the erosion of the stream banks. The discharge of natural sediment saturated runoff will minimize the possibility of erosion in the streambed downstream from the culverts. The proposed culverts allow the stream to operate in a more natural condition, avoiding the need for increasing human intervention in the natural processes...Our calculations

on velocity indicate that the culvert, as designed, will maintain streambed flow velocity at a velocity no greater than the stream experiences in its natural condition.

In addition, the use of baffles within the upstream culvert have been proposed to reduce the velocity of the streamflow. The use of baffles to reduce streamflow velocity will also eliminate the need for an extensive area of rip rap beyond the outlet structure which is located entirely within the County road right-of-way immediately upstream from State Park land.

Further, the two proposed culvert enlargements will allow the creek to function in a more natural capacity by reducing the damming effect to the stream where fill has been previously placed to construct Piuma Road and allow for unimpeded stream flow. In addition, the Commission notes that detention basins, while often effective in reducing stream flow velocity, also serve to inhibit the transport of sediment and sand to coastal areas resulting in reductions of available sand material along the coast and the subsequent erosion of sandy beaches.

As discussed in detail above, the proposed culvert improvements have been designed to allow for the maximum stream flow capacity while minimizing any adverse impacts to flow velocity through the use of velocity reducers. However, in the event that the culvert enlargements create unforeseen erosional impacts on the surrounding riparian habitat or public use of the Backbone Trail, special condition three (3) requires post construction monitoring of all sites by a qualified biologist, arborist or resource specialist and hydrologist. The monitoring period shall begin following the first rains to occur after construction is completed, and on an annual basis following each year's rain season for a period of 5 years. These consultants will submit reports, for the review and approval of the Executive Director, detailing any impacts created by the culverts, and any recommended design changes to mitigate against further impacts. If changes are required, the applicant will further be required to amend this permit to make the recommended retrofits in a timely manner. The applicant shall also be responsible for the remediation of any significant erosion which may occur as a result of the enlarged culverts or drainage structures. Further, due to the potential hazardous hydrologic conditions on this site, the Commission can only approve the project if the applicant assumes the liability from the associated risks as required by special condition seven (7).

Therefore, the Commission finds that the proposed amendment, as conditioned, is consistent with Section 30235 of the Coastal Act.

C. Environmentally Sensitive Habitat Area

Section 30230 of the Coastal Act states that:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will

sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 states:

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

Section 30240 states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

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

The certified Malibu/Santa Monica Mountains Land Use Plan (LUP) indicates that the project site is located within the environmentally sensitive Cold Creek Resource Management Area, which although not technically designated as environmentally sensitive habitat area (ESHA) has been recognized as an area of environmental significance. In addition, the blue line stream which crosses the project site also serves as a tributary areas to Cold Creek and the downstream Malibu Creek and Malibu Lagoon environmentally sensitive habitat areas.

To assist in the determination of whether a project is consistent with sections 30230, 30231 and 30240 of the Coastal Act, the Commission has, in past Malibu coastal development permit actions, looked to the certified Malibu/ Santa Monica Mountains LUP for guidance. The Malibu LUP has been found to be consistent with the Coastal Act and provides specific standards for development along the Malibu coast and within the Santa Monica Mountains. For instance, Policy 78 of the LUP, in concert with the

Coastal Act, provides that stream road crossings shall be undertaken by the least environmentally damaging feasible method. Policies 82 and 85, in concert with the Coastal Act, provide that grading shall be minimized and that all earthmoving operations with environmentally sensitive habitat areas and significant watersheds shall be prohibited between November 1 and March 31. Policy 79 provides that major flood control improvements which limit water flow should be avoided.

Coastal Development Permit 5-83-004 allows for the construction of a detention basin immediately upstream from the proposed culvert replacements. The detention basin would consist of a 55 ft. high, 240 ft. wide earthen dam which would be faced in concrete (on the inner side of the basin) and occupy approximately one acre of land which has been previously offered for dedication to a private or public non-profit agency. The applicant is now proposing to amend Coastal Development Permit 5-83-004 to delete a one acre debris basin from the approved plans and replace the two existing 48" diameter culverts under Piuma Road with two new larger (12 ft. wide x 6 ft. high and 14 ft. wide by 7 ft. high) culverts. The detention basin was originally proposed to comply with Los Angeles County flood control requirements. Since the permit was issued, Los Angeles County has revised its requirements regarding flood control measures. In this situation, the County Department of Public Works has recommended and approved the replacement of the existing 48" culverts with larger culverts rather than the use of a one acre detention basin.

The construction of the detention basin (which would require more extensive alteration and construction within the stream channel) would result in greater impacts to the habitat than the replacement of the culverts. In addition, the Commission notes that the use of detention basins to reduce stream flow velocities also serves to inhibit the transport of sediment and sand to coastal areas resulting in reductions to littoral sand transport along the coast and the subsequent erosion of sandy beaches. Further, a detention basin would require continued maintenance (including the use of construction equipment and the construction of a maintenance road) to periodically "empty" the sediment and sand from the basin which would have ordinarily been transported to the ocean through natural fluvial processes.

Although the culvert replacement will result in fewer adverse impacts to the riparian habitat than the construction of a one acre detention basin, the Commission notes that construction activities and placement of the larger culverts will result in some unavoidable adverse impacts to the habitat value of the site. The Coastal Act requires that environmentally sensitive habitat areas be maintained, enhanced, and where feasible, restored. Special condition one (1) of the permit requires that the applicant submit for the review and approval of the Executive Director, a detailed riparian revegetation and mitigation monitoring Program, for the replacement and enhancement of all habitat damaged as a result of the proposed work. This program shall include a preliminary biological survey of all project areas and a proposed restoration plan which outlines the programs goals & objectives. Furthermore, technical specifications for site restoration and a monitoring program are required. The applicant will be further

required to monitor the individual sites for a period of 5 years in order to ensure that the resources impacted by the proposed development are restored and enhanced.

The stream channel and riparian corridor for Little Dark Creek is primarily narrow in width with high sloping banks. Riparian vegetation is present within the narrow stream channel. The steep banks are primarily dominated by oak woodland type vegetation. Construction activities for the two culvert replacements will be primarily carried out from the roadway which will serve to minimize impacts to the riparian corridor. In addition, although the proposed culverts upgrades have been designed to occupy as little area as possible while conforming to County engineering standards, the two culvert upgrades with new wingwalls and energy dissipating rip rap, will still result in a combined permanent loss of approximately 1,720 sq. ft. of riparian habitat including the more sparsely vegetated sloping banks. Further, the applicant's consultants and the California Department of Parks and Recreation have identified at least one oak tree (located immediately downstream from the first culvert) which may be adversely impacted by the proposed project. However, the Commission notes that the previously approved detention basin dam, which would occupy approximately 60,800 sq. ft. of riparian and woodland habitat, would result in greater impacts to riparian habitat than the enlargement of the two existing culverts.

As such, special condition one (1) of the permit requires the applicant to submit a Riparian Revegetation and Mitigation Program for all areas of temporary and permanent riparian habitat loss. This condition requires the applicant to submit for the review and approval of the Commission, a mitigation plan containing a site plan for each area of temporary or permanent loss, a biological survey of the proposed mitigation sites, a proposal for mitigation strategies, technical specifications for mitigation, and a monitoring program. Mitigation at a 3:1 ratio of replacement area to the impacted area of permanent riparian habitat loss shall be required with a replacement ratio of 10:1 for any oak trees which are destroyed or damaged by the proposed culvert replacements. This condition is consistent with past Commission requirements for a 3:1 mitigation ratio for unavoidable impacts to riparian vegetation and a 10:1 mitigation ratio for unavoidable impacts to oak trees associated with development where the impacts result in removal of the existing habitat.

The culvert enlargements are located immediately adjacent to State Park land. The California Department of Parks and Recreation has indicated its concern that all construction activities take place entirely within the County of Los Angeles Road easement and the applicant's property in order to minimize disturbance to the riparian habitat located on Park land. Therefore, special condition two (2) requires that the property line between State Park land and the subject site shall be clearly staked. In addition, protective fencing shall be used around all oak trees which may potentially be disturbed during the installation of the culverts. To ensure that the work for this project is carried out in a manner consistent with the terms and conditions of this permit, special condition two (2) also requires the applicant to retain the services of an independent biological consultant or arborist to monitor construction activities. This

monitor shall have the authority to cease work should activities occur which are beyond the scope of this permit.

In the event that the culvert enlargements create unforeseen erosional impacts within the stream channel and on the surrounding riparian habitat or public use of the Backbone Trail, special condition three (3) requires post construction monitoring of the project site, and downstream areas, by a qualified biologist, arborist or resource specialist and hydrologist. The monitoring period shall begin following the first rains to occur after construction is completed and on an annual basis following each year's rain season for a period of 5 years. These consultants will submit reports, for the review and approval of the Executive Director, detailing any impacts created by the culverts and any recommended design changes to mitigate against further impacts. If changes are required, the applicant will further be required to amend this permit to make the recommended retrofits in a timely manner. The applicant shall also be responsible for the remediation of any significant erosion which may occur as a result of the enlarged culverts or drainage structures.

Special condition six (6) has been required to ensure that the applicant provide the Executive Director with a valid U.S. Army Corp of Engineers permit, California Regional Water Quality Board approval, and a California Department of Fish & Game Streambed Alteration Agreement prior to the commencement of construction. If these permits and agreements are not required, then the applicant shall provide the Executive Director with evidence that such approvals are not required.

The Commission notes that the proposed amendment will result in fewer impacts to the riparian habitat and the sediment transport function of streams in the Santa Monica Mountains than the originally approved project including the construction of a one acre detention basin consisting of a 55 ft. high, concrete faced, earthen dam. The proposed project, as conditioned, will not significantly degrade the environmentally sensitive riparian corridor and will minimize the alteration of the natural stream course. Therefore, the Commission finds that the proposed amendment, as conditioned, is consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

D. Access and Visual Resources

A portion of the Backbone Trail crosses the project site and runs along the stream immediately downstream from the first proposed culvert upgrade. The Coastal Act requires the Coastal Commission to provide the maximum public access for every project and to reserve lands suitable for coastal recreation for that purpose. The Coastal Act also requires each development to provide adequate recreational lands to serve the needs of the development. As such, the protection of trails and access in the Santa Monica Mountains is a key concern of the Commission. Sections 30251 and 30253 of the Coastal Act address the impacts of new developments. Section 30210 of the Coastal Act states:

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

Section 30213 states:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30223 states:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30251 states:

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

Sections 30210, 30213, 30223, and 30251 of the Coastal Act require the Coastal Commission to provide for maximum public access and to reserve lands suitable for coastal recreation for that purpose, as well as, to protect public visual resources. As such, the protection of trails and access in the Santa Monica Mountains is a key concern of the Commission.

The original grading plan approved for Coastal Development Permit 5-83-004 allowed for 78,140 cu. yds. of grading (40,775 cu. yds. of cut and 37,365 cu. yds. of fill). The proposed modification will allow for a reduction in grading of 16,900 cu. yds. fill and 6,160 cu. yds. cut due to the deletion of the originally proposed debris basin and an addition of 10,225 cu. yds. fill and 2,175 cu. yds. cut for the building pads for a total amount of grading of 67,480 cu. yds. (36,790 cu. yds. cut and 30,690 cu. yds.). Further, although the applicant is proposing a greater amount of cut than fill, the applicant's engineering consultant has calculated (based on previously conducted excavation on site), due to soil shrinkage and the presence of rocks, that no export of material will be necessary. The increased amount of grading for the building pads, which will be distributed among all 22 proposed building pads, will serve to balance the actual cut and fill amounts of the total grading, and will not result in a significant change to the approved grading plan or increase adverse impacts to visual resources. In addition, the

originally approved 55 ft. high detention basin would be highly visible from both Piuma Road and the Backbone Trail. As such, the deletion of the basin will significantly reduce visual impacts on site. Further, the proposed changes to the approved grading plan will have no impacts to public access.

The proposed culvert replacements are designed to avoid any adverse impacts to public access to and along the Backbone Trail. The new culverts and wingwalls will be located outside of the existing trail configuration. In addition, the project has been designed to minimize any impacts from erosion to the existing Backbone Trail which is located adjacent to the upstream culvert replacement. However, in order to ensure that adverse impacts do not result to public access along the Backbone Trail, special condition three (3) requires post construction monitoring of the culvert upgrade site by a qualified biologist, arborist or resource specialist and hydrologist. The monitoring period shall begin following the first rains to occur after construction is completed and on an annual basis following each year's rain season for a period of 5 years. These consultants will submit reports, for the review and approval of the Executive Director, detailing any impacts created by the culverts (including any damage or erosional impacts to the Backbone Trail) and any recommended design changes to mitigate against further impacts. If changes are required, the applicant will further be required to amend this permit to make the recommended retrofits in a timely manner. The applicant shall also be responsible for the remediation of any significant erosion which may occur as a result of the enlarged culverts or drainage structures.

The new larger culverts and wing walls will be visible from the portion of the Backbone Trail which crosses the project site and runs along the creek immediately downstream from the first culvert. The new culverts and wingwalls will result in some degradation of the visual resources along this section of the Backbone Trail. However, the culverts and wing walls are replacing existing culverts and walls through existing road fill which are existing adverse visual features. However, the construction of the previously approved 55 ft. high earthen dam required to construct the detention basin, would be visible from Piuma Road, as well as, the Backbone Trail and would result in much greater adverse impacts to the scenic and visual qualities of the area than the proposed enlargement of the existing culverts. In order to minimize any adverse impacts to visual resources, special condition five (5) requires that all exposed surfaces of the final culvert enlargements be designed to include, or mimic, the native materials and appearance of the natural environment through. Such use of native materials for rock facing, or mimicking through color and texturing of cement, has been previously approved by the Commission for County constructed culvert projects and has been highly effective in improving the visual quality of similar culverts and wingwalls

Therefore, the Commission finds that the proposed amendment, as conditioned, is consistent with sections 30210, 30213, 30223, and 30251 of the Coastal Act.

E. Local Coastal Program

Section 30604 of the Coastal Act states that:

(a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with Chapter 3 (commencing with Section 30200) and that the permitted development will not prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 (commencing with Section 30200).

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the project and accepted by the applicant. As conditioned, the proposed development will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed amendment, as conditioned, will not prejudice the City of Malibu's ability to prepare a Local Coastal Program for this area of Malibu that is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604(a).

F. California Environmental Quality Act

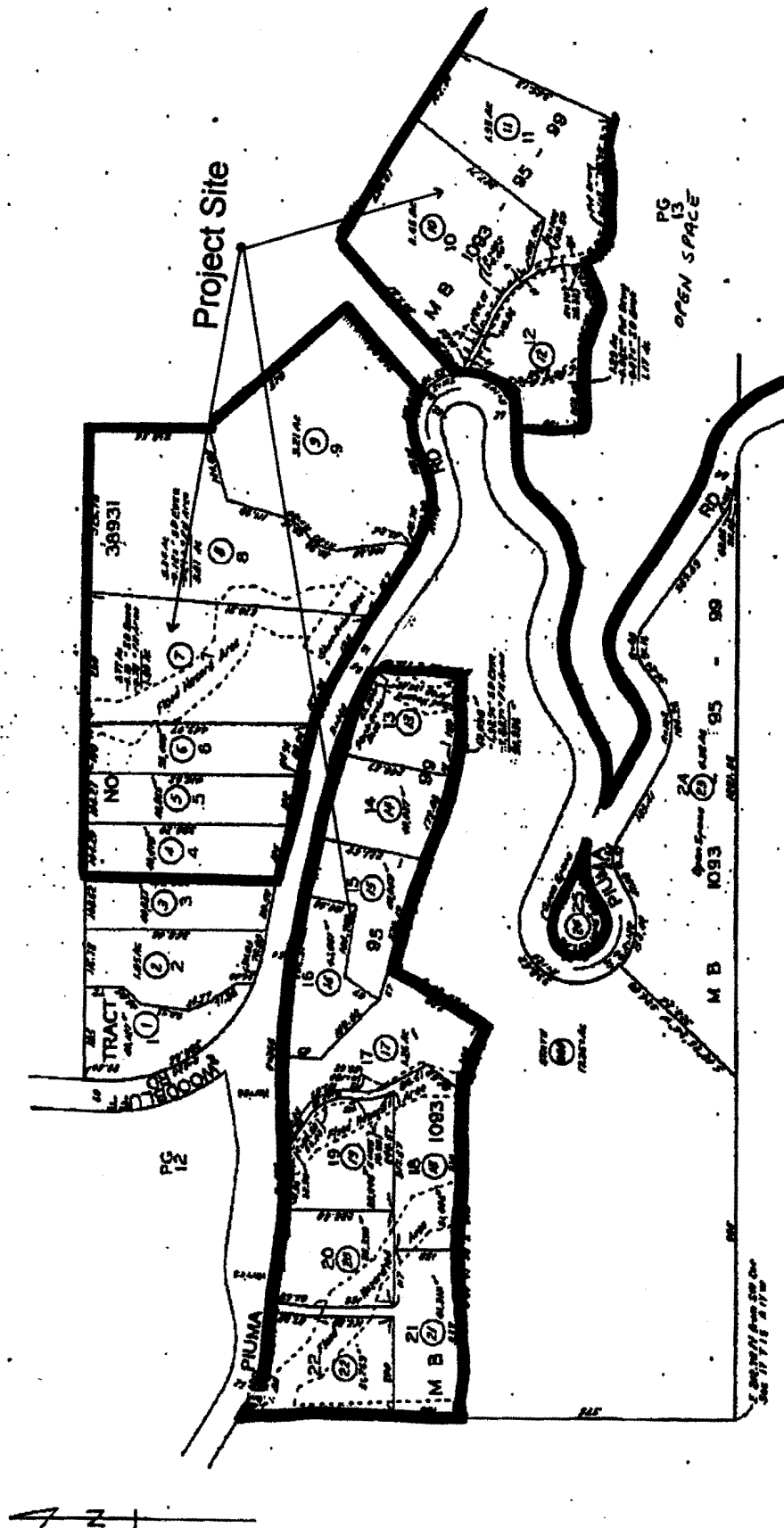
The Coastal Commission's permit process has been designated as the functional equivalent of CEQA. Section 13096(a) of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of CEQA. Section 21080.5 (d)(2)(i) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impacts that the activity may have on the environment.

The proposed amendment, as conditioned, will not have significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed amendment, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.

SMH-VNT

File: SMH2/80-781a1





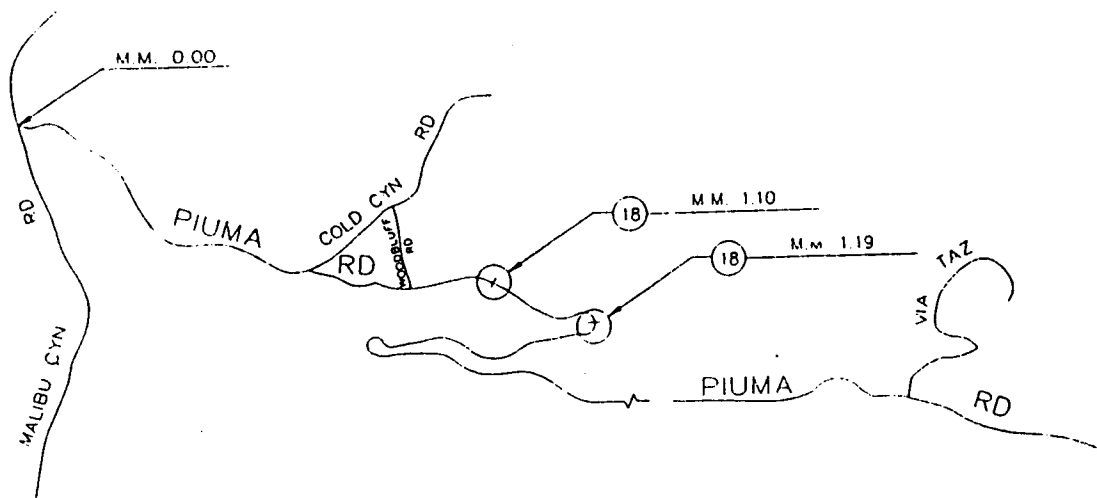
Portion of Lots 6 to 8, 13, 17 to 22 of
M.B. 1093-95-99 are subject to Flood
Hazard.
All areas on this page are not except
those tabulated.

B & E ENGINEERS

404 N. Halstead Street
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JOB NO. 85224 DATE 8/97
PROJECT Piuma Culverts - MM 1.10 & MM 1.19
ENG'R _____ CHECK BY RA



KEY MAP

CONSTRUCTION LEGEND

- (8) ASPHALT CONCRETE PAVEMENT
- (18) DRAINAGE SYSTEM AS SHOWN ON SHEET INDICATED.
- (24) WARPED WINGWALLS, PER CALTRANS STD. PLAN D86A
- (26) HEADWALL & WINGWALLS, PER CALTRANS STD. D90.
- (27) CABLE RAILING, PER CALTRANS STD. B11-47
- (28) GROUTED RIPRAP
- (29) 6" AIR-PLACED CONCRETE WITH 6X6-W3XW3 WELDED WIRE FABRIC.
- (32) BOX CULVERT WINGWALLS PER CALTRANS STD. D84
- (38) DOUBLE BOX CULVERT PER CALTRANS STD. D81.
- (39) GUARDRAIL.
- (40) REINFORCED CONCRETE SLAB

EXHIBIT 3

Amendment 5-83-004-A1

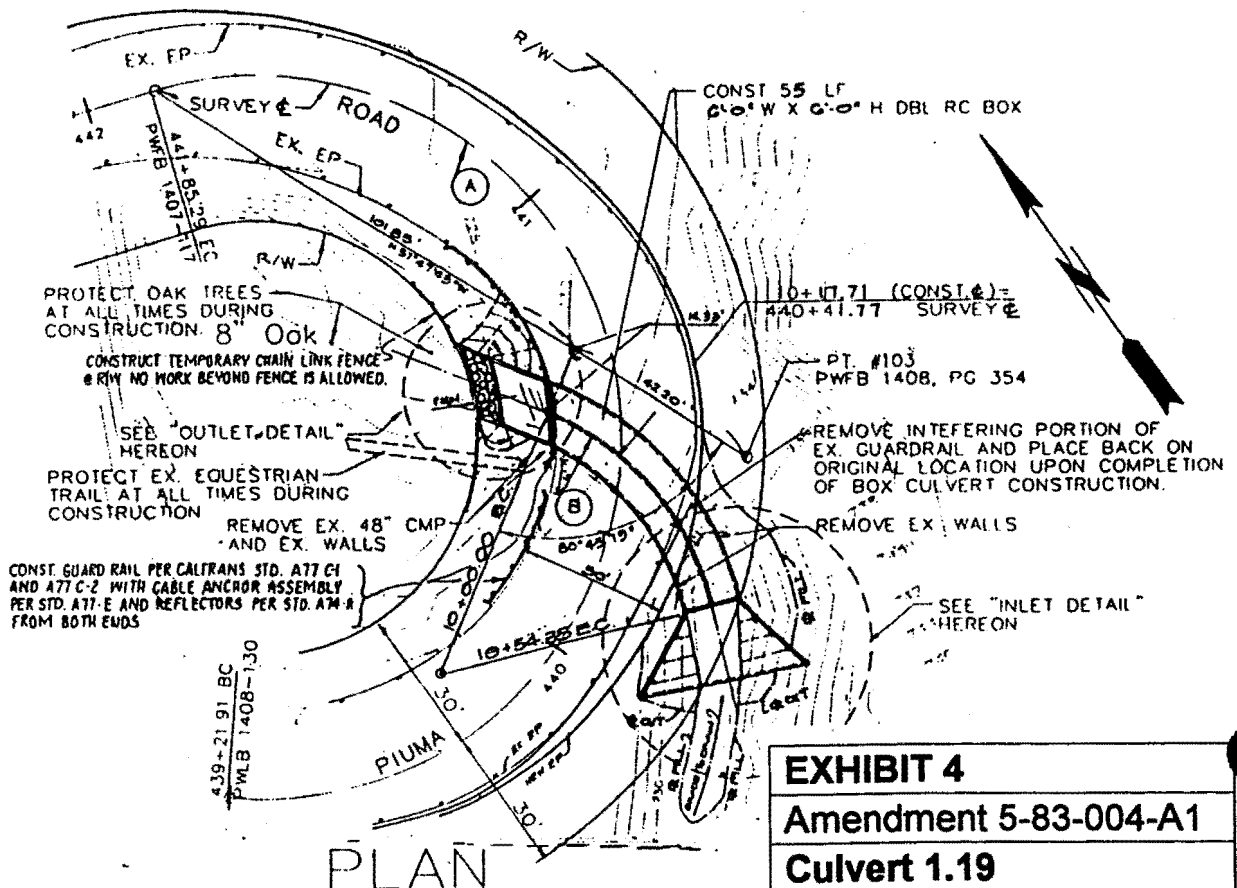
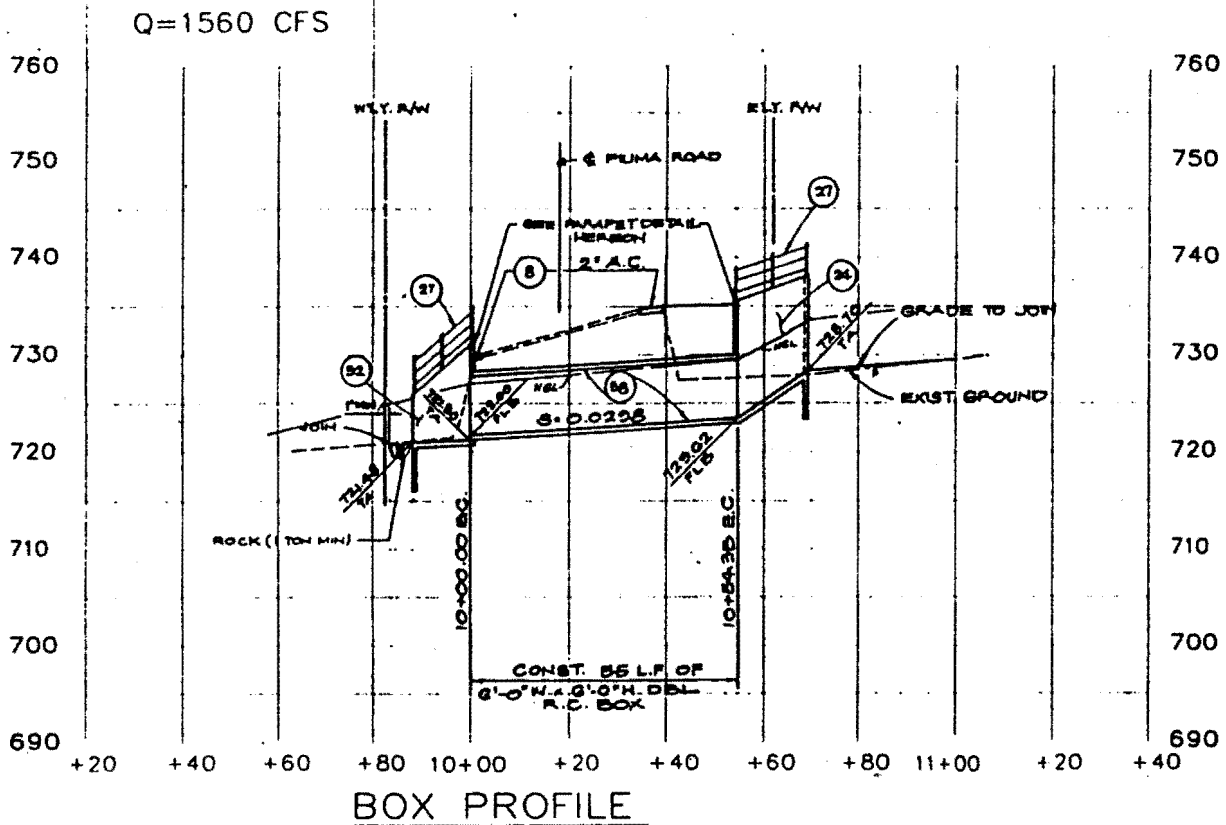
Site Plan for Culverts

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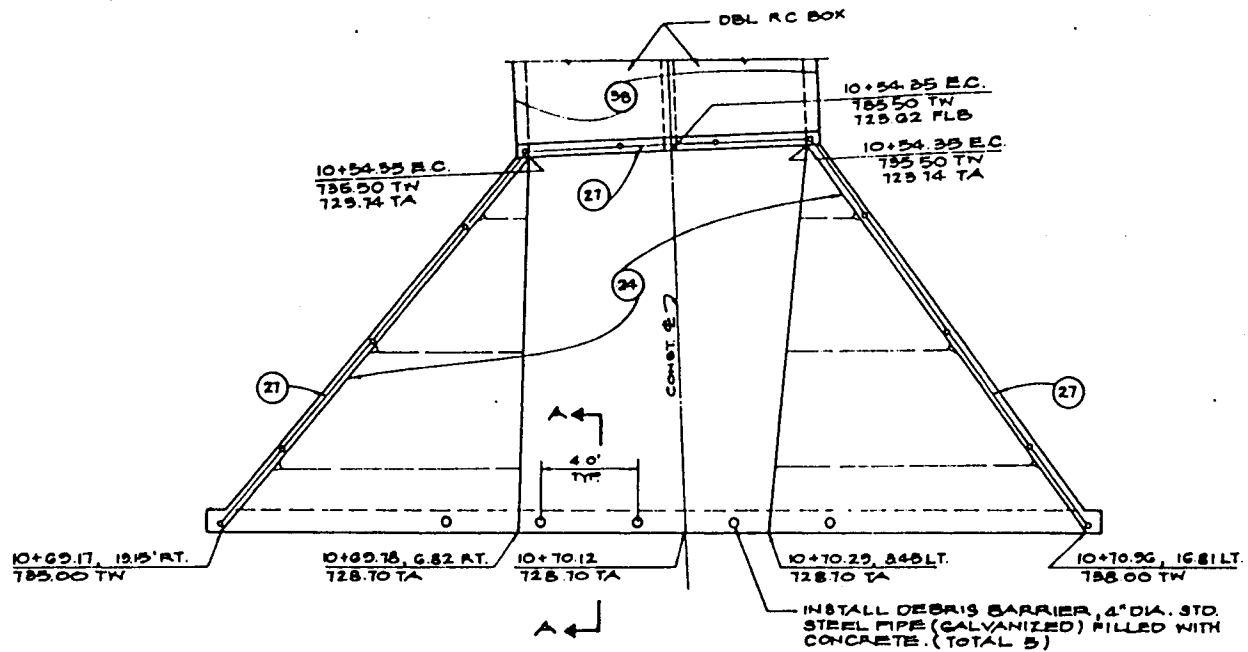
JOB NO. 85224 DATE 8/97
PROJECT Puma Culvert - MM 1.19
ENG'R _____ CHECK BY RA



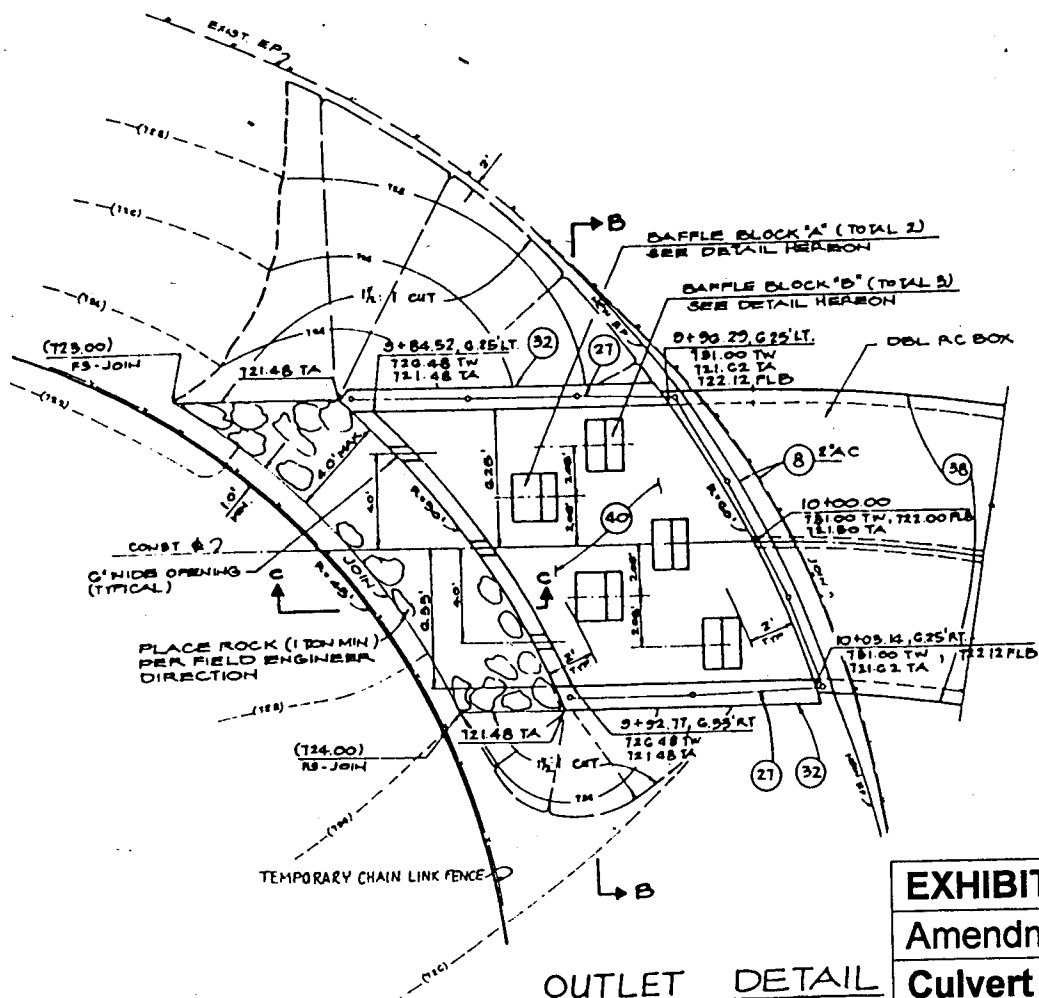
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JOB NO. 35224 DATE 8/97
PROJECT Piuma Culvert MM 1.19
ENG'R _____ CHECK BY RA



INLET DETAIL

**EXHIBIT 5**

Amendment 5-83-004-A1

Culvert 1.19Details

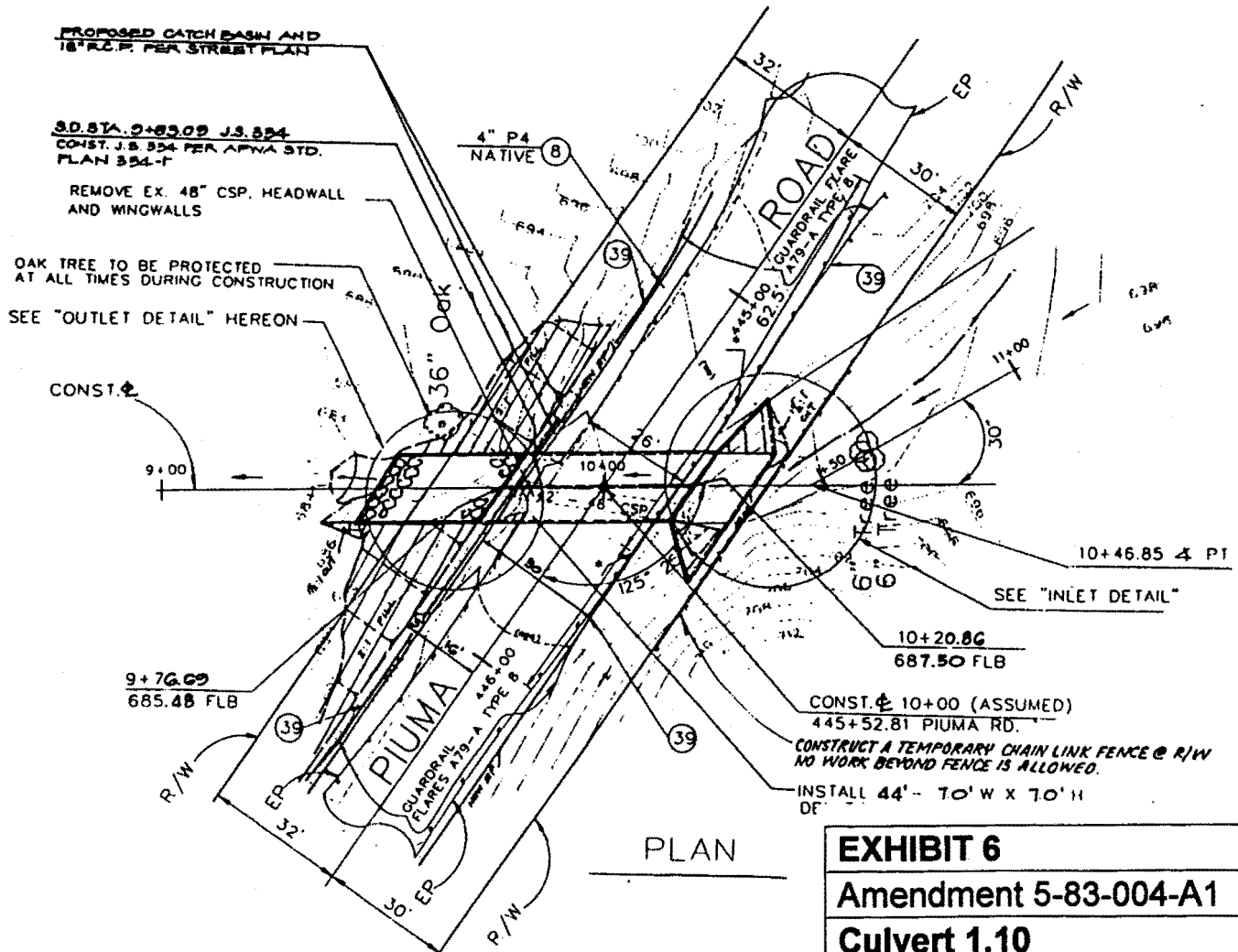
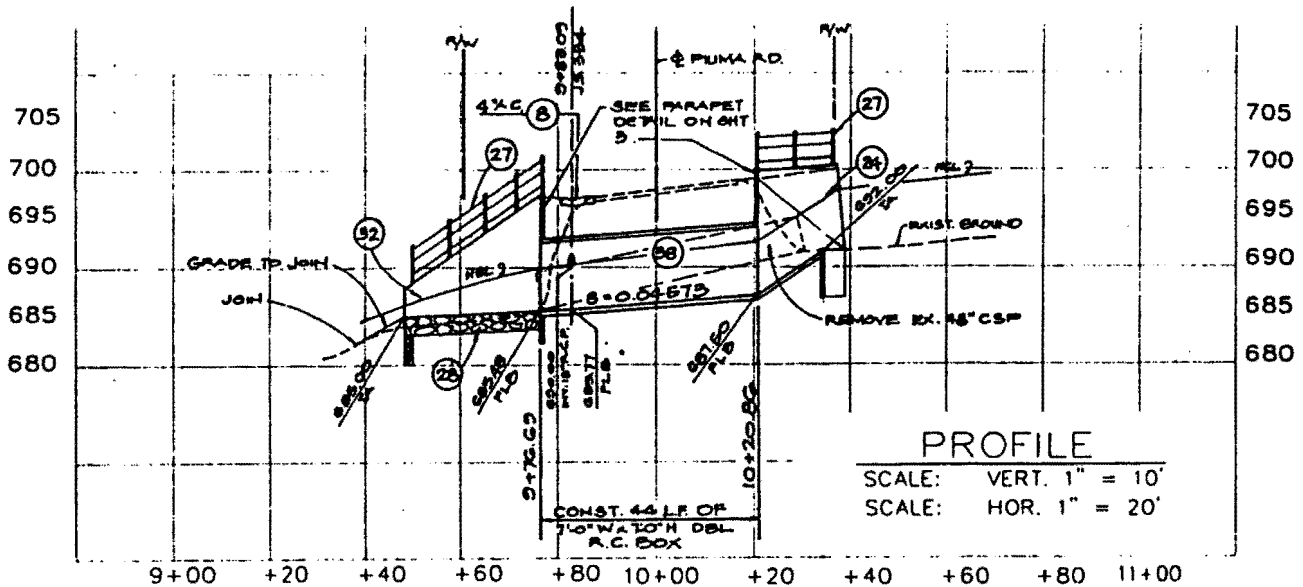
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JOB NO. 85224 DATE 8/97
PROJECT Puma Culvert MM 1.10
ENG'R _____ CHECK BY RA

Q = 1610 CFS.



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JOB NO 35224 DATE 8/97
PROJECT Puma Culvert - MM 1.10
ENG'R _____ CHECK BY RA

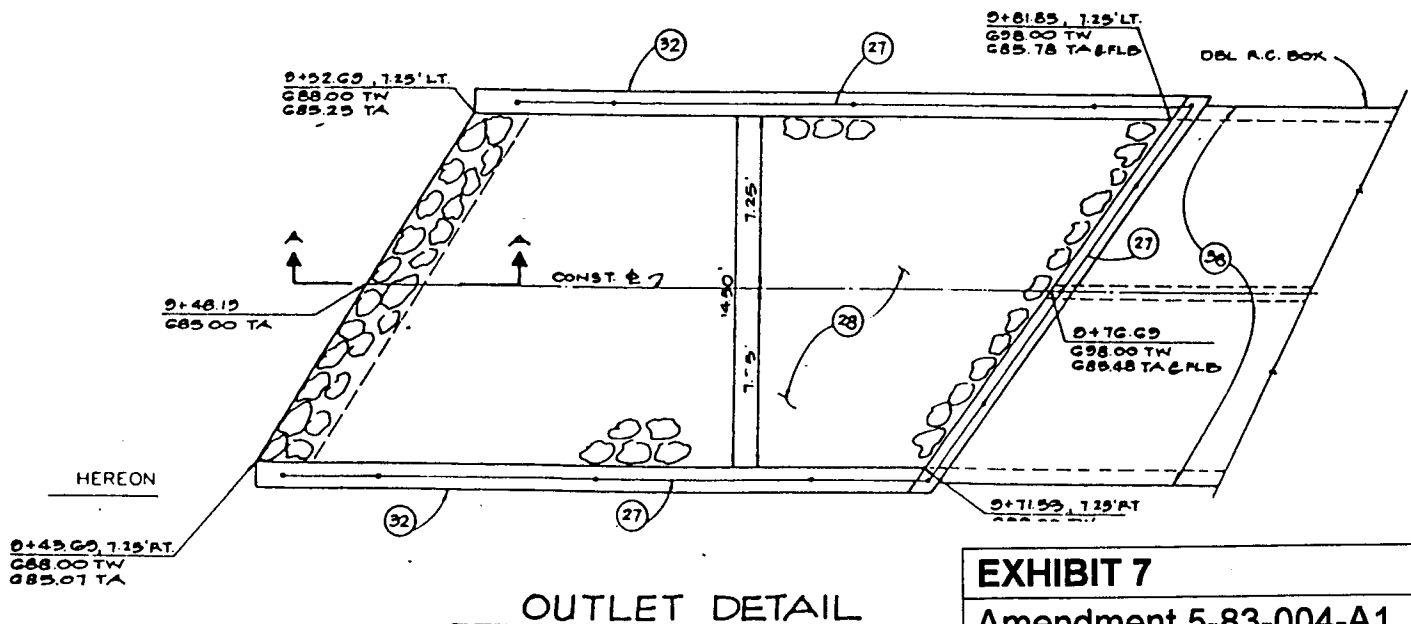
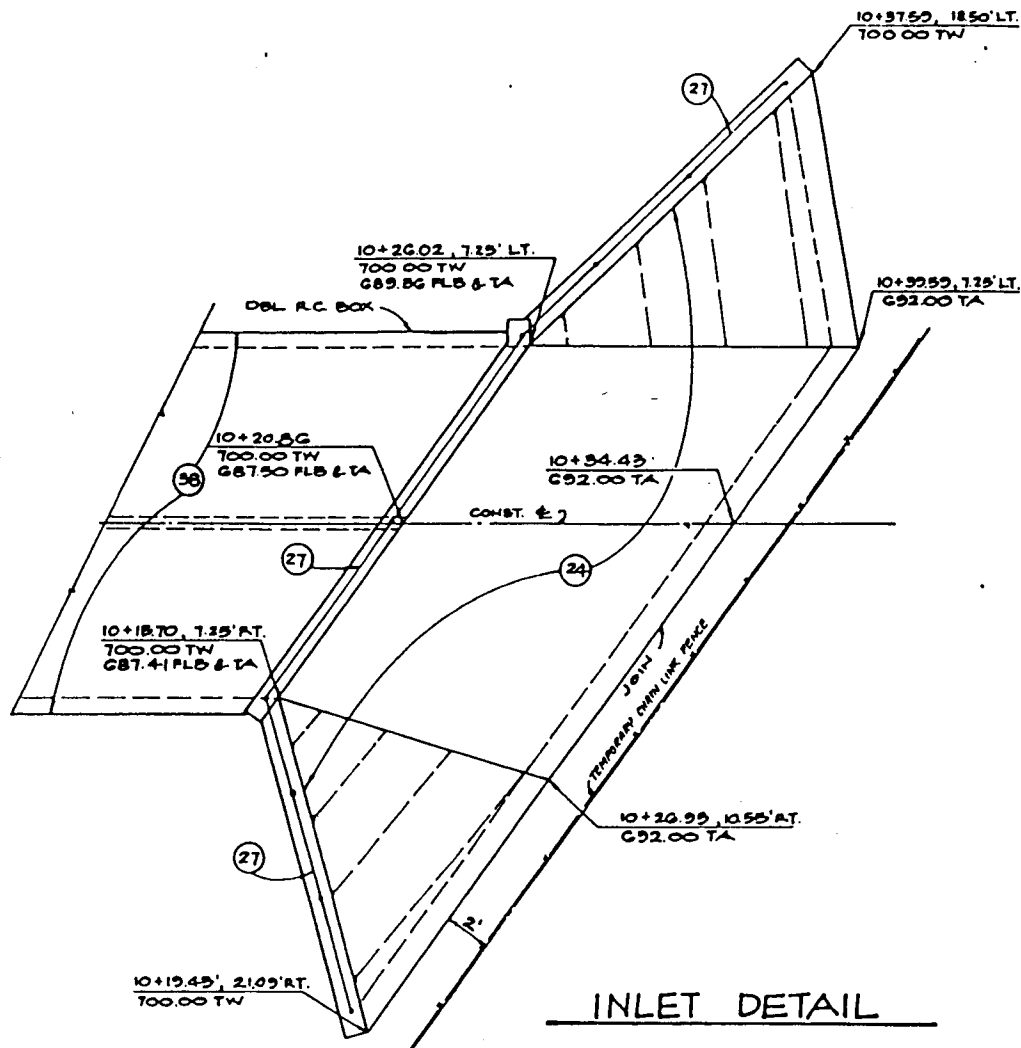


EXHIBIT 7

Amendment 5-83-004-A1

Culvert 1.10 Details

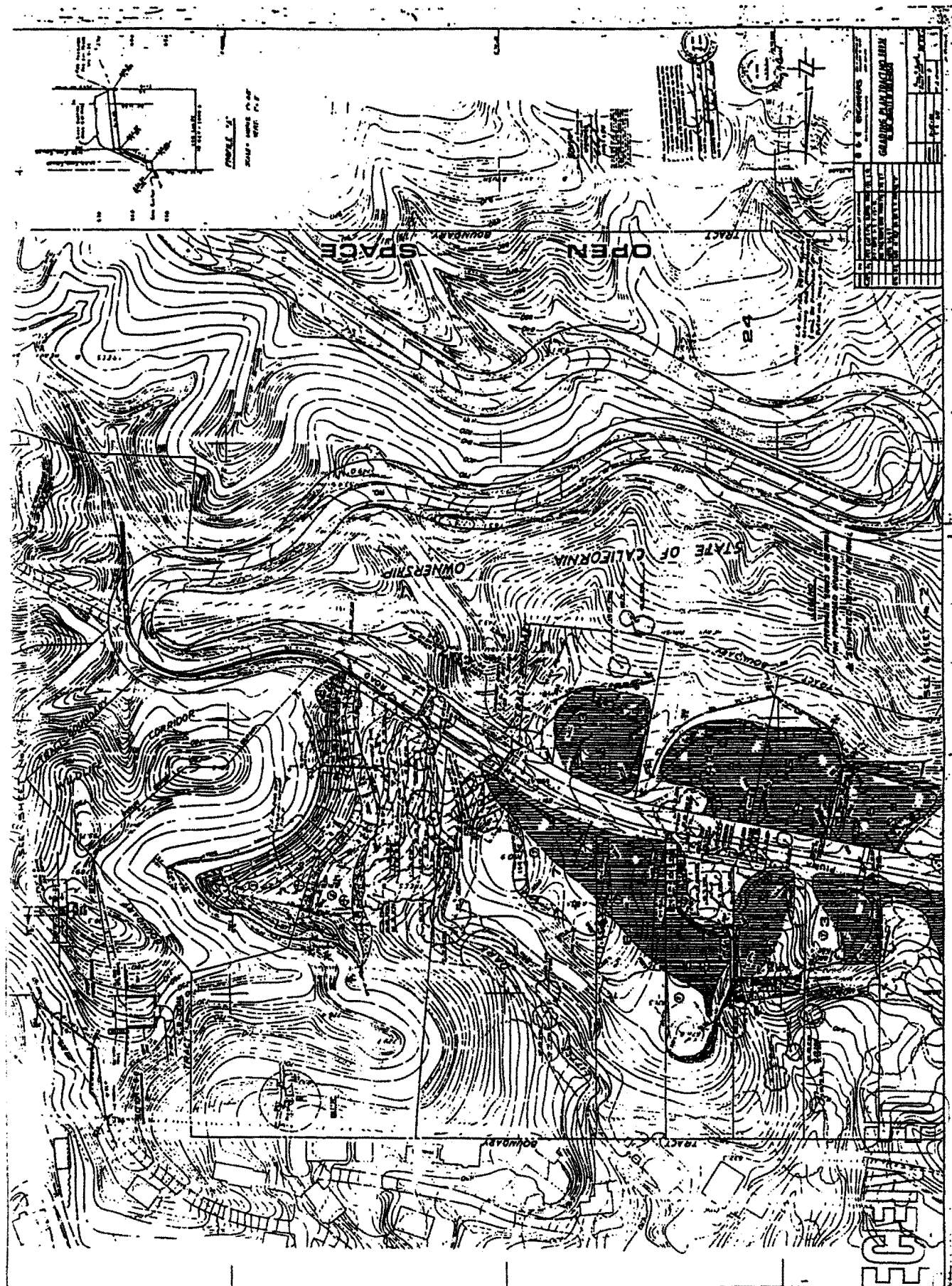


EXHIBIT 8

Amendment 5-83-004-A1

Grading Plan (page 1)

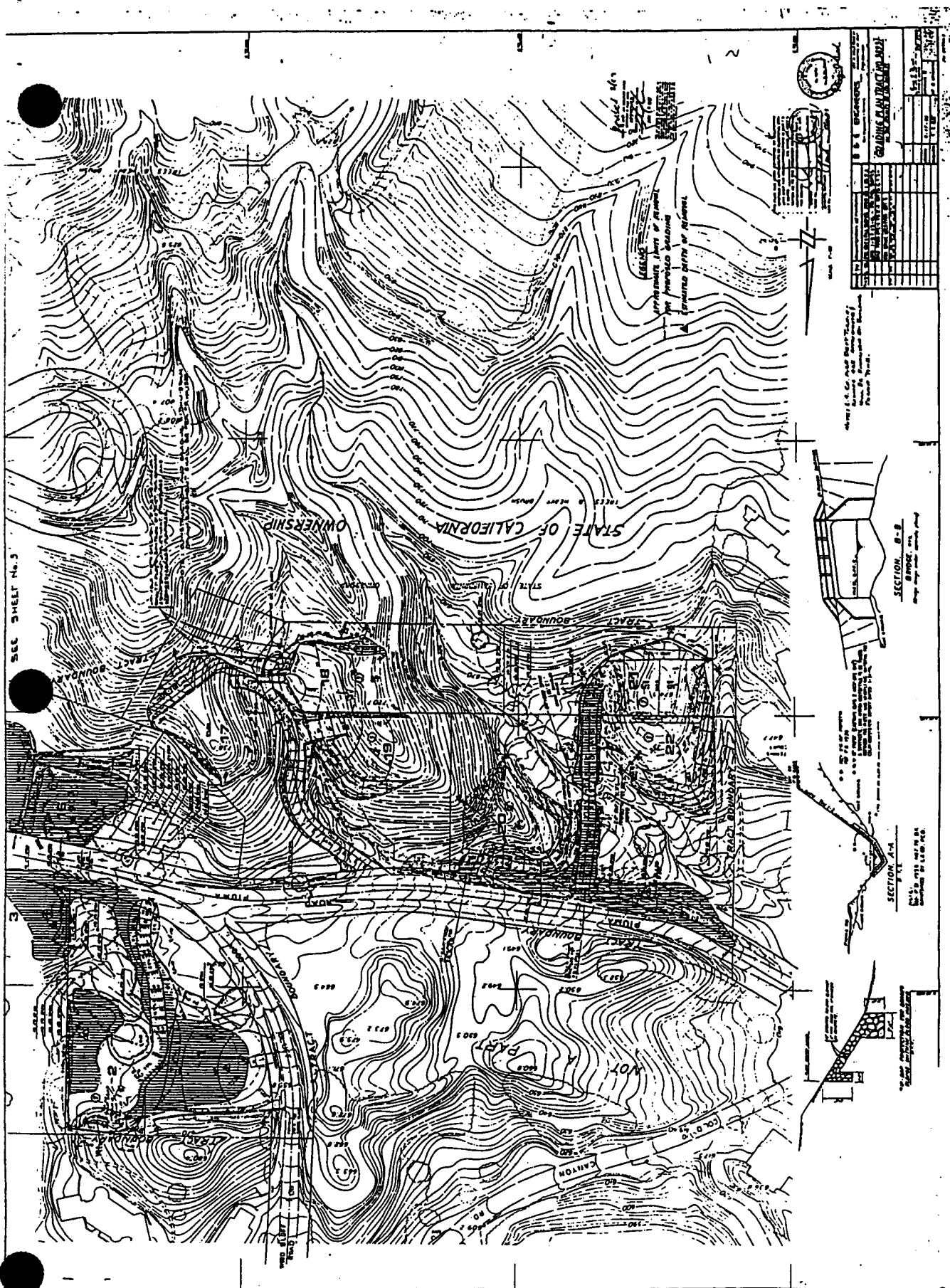


EXHIBIT 9

Amendment 5-83-004-A1

Grading Plan (page 2)

