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## CALIFORNIA COASTAL COMMISSION

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



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Staff: S. Tilles  
Staff Report: 11/18/99  
Hearing Date: December 7-10, 1999  
Commission Action:

### STAFF REPORT: REGULAR CALENDAR

**APPLICATION NO.:** 4-99-163

**APPLICANT:** William and Debra Barlow

**PROJECT LOCATION:** 20713 Rockcroft Drive, City of Malibu, Los Angeles County.

**PROJECT DESCRIPTION:** Construction of a new two-story, 27 ft. above grade, 3,989 sq. ft. single family residence with attached two-car garage, swimming pool with spa, six-foot high wrought iron fence, and new septic system, with 858 cu. yds. of grading (658 cut, 200 fill).

Lot area:	8,396.4 sq. ft.
Building coverage:	1,503 sq. ft.
Pavement coverage:	972 sq. ft.
Parking spaces:	2 (Garaged)
Height above finished grade:	27 feet

**LOCAL APPROVALS RECEIVED:** Approval-in-Concept, City of Malibu Planning Department; Approval-in-Concept, City of Malibu Geology and Geotechnical Review; In-Concept Approval, City of Malibu Environmental Health Department (Septic).

**SUBSTANTIVE FILE DOCUMENTS:** Coastal Development Permit Number 5-89-095; Final Report - Geotechnical Evaluation, Big Rock Mesa Landslide, Malibu, California, for Los Angeles County Improvement District 2629R, Volume I (Introduction and Physiography), Volume II (Geology), and Volume III (Hydrogeology), by D. A. Evans, Inc., dated March 15, 1986; Coastal Development Permit Number 4-97-028; Geologic Investigation Report by E. D. Michael, Consulting Geologist, dated November 16, 1994; Geotechnical Investigation by Evans, Colbaugh and Associates, dated May 4, 1995; Limited Geologic and Soils Engineering Investigation by GeoConcepts, Inc., dated December 22, 1998; Addendum Report No. 1 by GeoConcepts, Inc., dated March 4, 1999; Addendum Report No. 2 by GeoConcepts, Inc., dated April 1, 1999; Addendum Report No. 3 by GeoConcepts, Inc., dated April 26, 1999; Analysis for Site Suitability for an Evapotranspiration-Based Alternative Onsite Wastewater System, by Bill Wilson, dated November 15, 1999; and Gray Water System at the Proposed Project as a Mitigation Measure, by Bill Wilson, dated November 15, 1999.

## SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with six (6) special conditions regarding landscape and erosion control plans, removal of natural vegetation, plans conforming to geologic recommendations, septic system, assumption of risk, and removal of excavated material. The project site is located on the periphery of a built-out residential neighborhood of Malibu.

The project site is also located in the immediate vicinity of the modern, currently active Big Rock Mesa and ancient, currently inactive, Western Extension landslide areas. The Big Rock Mesa Landslide has a long history of landsliding, and between 1983 and 1985 experience increased sliding, in large part due to an artificially induced high ground water level associated with the urbanization of the area, including private septic systems. As a result, any amount of effluent from septic systems that may reach the landslide areas should be reduced or eliminated, to the extent feasible. Although an evapotranspiration sewage system would greatly reduce or eliminate any contribution of effluent to the landslide areas, it is not feasible due to the area size and geology of this parcel. As a result, a gray water system will be implemented to mitigate potential adverse effects on the Big Rock Mesa and Western Extension landslide areas.

## STAFF RECOMMENDATION

The staff recommends that the Commission **APPROVE** the permit application with special conditions.

## MOTION

Staff recommends a **YES** vote on the following motion:

I move that the Commission **approve with special conditions** CDP #4-99-163 per the staff recommendation as set forth below.

A majority of the Commissioners present is required to pass the motion.

## RESOLUTION

### I. Approval with Conditions

The Commission hereby **grants** a permit for the proposed development, subject to the conditions below, on the grounds that 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.

## II. Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. 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.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

## III. Special Conditions

### 1. Revised Landscaping and Erosion Control Plans

Prior to issuance of a coastal development permit, the applicant shall submit a revised landscaping and erosion control plans, prepared by a licensed landscape architect or a qualified resource specialist, for review and approval by the Executive Director. The landscaping and erosion control plans shall be reviewed and approved by the consulting engineering geologist to ensure that the plans are in conformance with the consultants' recommendations. The plans shall incorporate the following criteria:

#### A) Landscaping Plan

- 1) All graded and disturbed areas on the subject site shall be planted and maintained for erosion control purposes within sixty (60) days of receipt of the certificate

of occupancy for the residence. To minimize the need for irrigation and to screen and soften the visual impact of development, all landscaping shall consist primarily of native/drought resistant plants as listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated October 4, 1994. Invasive, non-indigenous plant species that tend to supplant native species shall not be used. The plan shall specify the erosion control measures to be implemented and the materials necessary to accomplish short-term stabilization, as needed on the site.

2) All cut and fill slopes shall be stabilized with planting at the completion of final grading. Planting should be of native plant species indigenous to the Santa Monica Mountains using accepted planting procedures, consistent with fire safety requirements. Such planting shall be adequate to provide ninety (90) percent coverage within two (2) years, and this requirement shall apply to all disturbed soils;

3) Plantings will be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with applicable landscape requirements;

4) The Permittee shall undertake development in accordance with the final approved 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 Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

5) Vegetation within fifty (50) feet of the proposed house may be removed to mineral earth, vegetation within a two hundred (200) foot radius of the main structure may be selectively thinned in order to reduce fire hazard. However, such thinning shall only occur in accordance with an approved long-term fuel modification plan submitted pursuant to this special condition. The fuel modification plan shall include details regarding the types, sizes and location of plant materials to be removed, and how often thinning is to occur. In addition, the applicant shall submit evidence that the fuel modification plan has been reviewed and approved by the Forestry Department of Los Angeles County. Irrigated lawn, turf and ground cover planted within the fifty foot radius of the proposed house shall be selected from the most drought tolerant species or subspecies, or varieties suited to the Mediterranean climate of the Santa Monica Mountains.

**B) Interim Erosion Control Plan**

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

2) The plan shall specify that should grading take place during the rainy season (November 1 – March 31) the applicant shall install or construct temporary sediment

basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, silt fencing, stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes and close and stabilize open trenches as soon as possible. These erosion measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained through out the development process to minimize erosion and sediment from runoff waters during construction. All

sediment should be retained on-site unless removed to an appropriate approved dumping location either outside the coastal zone or to a site within the coastal zone permitted to receive fill.

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

### **C) Monitoring**

Five (5) years from the date of the receipt of the Certificate of Occupancy for the residence the applicant shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies the on-site landscaping is in conformance with the landscape plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or a qualified 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.

## **2. Removal of Natural Vegetation**

Removal of natural vegetation for the purpose of fuel modification within the fifty (50) foot zone surrounding the proposed structure shall not commence until the local government has issued a building or grading permit for the development approved pursuant to this permit. Vegetation thinning within the fifty (50) to two hundred (200) foot fuel modification zone shall not occur until commencement of construction of the structures approved pursuant to this permit.

### **3. Plans Conforming to Geologic Recommendation**

All recommendations contained in the Limited Geologic and Soils Engineering Investigation by GeoConcepts, Inc., dated December 22, 1998; Addendum Report No. 1 by GeoConcepts, Inc., dated March 4, 1999; Addendum Report No. 2 by GeoConcepts, Inc., dated April 1, 1999; and Addendum Report No. 3 by GeoConcepts, Inc., dated April 26, 1999, shall be incorporated into all final design and construction including foundations, grading, and drainage. All plans must be reviewed and approved by the geologic and geotechnical consultant. Prior to the issuance of the coastal development permit, the applicant shall submit, for review and approval by the Executive Director, evidence of the geologic and geotechnical consultant's review and approval of all project plans.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading and drainage. Any substantial changes in the proposed development approved by the Commission which may be required by the consultants shall require an amendment to the permit or a new coastal permit.

### **4. Revised Septic System Plan to Incorporate Gray Water System**

Prior to issuance of a coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a revised septic system plan that incorporates a gray water diversion system to decrease the amount of effluent that may be contributed to the Big Rock Mesa and Western Extension landslide areas. The revised septic system plan shall be reviewed and approved by the applicant's septic system design consultant and shall be approved by the City of Malibu's Environmental Health Department.

### **5. Assumption of Risk, Waiver of Liability, and Indemnity**

- A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from fire, landsliding, earth movement, and erosion; (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.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction 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 Commission amendment to this coastal development permit.

#### **5. Removal of Excavated Material**

Prior to the issuance of the coastal development permit, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excavated material from the site. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required.

### **IV. Findings and Declarations**

The Commission hereby finds and declares as follows:

#### **A. Project Description and Background**

The applicant is proposing the construction of a new two-story, 27 ft. above grade, 3,989 sq. ft. single family residence with attached two-car garage, swimming pool with spa, six-foot high wrought iron fence, and new septic system, with 858 cu. yds. of grading (658 cut, 200 fill). The subject site is a 8,396.4 sq. ft. lot located on the west flank of a northeast trending ridge within the southwest portion of the Santa Monica Mountains in the City of Malibu, Los Angeles County. The subject site is located on the periphery of a built out area of Malibu, consisting of numerous single family residences constructed on steep slopes (Exhibit 1). The property consists of a near-level pad with ascending slopes to the east and descending slopes to the south, east, and west. The maximum topographic relief on the site is about twelve (12) feet and both ascending and descending slopes from the pad display a general gradient of 1.5:1 or less (horizontal:vertical). The subject site is not visible from Pacific Coast Highway or any other public view areas. As a result, there are no visual impacts on any scenic coastal areas and the project is compatible with the character of the surrounding area.

No ancient or recent bedrock landslides were observed on the property, though the site is also located immediately adjacent to the currently active Big Rock Mesa and ancient, currently inactive, Western Extension landslide areas. Vehicular access to the subject site is through the active Big Rock Mesa Landslide. Additionally, the main trace of the Malibu Coast fault is located approximately 3,000 feet south of the property, while the Las Flores thrust fault is approximately 200 feet to the northwest of the site.

#### **B. Geologic Stability and Hazards**

Section 30253 of the Coastal Act states 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.**

The proposed development is located in the Santa Monica Mountains, an area that is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wildfires often denude hillsides in the Santa Monica Mountains of all vegetation, thereby contributing to an increased potential for erosion and landslide on the property. In 1993, for example, approximately 51 single family residences in the Big Rock Mesa area were destroyed by fire storms. Furthermore, in the "Final Report – Geotechnical Evaluation, Big Rock Mesa Landslide, Malibu, California for Los Angeles County Improvement District 2629 R," by D. A. Evans, Inc., dated March 15, 1986, shows the subject site as approximately 225 feet from the active Big Rock Mesa Landslide and approximately 25 feet from the ancient, currently inactive, Western Extension Landslide (Exhibit 6).

The Big Rock Mesa Landslide has a long history of landsliding, and experienced increased sliding between 1983 and 1985. This increase was mainly the result of an artificially induced high ground water level associated with the urbanization of the area, including the proliferation of private waste water disposal systems. Following the increased movement of this landslide during the 1980's, Los Angeles County conducted a geologic investigation and implemented a dewatering system. The City of Malibu is currently maintaining this dewatering system. In the Geotechnical Investigation by Evans, Colbaugh and Associates, dated May 4, 1995, it was stated that "[a]lthough the remedial efforts undertaken in the 1980's demonstrated that dewatering effectively arrested landsliding, the long-term stability of the landslide depends on continued maintenance and periodic improvement of the in-place dewatering system."

Although the Western Extension landslide area is ancient and considered to be currently inactive, it also warrants consideration. In the "Geologic Investigation Report," by E. D. Michael, Consulting Geologist, dated November 16, 1994, the Western Extension is described as the area adjacent to the north and northwest of the modern Big Rock Mesa Landslide. This report states that widespread evidence observed during 1983 and 1984 indicate "unequivocally, incipient landslide movement." As a result, this report found that the "stability of the western extension is dependent upon that of the main Big Rock Mesa landslide mass which buttresses it." This report also stated that it "should be clearly understood that future movements are likely to occur" in the Western Extension landslide area.

This particular site's location in the immediate vicinity of the Big Rock Mesa and Western Extension landslide areas, necessitates further review of the septic system and its potential to add effluent to the landslide mass. The applicant has submitted a report titled "Addendum Report No. 2," by GeoConcepts, Inc., dated April 1, 1999, which states that:

***"The anticipated path of the effluent from the proposed seepage pit is near vertical with a 360 degrees radius. Therefore, approximately (25) percent of the effluent is anticipated to percolate in the direction of the landslide . . . When considering this small amount of effluent (approximately 150 gallons per day) it appears remote to highly unlikely that the anticipated effluent would reach the active landslide or adversely affect the Big Rock Landslide."***



Although on an individual basis the subject site's effluent from the septic system may only be considered to be a "small amount," when examined at a cumulative level this discharge may have significant effects on the landslide areas. This is evidenced by reports submitted in the past that identify effluent from septic systems as a major cause of increased sliding in the Big Rock Mesa area. The "Final Report – Geotechnical Evaluation, Big Rock Mesa Landslide, Malibu, California for Los Angeles County Improvement District 2629 R, dated March 15, 1986, states that:

*"Merifield, et al. (1978) describe early efforts to dewater the Big Rock Mesa study area subsequent to tract development. They ascribe evidence of renewed landslide activity to a general rise in the level of ground water and increased artificial recharge from private waste water disposal systems . . ."*

The "Final Report – Geotechnical Evaluation, Big Rock Mesa Landslide, Malibu, California for Los Angeles County Improvement District 2629 R, dated March 15, 1986, goes on to state that:

*"The coincidence of current failure with . . . the concentration of private waste water disposal effluent, is convincing evidence that the current landslide is a result of an artificially induced high ground-water level."*

The subject property has historically been a part of an assessment district to dewater the Big Rock Mesa landslide, under the County of Los Angeles Improvement District 2629 program. It is generally recognized that increased groundwater loading through septic system effluent is contributing to the lubrication of the Big Rock Mesa and Western Extension landslide areas, thereby decreasing stability and safety. Advanced septic system designs are available that can decrease the amount of effluent discharged into the landslide area. As a result, any reduction in the amount of waste water that may reach the landslide areas should be reduced or eliminated, to the extent feasible due to the cumulative impacts that may result from increased effluent from septic systems in this area.

Although an evapotranspiration private sewage disposal system could greatly reduce or eliminate any contribution of effluent to the landslide areas, it is not possible on this parcel due to the limited area and geology conditions. A gray water diversion system, however, is feasible on the subject site and could result in forty (40) to sixty (60) percent of the waste water being diverted for use in the landscape, as opposed to percolating from the seepage pits into the landslide mass area (Exhibit 7). The gray water system diverts the water from sinks, showers, and laundry into a surge tank, from where it is dispersed at a set rate into a "mini leach field" to be used in landscaped areas. Therefore, since the subject site is located in the immediate vicinity of the Big Rock Mesa and Western Extension landslide areas, the Commission finds that it is necessary to require the applicant, through **Special Condition Number Four (4)**, to submit revised septic system plans that implement a gray water diversion system to decrease loading to the groundwater, protect the subject site, and protect properties located within the Big Rock Mesa and Western Extension landslide areas.

The applicant has submitted a geologic report titled "Limited Geologic and Soils Engineering Investigation," prepared by GeoConcepts, Inc., dated December 22, 1998, evaluating the geologic stability of the proposed development. In this report, GeoConcepts states that no ancient or recent bedrock landslides or historical surficial slope failures or slumps were

observed on the property. The report incorporates numerous recommendations regarding construction, foundations, and drainage, and states that:

*"Based on the results of this investigation and a thorough review of the proposed development, as discussed, the site is suitable for the intended use providing the following recommendations are incorporated into the design and subsequent construction of the project. Also, the development must be performed in an acceptable manner conforming to building code requirements of the controlling governing agency."*

Furthermore, the applicant has also submitted a geologic report titled "Addendum Report No. 2," prepared by GeoConcepts, Inc., dated April 1, 1999, which states that:

*"It is the finding of this corporation, based upon the subsurface data, that the proposed seepage pit and project will be safe from landslide, settlement or slippage and will not adversely affect adjacent property, provided this corporation's recommendations . . . are followed and maintained."*

The Commission notes that the geologic and engineering consultants have included a number of geotechnical recommendations that will increase the stability and geotechnical safety of the site. To ensure that the recommendations of the geologic geotechnical consultant are incorporated into the project plans, the Commission finds that it is necessary to require the applicant, as required by **Special Condition Number Three (3)**, to submit project plans certified by the consulting geologic and geotechnical engineering consultant as conforming to their recommendations.

However, because there remains some inherent risk in building on sites in the immediate vicinity of ancient and active landslides, such as the subject site, and due to the fact that the proposed project is located in an area subject to an extraordinary potential for damage or destruction from wildfire, the Commission can only approve the project if the applicant assumes the liability from the associated risks as required by **Special Condition Number Five (5)**. This responsibility is carried out through the recordation of a deed restriction. The assumption of risk deed restriction, when recorded against the property, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site and which may adversely affect the stability or safety of the proposed development and agrees to assume any liability for the same.

It should be noted that an assumption of risk deed restriction for hazardous geologic conditions and danger from wildfire is commonly required for new development throughout the greater Malibu/Santa Monica Mountains region in areas where there exist potentially hazardous geologic conditions, or where previous geologic activity has occurred either directly upon or adjacent to the site in question. The Commission has required such deed restrictions for other development throughout the Malibu/Santa Monica Mountains region.

Landscaping of the graded and disturbed areas on the project site will enhance the geological stability of the site. In addition, interim erosion control measures implemented during construction will minimize erosion and enhance site stability. The Commission finds that the minimization of site erosion will add to the stability of the site. Erosion can best be minimized

by requiring the applicant to revegetate all disturbed areas of the site with native plants, compatible with the surrounding environment.

Invasive and non-native plant species are generally characterized as having a shallow root structure in comparison with their high surface/foilage weight. The Commission finds that non-native and invasive plant species with high surface/foilage weight and shallow root structures do not serve to stabilize slopes and that such vegetation results in potential adverse effects to the stability of the project site. Native species, alternatively, tend to have a deeper root structure than non-native, invasive species and aid in preventing erosion. In addition, the use of invasive, non-indigenous plant species tends to supplant species that are native to the Malibu/Santa Monica Mountains area. Increasing urbanization in this area has also caused the loss or degradation of major portions of the native habitat and the loss of native plant seed banks through grading and removal of topsoil. Moreover, invasive groundcovers and fast-growing trees that originate from other continents, that have been used as landscaping in this area, have invaded and already seriously degraded native plant communities adjacent to development. Therefore, the Commission finds that in order to ensure site stability, the disturbed and graded areas of the site shall be landscaped with appropriate native plant species, as specified in **Special Condition Number One (1)**.

Although the applicant has submitted a landscaping plan, a revised landscaping plan must be submitted since the plan that was submitted it is inadequate in that it did not include provisions providing for native plants, erosion control, or the timing of plantings. The Commission, therefore, finds it is necessary to require the applicant to submit a revised landscape and erosion control plan, as specified in **Special Condition Number One (1)**.

In addition, in order to ensure that vegetation clearance for fire protection purposes does not occur prior to commencement of grading or construction of the proposed structures, the Commission finds it necessary to impose a restriction on the removal of natural vegetation, as specified in **Special Condition Number Two (2)**. This restriction specifies that natural vegetation shall not be removed until grading or building permits have been secured and construction of the permitted structures has commenced.

Further, the Commission also notes that the amount of new cut grading proposed by the applicant is larger than the amount of fill to be placed and will result in approximately 458 cu. yds. of excess excavated material. Excavated materials that are placed in stockpiles are subject to increased erosion. The Commission also notes that additional landform alteration would result if the excavated material were to be retained on site. In order to ensure that excavated material will not be stockpiled on site and that landform alteration is minimized, **Special Condition Number Six (6)** requires the applicant to remove all excavated material, including concrete debris resulting from the removal of the existing pool, from the site to an appropriate location and provide evidence to the Executive Director of the location of the disposal site prior to the issuance of the permit. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required.

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

### **C. Septic System**

The Commission recognizes that the potential build-out of lots in the Santa Monica Mountains, and the resultant installation of septic systems, may contribute to adverse health effects and geologic hazards in the local area. 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, minimizing alteration of natural streams.*

Section 30250(a) of the Coastal Act states in part that:

*New residential, ...development, ...shall be located within, ...existing developed areas able to accommodate it...and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.*

The applicant has submitted approval from the City of Malibu Environmental Health Department stating that the proposed septic system is in conformance with the minimum requirements of the City of Malibu Uniform Plumbing Code. As discussed above under "Geologic Stability and Hazards," and as required by **Special Condition Number Four (4)**, however, the applicant shall submit a revised septic system plan that incorporates a gray water diversion system. This revised septic system plan shall be reviewed and approved by the applicant's septic system design consultant and shall be approved by the City of Malibu's Environmental Health Department to ensure that it is also in conformance with the requirements of the City of Malibu Uniform Plumbing Code.

The Commission has found in past permit actions that compliance with the health and safety codes will minimize any potential for wastewater discharge that could adversely impact coastal waters. The City of Malibu's minimum health code standards for septic systems have been found protective of coastal resources and take into consideration the percolation capacity of soils along the coastline, the depth to groundwater, and other considerations, and have generally been found to be protective of coastal resources. Gray water diversion systems have been approved and adopted by the City of Malibu Uniform Plumbing Code and by the State of California. In addition, the surge tank that is incorporated into the gray water diversion system prevents any overflow of gray water above the set discharge rate that can be utilized in the landscape. As a result, the gray water diversion system required by **Special Condition Number Four (4)** will not result in any adverse effects on water quality, as it will be utilized for landscape irrigation and will not be discharged into streams or coastal waters. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30231 and 30250 of the Coastal Act.

## **D. Local Coastal Program**

Section 30604 of the Coastal Act states that:

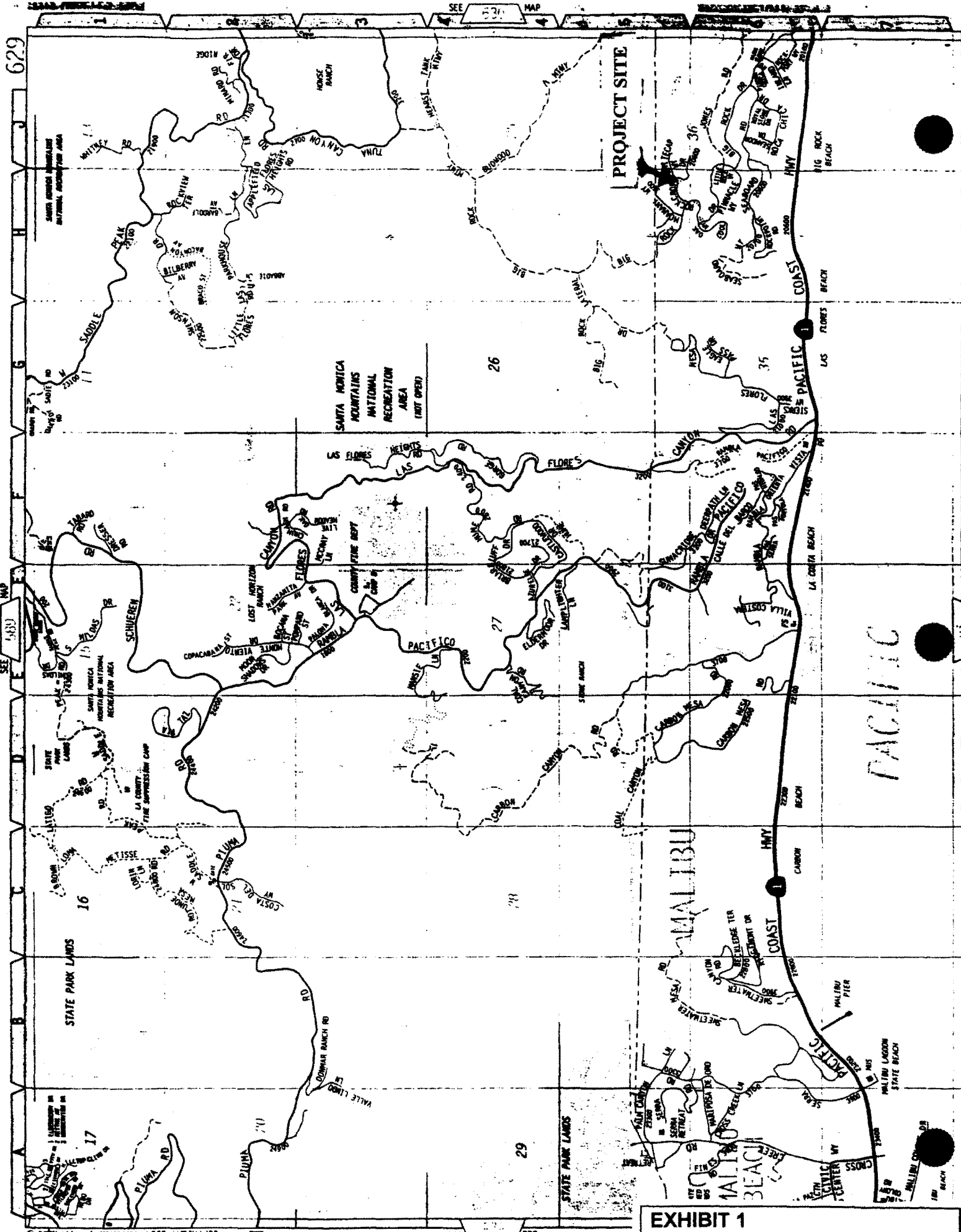
*a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the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

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal 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 development, as conditioned, will not prejudice the City's ability to prepare a Local Coastal Program for Malibu which is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604(a).

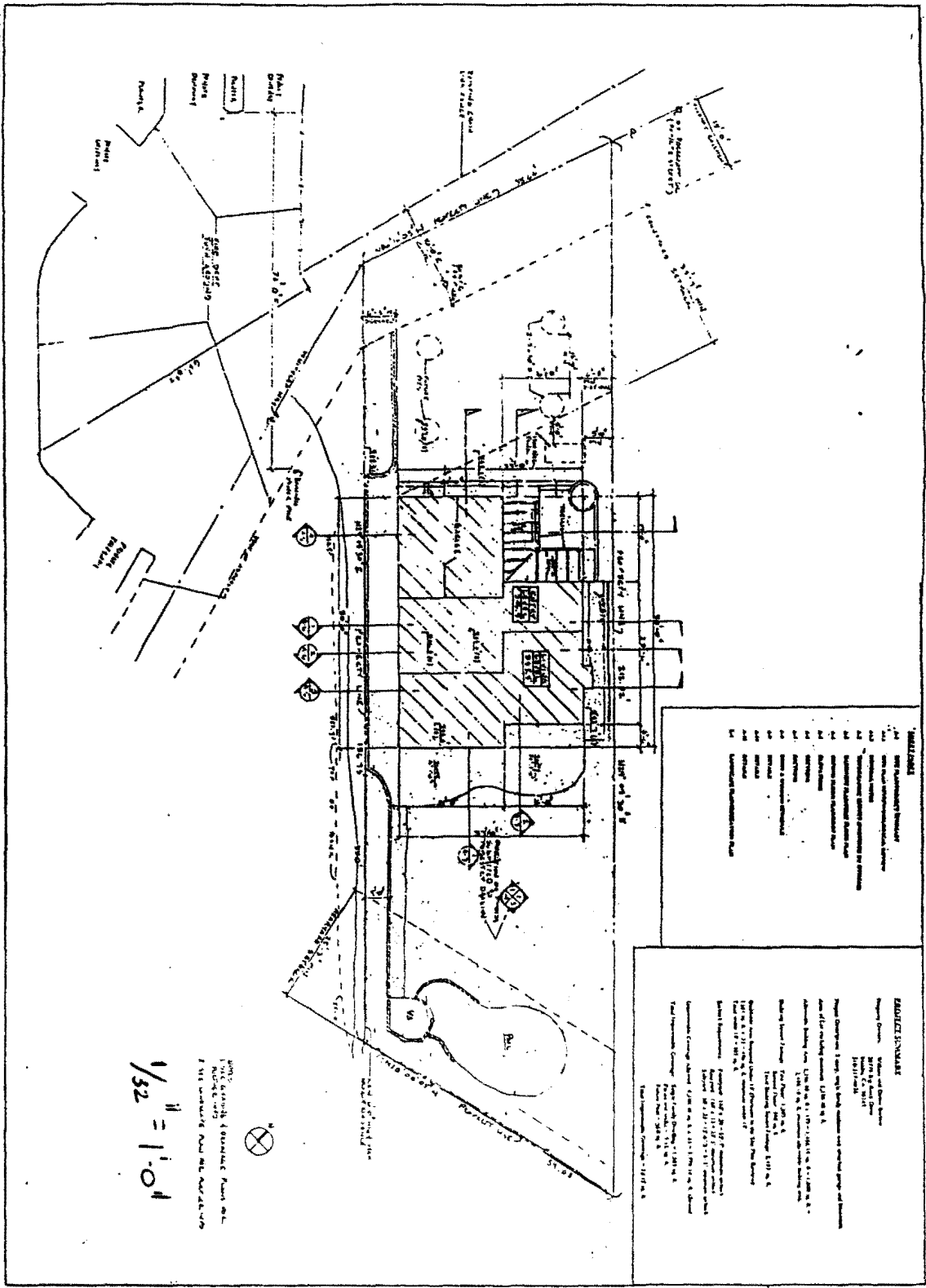
## **E. CEQA**

Section 13096(a) of the Commission's administrative regulations requires Commission approval of 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 finds that, the proposed project, 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 project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.



**EXHIBIT 1**  
**CDP 4-99-163 (Barlow)**  
**Location Map**



1/32" = 1'-0"  
 Note: 1/32" = 1'-0"  
 1/32" = 1'-0"  
 1/32" = 1'-0"

**NOTES:**

1. See General Notes on Drawing Set.
2. All dimensions are in feet and inches.
3. All bearings are in degrees, minutes and seconds.
4. All distances are in feet.
5. All areas are in square feet.
6. All volumes are in cubic feet.
7. All weights are in pounds.
8. All forces are in pounds.
9. All moments are in foot-pounds.
10. All stresses are in pounds per square inch.
11. All strains are in inches per inch.
12. All deflections are in inches.
13. All settlements are in inches.
14. All rotations are in degrees.
15. All temperatures are in degrees Fahrenheit.
16. All pressures are in pounds per square foot.
17. All densities are in pounds per cubic foot.
18. All viscosities are in centipoise.
19. All surface tensions are in dynes per centimeter.
20. All specific gravities are dimensionless.
21. All refractive indices are dimensionless.
22. All absorption coefficients are in inverse centimeters.
23. All emission coefficients are in inverse centimeters.
24. All scattering coefficients are in inverse centimeters.
25. All extinction coefficients are in inverse centimeters.
26. All optical densities are dimensionless.
27. All transmittances are dimensionless.
28. All reflectances are dimensionless.
29. All absorptances are dimensionless.
30. All emittances are dimensionless.
31. All absorptivities are in inverse centimeters.
32. All emissivities are dimensionless.
33. All absorptivities are in inverse centimeters.
34. All emissivities are dimensionless.
35. All absorptivities are in inverse centimeters.
36. All emissivities are dimensionless.
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39. All absorptivities are in inverse centimeters.
40. All emissivities are dimensionless.

**PROJECT INFORMATION:**

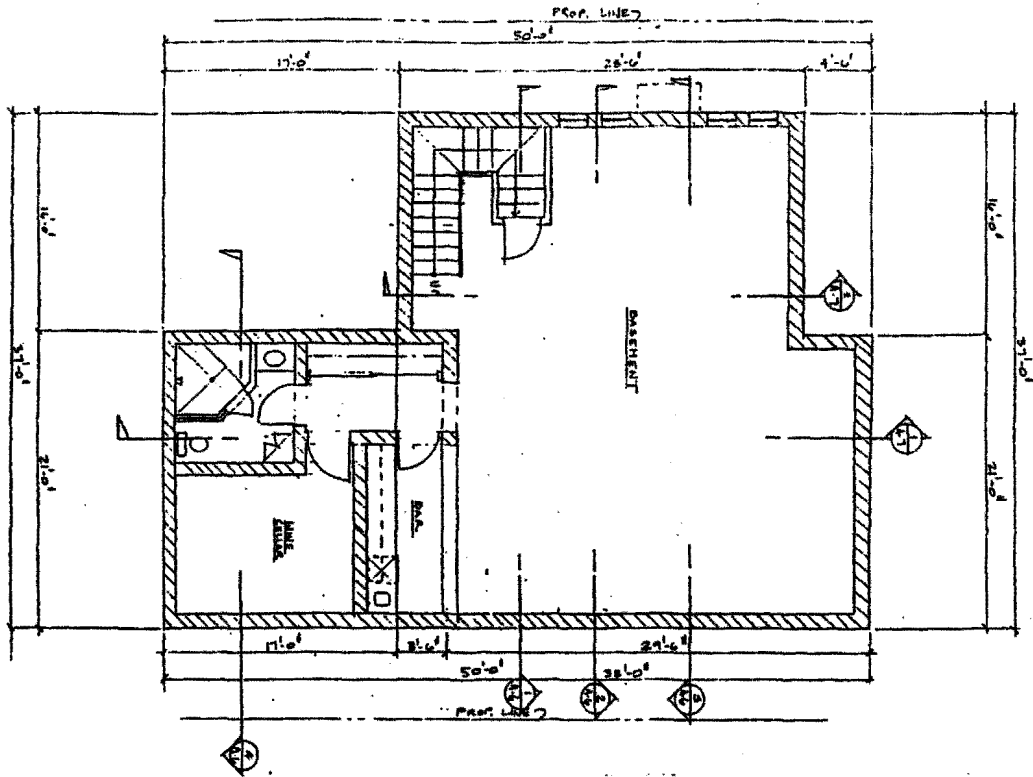
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 Project No.: 10115-01  
 Date: 10/1/2001  
 Scale: 1/32" = 1'-0"  
 Drawing No.: 10115-01-01  
 Project Engineer: [Name]  
 Project Architect: [Name]  
 Project Designer: [Name]  
 Project Drafter: [Name]  
 Project Checker: [Name]  
 Project Approver: [Name]  
 Project Date: 10/1/2001  
 Project Status: [Status]

**BARLOW RESIDENCE**  
 10115 BARLOW ROAD  
 HOUSTON, TX 77036

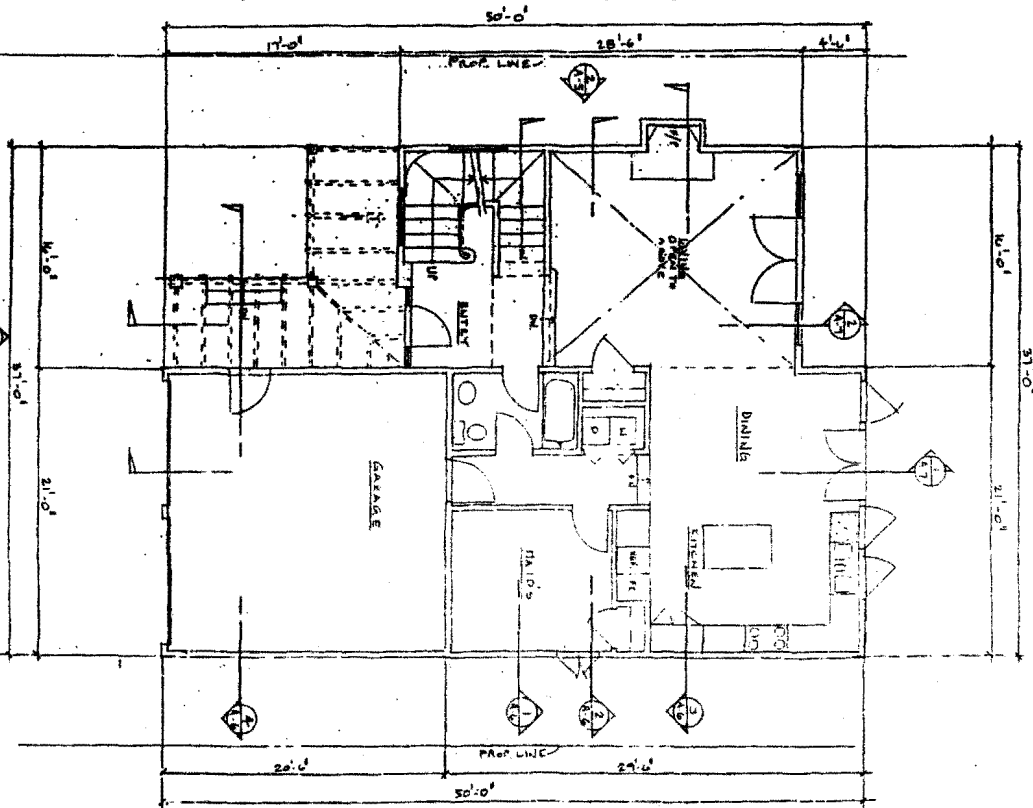
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2	10/1/2001	ISSUED FOR CONSTRUCTION
3	10/1/2001	ISSUED FOR RECORD
4	10/1/2001	ISSUED FOR AS-BUILT
5	10/1/2001	ISSUED FOR FINAL
6	10/1/2001	ISSUED FOR ARCHIVE
7	10/1/2001	ISSUED FOR DESTRUCTION
8	10/1/2001	ISSUED FOR REMEDIATION
9	10/1/2001	ISSUED FOR RECONSTRUCTION
10	10/1/2001	ISSUED FOR REPAIR
11	10/1/2001	ISSUED FOR REPLACEMENT
12	10/1/2001	ISSUED FOR RENOVATION
13	10/1/2001	ISSUED FOR RESTORATION
14	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
15	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
16	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
17	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
18	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
19	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE
20	10/1/2001	ISSUED FOR REPAIR AND MAINTENANCE

**EXHIBIT 2**  
**CDP 4-99-163 (Barlow)**  
**Site Plan**

BASEMENT PLAN



FIRST FLOOR PLAN



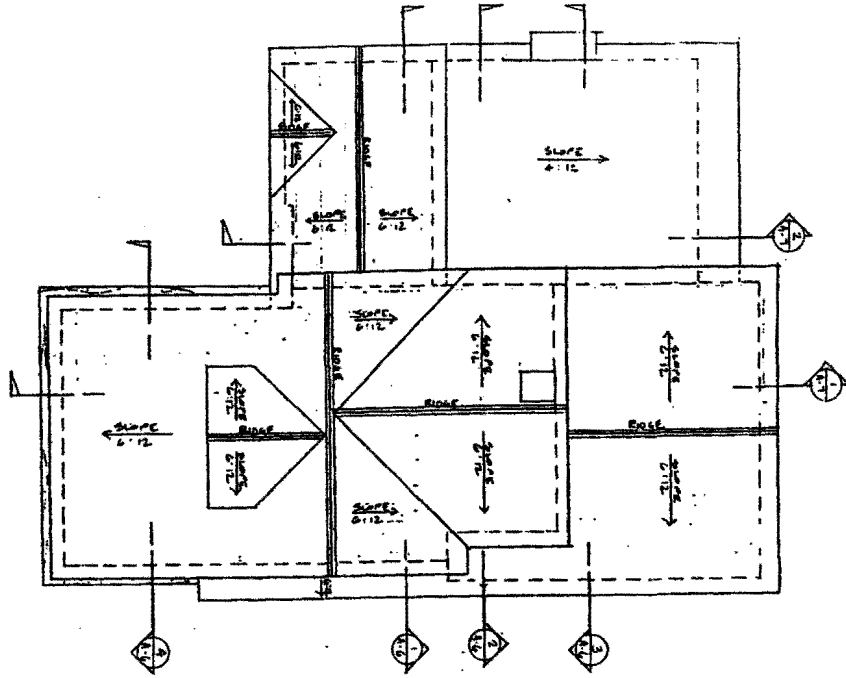
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BARLOW RESIDENCE  
 20713 ROLKCAFT  
 MALIBU, CA 90265

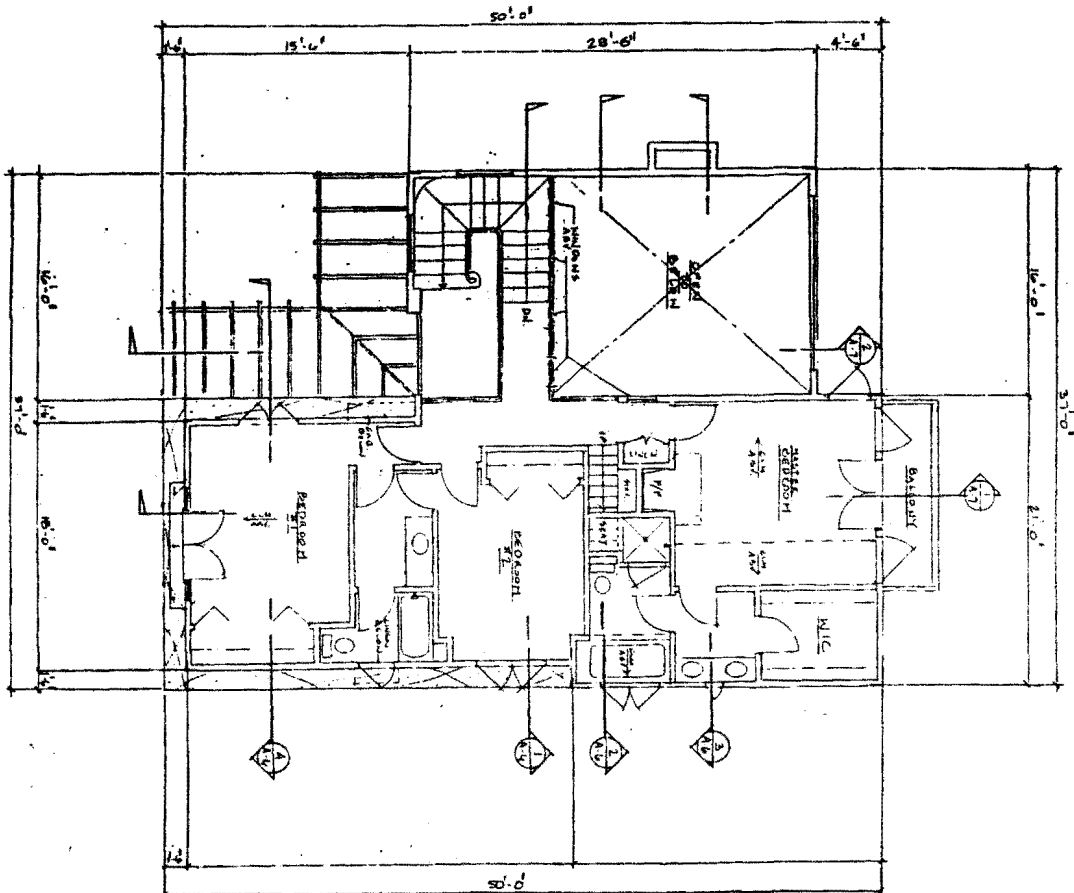
**EXHIBIT 3**  
**CDP 4-99-163 (Barlow)**  
**Basement/First Floor Plans**



ROOF PLAN



SECOND FLOOR PLAN



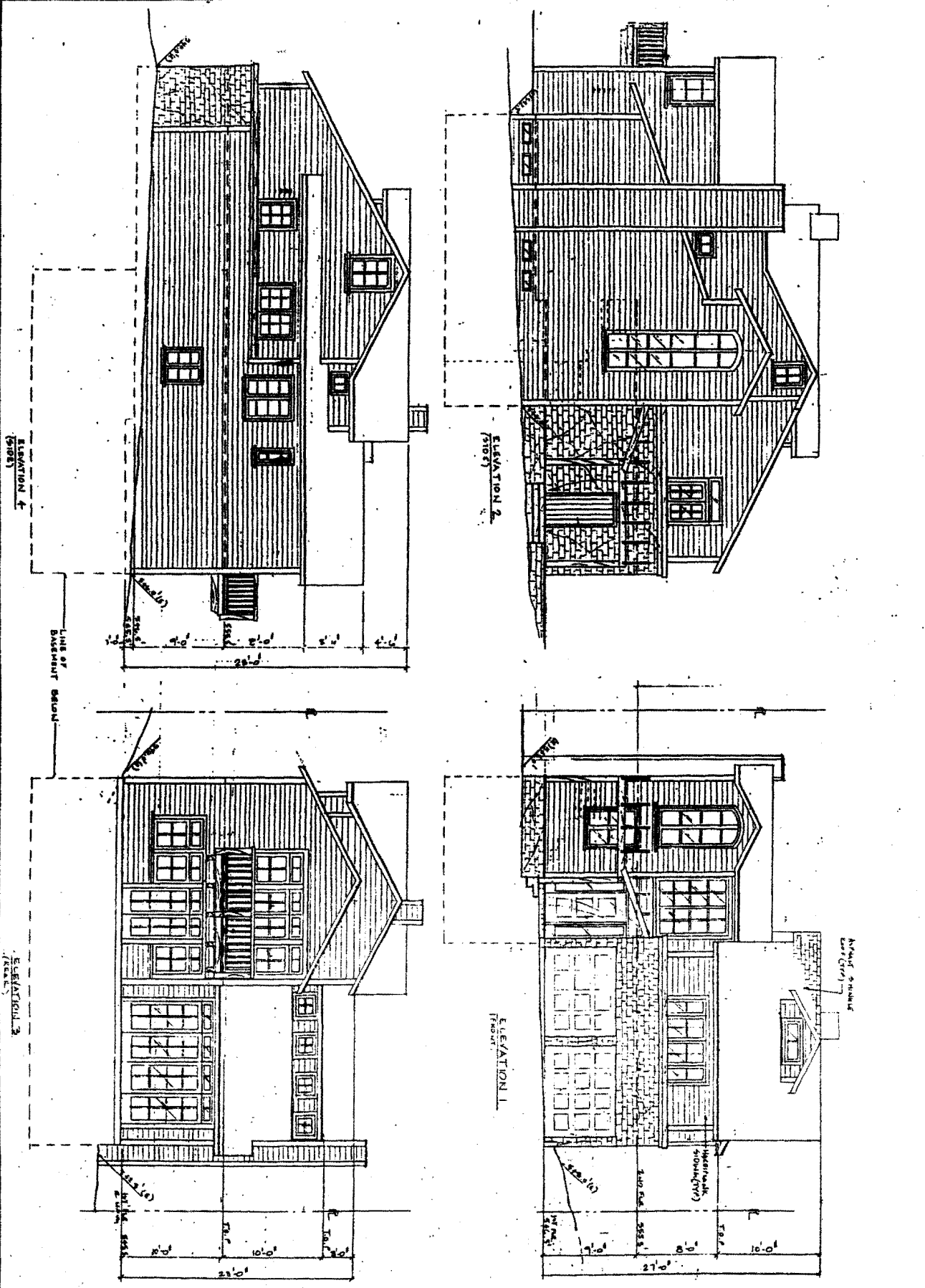
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9	11/11/83	J.M.	J.M.	J.M.
10	11/11/83	J.M.	J.M.	J.M.

BARLOW RESIDENCE  
20713 ROCKCROFT  
MALIBU, CA 90265

EXHIBIT 4

CDP 4-99-163 (Barlow)

Roof/Second Floor Plans

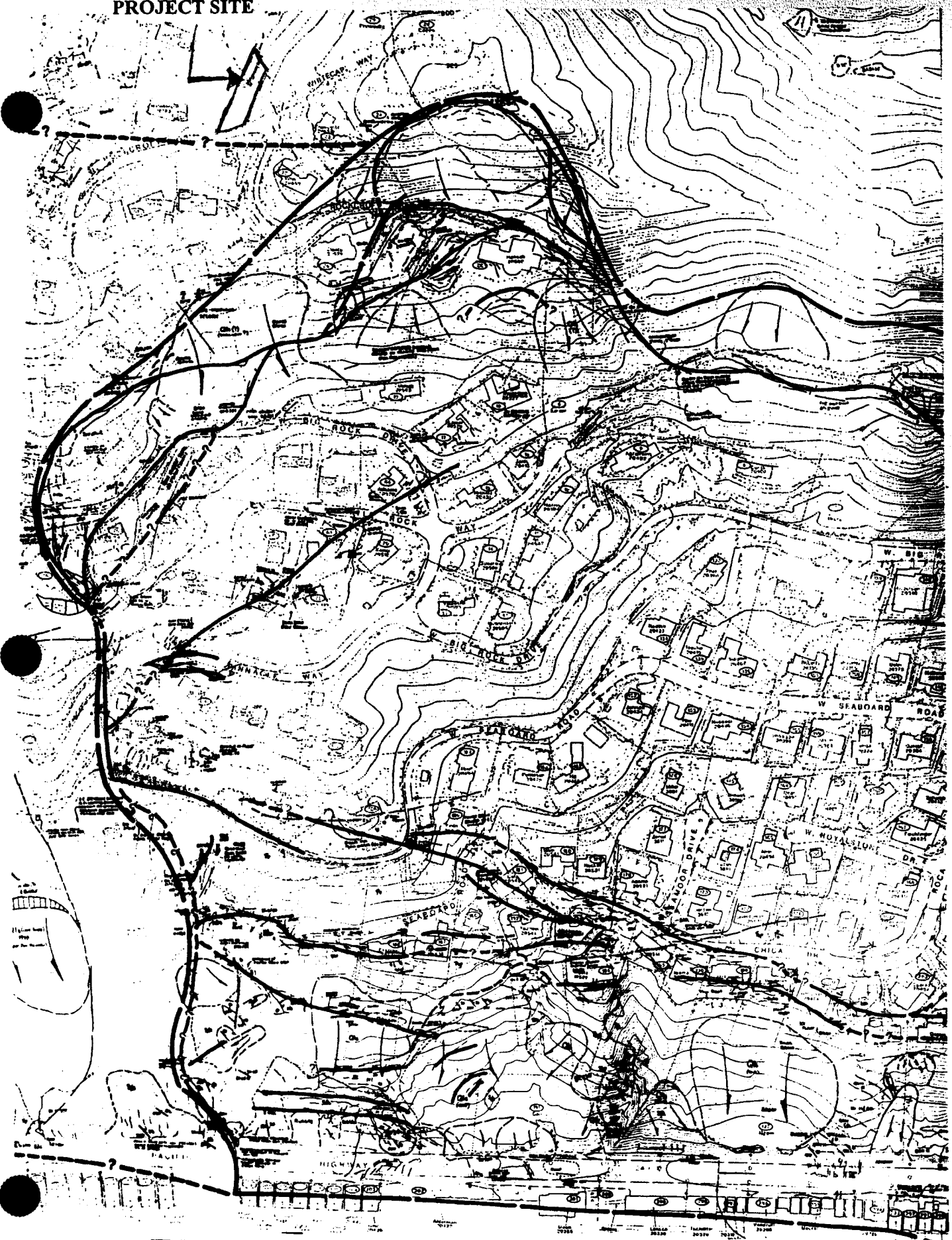


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SCALE	1/4" = 1'-0"
PROJECT	BARLOW RESIDENCE
ARCHITECT	...
...	...

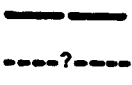
BARLOW RESIDENCE  
 2015 ROCKCROFT  
 MALIBU, CA 90265

**EXHIBIT 5**  
**CDP 4-99-163 (Barlow)**  
**Elevations**

**PROJECT SITE**



**EXPLANATION**



LIMITS of KNOWN LANDSLIDE,  
estimated location

ENLARGEMENT of KNOWN LANDSLIDE,  
estimated location

**EXHIBIT 6**

**CDP 4-99-163 (Barlow)**

**Landslide Map**

**Bill Wilson~Environmental Planning & Design**  
**PO Box 2958 Beverly Hills, California 90213**  
**Phone/Fax (310) 207-0352**

**Sabrina Tillis**  
**California Coastal Commission**  
**Ventura, California**  
**Phone (805) 641-0142 Fax (805) 641-1732**

**SITE: Proposed Barlow Residence**  
**20713 Rockcroft**  
**Malibu, California 90265**

**RE: GRAY WATER SYSTEM AT THE PROPOSED PROJECT AS A  
MITIGATION MEASURE**

November 15, 1999

Dear Ms. Tillis:

As requested, the following discussion is to inform you of the option of using a gray water system at homes in the Big Rock area to divert some of the wastewater generated to the landscape. Gray water diversion was pre-empted by the State and local Regulating Authorities were required to adopt the Gray Water Code several years ago. Under this code, water from showers and sinks, and the laundry, can be diverted to the landscape, while toilet water and kitchen water would continue to be discharged to the house sewer line or septic system.

In new construction, gray water diversion can be provided for by running the two-inch diameter waste lines to the perimeter of the house before tying them into the four-inch house sewer line. This differs from conventional plumbing practice in which the bathroom shower and sink tie into the four-inch waste line from the toilet as soon as possible. With the two-inch collection line running parallel to the four-inch line to the perimeter of the house, it is a simple matter to install a diversion valve and overflow and a small surge tank for the gray water diversion.

In operation, gray water from sinks, showers, and the laundry would flow into the surge tank and then be immediately dispersed to a 'mini leach field' in a landscaped area. Usually a lint and hair sock filter is placed on the line coming into the surge tank next to the house. The rules for putting in a gray water system are detailed in the State Gray Water Code. Gray water systems require a minor permit from the Regulating Authority, in this case the City of Malibu.

Diversion of gray water can account for 40-60% of the wastewater generated in a household. As a mitigation measure, gray water systems can be used to divert a

EXHIBIT 7a

CDP 4-99-163 (Barlow)

Gray Water System Analysis

significant amount of water away from sewers and septic systems, but not as justification for down-sizing the septic system. In other words, no credit is allowed in sizing a septic system because of the gray water system. The gray water system is a mitigation to be employed after installation of the required septic system that can decrease the amount of water that is disposed of in leach fields or seepage pits, lengthen their life times, and save on landscape irrigation costs.

Since the gray water system does not impact the sizing of the conventional septic system and is readily approvable, it presumably could serve as a mitigation measure without requiring further back-and-forth between the City and Coastal Commission, but simply ordered as a stipulation in the review and approval process at the December hearing. The main compliance act would consist of providing separated plumbing in the plumbing layout.

Please contact me if I can provide you with any further information on this option. As I mentioned in our discussion, we are recommending gray water diversion at another small lot in the Big Rock zone to relieve poor winter time performance in the seepage pit at an older existing residence down the hill from the Barlow's site and in an area of much greater concern in regards to the dewatering operations.

Yours truly,

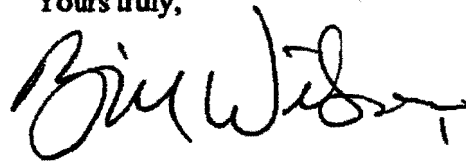


EXHIBIT 7b
CDP 4-99-163 (Barlow)
Gray Water System Analysis

