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STATE OF CALIFORNIA -- THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

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GRAY DAVIS, Governor

## Commission Act

## STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-00-184

APPLICANTS: James and Tracy Moore

AGENT: Clive Dawson

PROJECT LOCATION: 7169 Birdview Ave, Malibu, Los Angeles County.

**PROJECT DESCRIPTION:** Construction of a two-story, 21 ft. high, 5,673 sq. ft. single family residence with attached 2-car garage, basement, new driveway and septic system, retaining walls, swimming pool, and approximately 2,470 cu. yds. of cut grading on a bluff top lot.

Lot area:	29,964	sq. ft.
Building coverage:	3,430	sq. ft.
Paved coverage:	10,438	sq. ft.
Landscaped coverage:	5,579	sq. ft.

**LOCAL APPROVALS RECEIVED:** City of Malibu Planning Department Approval-In-Concept 8/3/00; City of Malibu Geology and Geotechnical Engineering Review Approval In-Concept 10/14/99; City of Malibu Environmental Health In-Concept Approval 8/13/99.

**SUBSTANTIVE FILE DOCUMENTS:** Prepared by Coastline Geotechnical Consultants, Inc.: Geotechnical Engineering Investigation Report 3/31/99, Response to Geotechnical Engineering Review Sheet from City of Malibu 7/19/99, Second Response to Geotechnical Engineering Review Sheet from City of Malibu 9/27/99; Prepared by Mountain Geology, Inc.: Engineering Geologic Report 3/29/99, Addendum Engineering Geologic Report #1 8/30/99, Addendum Engineering Geologic Report #1 8/30/99, Addendum Engineering System Consultant Re: alternative septic placement for subject property.

## SUMMARY OF STAFF RECOMMENDATION

Staff recommends approval of the proposed project with **8 Special Conditions** regarding 1) Geologic Recommendations, 2) Drainage and Polluted Runoff Control, 3) Landscaping, Bluff Restoration, and Erosion Control Plan, 4) Removal of Excavated Material and Construction Debris, 5) Assumption of Risk, 6) No Future Shoreline Protective Device, 7) Future Development Deed Restriction, and 8) Revised Plans.

The subject site is located on a bluff top lot on Birdview Avenue in the Point Dume area of the City of Malibu. The proposed project is for construction of a new two-story, 21 ft. high, 5,673 sq. ft. single family residence with attached 2-car garage, basement, new driveway and septic system, retaining walls, swimming pool, and approximately 2,470 cu. yds. of cut grading. The majority of cut grading proposed is required as excavation for the proposed basement and pool. The proposed residence will be located landward of the recommended geologic setback plane to ensure geologic stability of the proposed residence on the bluff. The proposed residence will also be set back a sufficient distance from the bluff edge to be safe from estimated coastal erosion and bluff retreat over the expected economic life of the structures (75-100 years). However, the proposed swimming pool and pool deck are located on the coastal bluff seaward of the proposed residence, approximately 8-18 ft. from the undulating bluff edge, within the recommended geologic setback area and the estimated 75-100 year coastal erosion/bluff retreat setback area. Additionally, the proposed development includes two property line retaining walls, which extend seaward of the proposed residence, to the top of slope of the coastal bluff. To ensure geologic and structural stability of the proposed development and minimize hazards associated with coastal erosion and bluff retreat, staff is recommending that the proposed project be conditioned such that the applicants submit revised plans, prior to issuance of the coastal permit, indicating that the pool, decking, and portions of the property line retaining walls currently planned within the geologic setback area are either deleted from project plans or relocated landward of the geologic setback area.

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

## I. STAFF RECOMMENDATION

<u>MOTION</u>: I move that the Commission approve Coastal Development Permit No. 4-00-184 pursuant to the staff recommendation.

#### **STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### **RESOLUTION TO APPROVE THE PERMIT:**

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The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

## II. STANDARD CONDITIONS

1. <u>Notice of Receipt and Acknowledgment</u>. 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. <u>Expiration</u>. 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. <u>Interpretation</u>. Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.

**4.** <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. <u>Terms and Conditions Run with the Land</u>. 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. Geologic Recommendations

All recommendations contained in the Geotechnical Engineering Investigation Report dated 3/31/99, Response to Geotechnical Engineering Review Sheet from City of Malibu dated 7/19/99, Second Response to Geotechnical Engineering Review Sheet from City of Malibu dated 9/27/99, prepared by Coastline Geotechnical Consultants, Inc., and the Engineering Geologic Report dated 3/29/99, Addendum Engineering Geologic Report #1 dated 8/30/99, Addendum Engineering Geologic Report #1 dated 8/30/99, Addendum Engineering Geologic Report #1 dated 9/27/00 prepared by Mountain Geology, Inc., shall be incorporated into all final design and construction including recommendations

concerning <u>foundation</u>, <u>drainage</u>, and <u>sewage disposal</u>. Project plans must be reviewed and approved by the geologic consultants prior to commencement of development. Prior to issuance of the coastal development permit, the applicants shall submit evidence to the Executive Director of the consultants' review and approval of all final design and construction plans.

The final plans approved by the consultants shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, drainage, and sewage disposal. 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.

#### 2. Drainage and Polluted Runoff Control Plan

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and written approval, final drainage and runoff control plans, including supporting calculations. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. The plan shall be reviewed and approved by the consulting engineering geologist to ensure the plan is in conformance with geologist's recommendations. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

- (a) Selected BMPs (or suites of BMPs) shall be designed to treat or filter stormwater from each runoff event, up to and including the 85<sup>th</sup> percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with an appropriate safety factor, for flow-based BMPs.
- (b) Runoff shall be conveyed off site in a non-erosive manner.
- (c) Energy dissipating measures shall be installed at the terminus of outflow drains.

The plan shall include provisions for maintaining the drainage system, including structural BMPs, in a functional condition throughout the life of the approved development. Such maintenance shall include the following: (1) BMPs shall be inspected, cleaned and repaired when necessary prior to the onset of the storm season, no later than September 30<sup>th</sup> each year and (2) should any of the project's surface or subsurface drainage/filtration structures or other BMPs fail or result in increased erosion, the applicants/landowner or successor-in-interest shall be responsible for any necessary repairs to the drainage/filtration system or BMPs and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the applicants shall submit a repair and restoration plan to the Executive Director to determine if an amendment or new coastal development permit is required to authorize such work.

#### 3. Landscape, Coastal Bluff Habitat Restoration, and Erosion Control Plans

Prior to issuance of the coastal development permit, the applicants shall submit a landscaping, coastal bluff habitat restoration plan, and erosion control plan, prepared by a licensed landscape architect and/or a qualified resource specialist, for review and approval by the Executive Director. The landscaping, coastal bluff habitat restoration plan, and erosion control plan shall be reviewed and approved by the project's consulting environmental resource specialist and geologists confirming that the plans are in conformance with the consultants' recommendations. The plans shall identify the species, extent, and location of all plant materials and shall incorporate the following criteria:

#### A. Landscaping Plan

- (1) All portions of the site disturbed by construction activities shall be planted within (60) days of receipt of the certificate of occupancy for the residence. To minimize the need for irrigation, 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 <u>Recommended List of Plants for Landscaping in the Santa Monica Mountains</u>, dated February 5, 1996. Such planting shall be adequate to provide 90 percent coverage within two (2) years, and this requirement shall apply to all disturbed soils. Invasive, nonindigenous plant species which tend to supplant native species shall not be used.
- (2) 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.
- (3) Invasive plant species existing at the project site shall be removed and replaced with appropriate native plant species.
- (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) Prior to issuance of Coastal Development Permit 4-00-184, the applicants shall submit a revised Landscaping/Coastal Bluff Habitat Restoration Plan illustrating that the proposed lawn area located seaward of the residence is deleted from project plans and that all plantings seaward of the residence will be carried out in accordance with the terms of parts A and B of this Special Condition.

#### B. Coastal Bluff Habitat Restoration Plan

The coastal bluff habitat restoration plan shall include the following components:

(1) The coastal bluff habitat restoration plan shall clearly delineate the top of bluff and a coastal bluff habitat restoration buffer area to extend from 20 ft. seaward of the proposed structure to the coastal bluff edge. All invasive and non-native plant species shall be removed and the area restored within the coastal bluff habitat restoration area as

generally shown on Exhibit 3. All ice plant seaward of the proposed residence shall be removed and the area revegetated with appropriate plant species consistent with the terms of part B (2) of this Special Condition.

- (2) The coastal bluff habitat restoration area shall be revegetated with locally native plant species appropriate to coastal bluff vegetation communities. Invasive, non-native plant species shall not be used in the coastal bluff habitat restoration area. The revegetation plans shall utilize a mixture of seeds and container plants to increase the potential for successful revegetation. No hydroseeding or other disturbance shall occur on the project site where native plant material is presently established.
- (3) The plan shall specify the preferable time of year to carry out the restoration. The plan shall also specify specific performance standards to judge the success of the enhancement effort consistent with the terms of part C (1) of this Special Condition. The performance standards shall incorporate ground coverage and survival rates typical of coastal bluff vegetation habitat areas.
- (4) The plan shall include specifications for temporary drip or low flow irrigation structures and measures to deliver supplemental watering that may be necessary to establish newly seeded plant stock. The plan shall provide for the removal of the irrigation structures upon successful establishment of the subject plant species.
- (5) The Permitee shall undertake development in accordance with the final approved plan. Any proposed changes to the final approved plan shall be reported to the Executive Director. No changes to the final approved plan shall occur without a Coastal Commission-approved amendment to the coastal development permit, unless the executive Director determines that no amendment is necessary.
- (6) Selective thinning to reduce fire hazard within the coastal habitat bluff restoration area 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 applicants shall submit evidence that the fuel modification plan has been reviewed and approved by the Forestry Department of Los Angeles County. Irrigated ground cover planted within the Zone A 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.

#### C. <u>Monitoring</u>

(1) The applicants shall submit, for the review and approval of the Executive Director, a five (5) year Landscape and Coastal Bluff Habitat Restoration Monitoring Program, prepared by an environmental resource specialist, which outlines relative restoration performance standards to ensure that restoration efforts at the project site are successful. Successful site restoration shall be determined if the revegetation of native plant species on site is adequate to provide 90% coverage by the end of the five (5) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation. The monitoring program shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) showing the area of the project site where restoration will occur prior to restoration.

- (2) The applicants shall submit, on an annual basis for a period of five (5) years (no later than December 31<sup>st</sup> each year) a written report, for the review and approval of the Executive Director, prepared by an environmental resource specialist, evaluating the success or failure of the restoration project. The annual reports shall include further recommendations and requirements for additional restoration activities in order for the project to meet the criteria and performance standards specified in the restoration plan. 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. During the monitoring period, all artificial inputs shall be removed except for the purposes of providing mid-course corrections or maintenance to ensure the long-term survival of vegetation at the project site. If these inputs are required beyond the first four years, then the monitoring program shall be extended for an equal length of time so that the success and sustainability of vegetation at the project site is ensured. Restoration sites shall not be considered successful until they are able to survive without artificial inputs.
- (3) At the end of a five (5) year period, a final detailed report shall be submitted for the 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 applicants 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 coastal bluff habitat restoration program shall be processed as an amendment to this Coastal Development Permit.

#### D. Interim Erosion Control

- 1) The plan shall delineate the areas to be disturbed by 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 construction take place during the rainy season (November 1 March 31) the applicants 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 disturbed 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 construction operations and maintained throughout 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 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the

disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

#### 4. Removal of Excavated Material and Construction Debris

Prior to the issuance of Coastal Development Permit 4-00-184, the applicants shall provide evidence to the Executive Director of the location of the disposal site for all debris/excavated material from the site. Should the dumpsite be located in the Coastal Zone, a coastal development permit shall be required.

#### 5. Assumption of Risk

- A. By acceptance of this permit, the applicants acknowledge and agree to the following:
- (1) The applicants acknowledge and agree that the site may be subject to hazards from liquefaction, storm waves, surges, erosion, landslide, flooding, and wildfire.
- (2) The applicants acknowledge and agree to assume the risks to the applicants and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development.
- (3) The applicants unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards.
- (4) The applicants agree 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 applicants 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 applicants' 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.

#### 6. <u>No Future Bluff or Shoreline Protective Device</u>

A. By acceptance of the permit, the applicants agree, on behalf of themselves and all successors and assignees, that no bluff or shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit 4-00-184 including, but not limited to, the residence, patios, or septic system, and any other future improvements, in the event that the development is threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, or other natural hazards in the future. By acceptance of this permit, the applicants hereby

waive, on behalf of themselves and all successors and assigns, any rights to construct such device(s) that may exist under Public Resources Code Section 30235.

- B. By acceptance of this permit, the applicants further agree, on behalf of themselves and all successors and assigns, that the landowner shall remove the development authorized by this permit, including but not limited to, the residence, patios, and septic system, if any government agency has ordered that the structures are not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.
- C. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which reflects the above restrictions on development. The deed restriction shall include a legal description of the applicants' 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.

#### 7. Future Development Deed Restriction

This permit is only for the development described in Coastal Development Permit Number 4-00-184. Pursuant to Title 14 California Code of Regulations Sections 13253 (b)(6), the exemptions otherwise provided in Public Resources Code Section 30610 (b) shall not apply to the entire parcel. Accordingly, any future additions, change of use, or improvements related to the property and/or proposed residence, or any grading or changes in the landscaping, erosion control, or coastal bluff habitat restoration plan approved under Coastal Development Permit Number 4-00-184, will require a permit from the Coastal Commission or its successor agency.

**PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants 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 applicants' 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.

#### 8. <u>Revised Plans</u>

Prior to issuance of Coastal Development Permit 4-00-184, the applicants shall submit revised project plans, for review and approval of the Executive Director, which illustrate that no development shall be located seaward of the geologic setback area as generally delineated in Exhibit 3. The revised project plans shall illustrate that the proposed pool, pool deck, and

property line retaining walls currently located seaward of the geologic setback area are deleted or relocated landward of the geologic setback area.

## IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

#### A. Project Description and Background

The applicants are proposing to construct a new two-story, 21 ft. high, 5,673 sq. ft. single family residence with attached 2-car garage, basement, new driveway and septic system, retaining walls, swimming pool, and approximately 2,470 cu. yds. of cut grading (Exhibits 3-8).

The project site is a 29,964 sq. ft. bluff top parcel located on the seaward side of Birdview Avenue on the south-western perimeter of Point Dume in the City of Malibu (Exhibits 1,2). The project site is a flag lot accessed from Birdview Avenue via a private driveway which utilizes an easement traversing a street front parcel (also owned by the applicants). The subject site is a vacant parcel located on a generally level terrace platform as it extends from the east property boundary toward the bluff edge. From the bluff top, the project site descends steeply approximately 110 ft. to Westward Beach Road and the sandy beach below.

The proposed project includes construction of a new two-story, 21 ft. high, 5,673 sq. ft. single family residence with attached 2-car garage, basement, new driveway and septic system, retaining walls, swimming pool, and approximately 2,470 cu. yds. of cut grading. The Majority of cut grading proposed is excavation required for construction of the proposed basement and pool. The proposed residence will be located approximately 47 ft. landward of the bluff edge and landward of the recommended geologic setback line to ensure geologic stability of the proposed residence on the bluff. The proposed residence will also be set back a sufficient distance from the bluff edge to be safe from coastal erosion and bluff retreat over the expected economic life of the structures (75-100 years). The location of the proposed residence is consistent with previous permit actions on similar bluff top project sites in Malibu where the Commission has required a minimum set back of 25 ft. from the seaward edge of the top of bluff. The proposed project does not include structural improvements on the bluff face or the area at the base of the bluff for the purposes of shoreline protection.

As mentioned, the subject parcel is located on a coastal bluff in the Point Dume area in the City of Malibu. Habitat areas on the coastal bluffs of Point Dume have been found by the Commission in past permit actions to be environmentally sensitive habitat areas containing a rare Southern Coastal Bluff Scrub plant community. Vegetation at the project site consists of domestic shrubs and trees while vegetation on the upper coastal bluff edge is significantly disturbed and dominated by ice plant. The applicants have submitted project plans indicating that non-native/invasive vegetation on and adjacent to the bluff edge will be removed and the area revegetated with appropriate native plant species.

The area surrounding the project site is characterized as a built-out portion of Malibu consisting of numerous single family residences. The proposed development is consistent with surrounding development and will not be visible from any inland public viewing area or scenic highway. Additionally, the proposed residence will be set back from the coastal bluff edge and does not include any improvements or structures on the bluff face. Therefore, the proposed project will be minimally visible from points along the sandy beach below. The project site is located on a steep coastal bluff above the sandy beach, therefore, the proposed project will not impede public access to or along the beach. As such, the proposed project will not have a significant impact on coastal scenic resources or public access.

#### B. Bluff Top Development and Hazards

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

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

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30235 of the Coastal Act mandates that shoreline protective devices be permitted only where necessary to serve coastal dependent uses or to protect existing development. Section 30253 of the Coastal Act requires that new development minimize risk to life and property in areas of high geologic, flood, and fire hazard, and to assure stability and structural integrity.

The proposed development is located on a bluff top along the Malibu coastline, an area that is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Malibu/Santa Monica Mountains area include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wild fires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property. Coastal bluffs, such as the one located at the subject site, are unique geomorphic features that are characteristically unstable. By nature, coastal bluffs are subject to erosion from sheet flow across the top of the bluff and from wave action at the base of the bluff. In addition, due to their geologic structure and soil composition, these bluffs are susceptible to surficial failure, especially with excessive water infiltration.

Due to the geologic instability of coastal bluffs and their integral role in maintaining the ecosystem and shoreline processes, new development on bluff top lots may be found consistent with Sections 30235 and 30253 of the Coastal Act only when the development is sited to ensure geologic stability, and not to require construction of protective devices which may potentially alter natural landforms and geomorphic processes of coastal bluffs. Additionally, the certified Malibu/Santa Monica Mountains LUP contains a number of policies regarding development on or near coastal bluffs. Although the City of Malibu is now incorporated, these policies are still used as guidance by the Commission in order to determine the consistency of a project with Sections 30235 and 30253 of the Coastal Act. The Malibu/Santa Monica Mountains 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 164, in concert with the Coastal Act, provides that new development shall be set back a minimum of 25 feet from the seaward edge of the top of the bluff or a stringline drawn between the nearest corners of the adjacent structures, whichever distance is greater, but in no case less than would allow for a 75-year useful life for the structure. Policy 165, in conjunction with the Coastal Act, provides that no new permanent structures be permitted on a bluff face.

The unusual configuration of existing development on lots adjacent to the subject site, in conjunction with the subject lot being relatively small in size, renders a strict application of a stringline analysis impractical as the result would restrict development on approximately one-half of the subject property. However, the Commission notes that the proposed residence will be located at least 47 ft. landward of the seaward edge of the top of bluff. The proposed residence will also be located landward of the geologic setback area recommended by the project's consulting geologists (Exhibit 3). In addition, the project's consulting geologists have indicated that the 47 ft. setback of the new development exceeds the setback required to protect new structures from the hazards of future coastal erosion and bluff retreat over the economic life of the development for 75-100 years. The Addendum Engineering Geologic Report #1 dated 9/27/00 prepared by Mountain Geology, Inc., states:

...MGI has concluded that coastal erosion and bluff retreat in the area of the subject property to be on the order of a fraction of an inch to four (4) inches per year with the <u>average</u> being two (2) inches per year.

For conservative geologic planning, and assuming a "worst-case" scenario, MGI shall assume that the amount of coastal erosion and bluff retreat for the subject property is four (4) inches per year. This retreat amount over a period of 100 years totals 400 inches or <u>33.3 feet</u>. As indicated on the current site plan, the established Geologic Setback Line is located at an average distance of 40 ft. from the top of the bluff. Thus, the proposed development (i.e. structures and footings) will not be adversely affected by coastal erosion and bluff retreat over the economic life of the structures (i.e. 75-100 years).

The recommended geologic setback line for the proposed residence fluctuates in distance from the bluff edge across the project site, however, the geologic setback line is on the average of 40 ft. from the top of the slope of the coastal bluff. The geologic setback line therefore exceeds the landward location of the estimated 75-100 year coastal erosion/bluff retreat setback area (located 33.3 ft. from the bluff edge) and is a more restrictive setback applied to ensure geologic stability of the proposed development. The geologic consultants have found that proposed development located behind the recommended geologic setback line will not be

subject to the hazards of coastal bluff erosion. Therefore, development located behind the geologic setback line should not require construction of a shoreline or bluff face protective device in the future.

In addition, the applicants have submitted a Geotechnical Engineering Investigation Report dated 3/31/99, Response to Geotechnical Engineering Review Sheet from City of Malibu dated 7/19/99, Second Response to Geotechnical Engineering Review Sheet from City of Malibu dated 9/27/99, prepared by Coastline Geotechnical Consultants, Inc., and an Engineering Geologic Report dated 3/29/99, Addendum Engineering Geologic Report #1 dated 8/30/99, Addendum Engineering Geologic Report #1 dated 8/30/99, Addendum Engineering Geologic conditions at the subject site. The consultants have found that the subject site is relatively stable and suitable for residential development given that their recommendations are incorporated into the proposed project. The Geotechnical Engineering Investigation Report dated 3/31/99 prepared by Coastline Geotechnical Consultants, Inc., states:

Based on the findings summarized in this report, and provided the recommendations of this report are followed, and the designs, grading and construction are properly and adequately executed, it is our opinion that construction within the building site behind the geotechnical setback line would not be subject to geotechnical hazards from landslides, slippage, or excessive settlement. Further, it is our opinion that the proposed building and anticipated site grading would not adversely affect the stability of the site, or adjacent properties with the same provisos listed above.

Furthermore, the Engineering Geologic Report dated 3/29/99 prepared by Mountain Geology, Inc. states:

Based upon our investigation, the proposed development will be free from geologic hazards such as landslides, slippage, active faults, and settlement. The proposed development and installation of the private sewage disposal system will have no adverse effect upon the stability of the site or adjacent properties provided the recommendations of the Engineering Geologist and Geotechnical Engineer are complied with during construction.

The Geotechnical Engineering Investigation Report dated 3/31/99, Response to Geotechnical Engineering Review Sheet from City of Malibu dated 7/19/99, Second Response to Geotechnical Engineering Review Sheet from City of Malibu dated 9/27/99 prepared by Coastline Geotechnical Consultants, Inc., and an Engineering Geologic Report dated 3/29/99, Addendum Engineering Geologic Report #1 dated 8/30/99, Addendum Engineering Geologic Report #1 dated 9/27/00 prepared by Mountain Geology, Inc. include a number of recommendations to ensure the stability and safety of the site. To ensure that the recommendations of the consulting engineering geologist and geotechnical engineer have been incorporated into all proposed development, **Special Condition One (1)** requires the applicants to submit project plans certified by the engineering geologist and geotechnical engineer as conforming to all recommendations regarding structural and site stability. Final plans approved by the Commission relative to construction, grading and drainage. Any substantial changes to the proposed development approved by the Commission which may be recommended by the consultants shall require an amendment to the permit or a new coastal permit.

The subject site is considered grossly stable from a geologic standpoint, however, the steep slopes of the coastal bluff at the subject site are subject to erosion and soil slippage. 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 applicants to incorporate appropriate drainage features and to landscape disturbed and graded areas of the site with native plants compatible with the surrounding environment.

The Commission notes that the proposed project involves bluff top development with a significant amount of grading. In past permit actions, the Commission has found that soil disturbance on steep bluffs has the potential to significantly exacerbate natural processes of bluff top erosion through removal of natural vegetation that serves to stabilize the bluff, and through exposure of bare soils to rain, run-off, and wind erosion. Therefore, in order to minimize erosion and ensure the stability of the site, Special Condition Three (3) requires that all disturbed and graded areas on the subject site are revegetated and restored primarily with native vegetation. The Commission finds that invasive and non-native plant species are typically characterized as having a shallow root structure in comparison with their high surface/foliage weight and/or require a greater amount of irrigation and maintenance than native vegetation. The Commission notes that non-native and invasive plant species with high surface/foliage weight and shallow root structures do not serve to stabilize steep slopes, such as the slopes on the subject site, and that such vegetation results in potential adverse effects to the geologic stability of the project site. In comparison, the Commission finds that native plant species are typically characterized not only by a well developed and extensive root structure in comparison to their surface/foliage weight but also by their low irrigation and maintenance requirements.

To ensure that revegetation efforts are successful, **Special Condition Three (3)** also requires that the applicants agree to monitor the site for a period of five (5) years. Monitoring shall include the submittal of annual reports to the Executive Director, which shall outline the progress of the revegetation efforts and shall include any recommendations for modifications to the project if the initial restoration effort fails.

In addition, uncontrolled runoff over the bluff face will contribute to headward erosion and lead to destabilization of the bluff slopes and eventually the building site. To further minimize erosion and increase the geologic stability of the subject site the Commission finds it necessary to ensure that adequate drainage and erosion controls measures are incorporated into the proposed project. Therefore, **Special Conditions Two (2) and Three (3)**, require the applicants to submit drainage and erosion control plans certified by the consulting engineering geologist and geotechnical engineer as conforming to their recommendations. Further, to ensure that the project's drainage structures will not contribute to destabilization of the project site or surrounding area and that the project's drainage structures shall be repaired should the structures fail in the future, **Special Condition Two (2)** also requires that the applicants agree to be responsible for any repairs or restoration of eroded areas should the drainage structures fail or result in erosion.

The proposed project also includes a significant amount of cut grading in the amount of 2,470 cu. yds. Excavated materials that are placed in stockpiles are subject to increased erosion and may also contribute to additional landform alteration 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 Four (4)** requires the applicants to remove all excavated material from the site to an appropriate location and provide evidence to

the Executive Director of the location of the disposal site prior to issuance of the permit. Should the dumpsite be located in the Coastal Zone, a coastal development permit shall be required.

The Commission notes that while the proposed drainage system and erosion control measures will serve to minimize hazards associated with headward erosion, potential risks associated with excessive water infiltration on a bluff top causing destabilization can be minimized by allowing only drip or low flow irrigation seaward of the residence. Percolation of irrigated water into the bluff can lead to destabilization of the bluff, and consequently pose a significant risk to existing and proposed development. There have been incidents where irrigation lines have burst, saturating the bluff and thereby subjecting bluff top development to hazardous conditions. To minimize potential geologic risks caused by excess water infiltration associated with maintaining landscaping on the bluff, Special Condition Three (3) requires the applicants to submit revised Landscaping Plans, for review and approval of the Executive Director, which illustrate that the proposed lawn area seaward of the residence is deleted from the project plans. Special Condition Three (3) also requires the removal of an extensive ice plant cover which exists seaward of the residence, and replacement of this vegetation with native grass species or other native, drought tolerant vegetation. The Commission finds that implementing a landscaping plan that requires removal of non-native and invasive plant species, which generally require large guantities of water for maintenance, and replacement of these species with native and drought tolerant vegetation, will assist in reducing risks associated with excessive water infiltration into the bluff top and aid in stabilizing the site. Special Condition Three (3) also requires that supplemental watering features necessary to establish appropriate restorative vegetation will be removed from the restoration area of the bluff and that only drip or low flow irrigation will be permitted on any portion of the site seaward of the proposed residence.

In conjunction with limiting excess water infiltration associated with maintaining landscaping on bluff top lots, the Commission has, in past permit actions, looked to alternative methods of sewage disposal such as evapotranspiration systems to reduce effluent disposal into the bluff top. In the case of the proposed project, the Residential Waste Water Disposal System Consultant has evaluated the site and concluded that due to the limiting factors of space availability and geologic setbacks, the project site can not accommodate installation and operation of an evapotranspiration system. However, the project's consulting engineering geologist has also evaluated the site and has found that the proposed conventional septic system utilizing seepage pits for effluent disposal will not adversely affect the stability of the site. The Engineering Geologic Report dated 3/29/99, prepared by Mountain Geology, Inc. states:

The installation of the proposed private sewage disposal systems and the discharge of effluents on the site will not create or cause adverse conditions to the site or adjacent properties due to the favorable geologic structure, and favorable nature of the earth materials with respect to percolation rates.

Although the applicants' geologic consultants have concluded that all the proposed development will be safe from geologic hazards, the applicants are proposing to construct a swimming pool and decking, and portions of two property line retaining walls seaward of the proposed residence, within the recommended geologic setback area. Project plans submitted by the applicants also indicate that the proposed swimming pool and deck will be partially constructed within the estimated 75-100 year coastal erosion and bluff retreat setback area and that two property line retaining walls are proposed to be constructed entirely up to the bluff edge. The proposed pool is designed to utilize cast-in-place friction piles founded into bedrock

at the site, which the project's consulting geologists conclude will provide an adequate factor of safety (of at least 1.5) in an area presently determined to be below the safety factor at 1.38. Structures located within the recommended geologic setback area, even when constructed on deepened foundation systems to avoid slippage of the structures in the event of a bluff failure, have the potential to affect bluff stability through disturbance of bluff top soils associated with grading and increased impervious surfaces contributing to run-off and erosion at the bluff face. In past permit actions, the Commission has found that soil disturbance on coastal bluffs, such as the coastal bluff which exists at the project site, has the potential to significantly exacerbate the natural process of erosion by altering natural topography and drainage patterns, through removal of natural vegetation that serves to stabilize soil on bluff top lots, and through exposure of bare soil to wind, rain, and run-off.

Additionally, large structures constructed on the bluff such as the proposed pool and pool decking, though designed to prevent slippage of the structures themselves should the bluff fail. will continue to be subject to bluff failure in the geologic setback area and, based on the predicted erosion rates at the subject site, may be subject to coastal erosion and bluff retreat during the economic life of the proposed development. Swimming pools, decks, and retaining walls, such as those proposed at the subject site, are not considered principle permitted uses at the site and, therefore, would not qualify for protective devices to ensure their geologic stability. Being that the proposed pool, decking, and retaining walls located seaward of the geologic setback area and/or within the coastal erosion and bluff retreat setback area may be subject to geologic hazards in the future, and would not be eligible for construction of a protective device to ensure their stability, the structures would have to be removed should they be threatened by bluff erosion and failure. Removal of the proposed structures in the geologic setback area, particularly the swimming pool with a deepened foundation system, would be a invasive process on the coastal bluff at the site which would cause significant soil disturbance in the form of grading and excavation on the bluff edge, which would in turn increase the potential for bluff destabilization. The Commission finds that the proposed pool, decking, and retaining walls located seaward of the recommended geologic setback area have the potential to adversely impact the longterm geologic stability of the coastal bluff for the reasons discussed above. Therefore, to ensure continued geologic and structural stability of the project site and the proposed development, Special Condition Eight (8) requires the applicants to submit, prior to issuance of the coastal permit, for review and approval of the Executive Director, revised project plans which show that the proposed pool, pool decking, and retaining walls presently planned within the geologic setback area, are either deleted from the project plans or relocated to a position landward of the established geologic setback area as generally delineated on Exhibit 3.

Notwithstanding the project's setbacks, and the Special Conditions imposed on this permit which will serve to minimize potential hazards, the Commission nevertheless finds that coastal bluff erosion is a dynamic, long-term process and that no structure situated on a coastal bluff can be completely free of hazard. Thus, the Commission finds that there remains an inherent risk in building on the subject site with the geologic conditions and constraints described in this section, and due to the fact that the project site is located in an area subject to an extraordinary potential for damage or destruction from wildfire. Typical vegetation in the Santa Monica Mountains consists predominantly of coastal sage scrub and chaparral. Many plant species common to these communities produce and store terpenes, which are highly flammable substances (Mooney in Barbour, <u>Terrestrial Vegetation of California</u>, 1988). Chaparral and sage scrub communities have evolved in concert with, and continue to produce the potential for, frequent wild fires. Additionally, the typical warm, dry summer conditions of the Mediterranean

climate combine with the natural characteristics of the native vegetation to pose a risk of wild fire damage to development that cannot be completely avoided or mitigated.

Therefore, the Commission can only approve the project if the applicants assume the responsibility and liability from the risks associated with developing the project as required by **Special Condition 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 applicants are aware of and appreciate the nature of the hazards which exist on the site that may adversely affect the stability or safety of the proposed development and agrees to assume any liability for the same. Moreover, through acceptance of **Special Condition Five (5)**, the applicants agree to indemnify the Commission, its officers, agents, and employees against any and all claims, demands, damages, costs, expenses, or liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project in an area where an extraordinary potential for damage from geologic and wildfire hazard exists as an inherent risk.

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 frequently required such deed restrictions for other development throughout the Malibu/Santa Monica Mountains region.

As conditioned to eliminate development seaward of the established geologic setback area, the location of the proposed structures on the subject site are presently feasible from a geologic point of view. However, further improvements such as concrete block walls and/or other protective structures may eventually be proposed by the applicants to maintain the development and ensure slope stability if threatened by natural coastal bluff erosion in the future. The applicants do not propose the construction of any shoreline protective device to protect the proposed development and, as discussed above, the established setbacks will assist in protecting the development from the hazards of future bluff erosion for the next 75-100 years. However, many beach areas of Malibu have experienced extreme erosion and scour during severe storm events, such as El Nino storms. It is not possible to completely predict what conditions the proposed residence may be subject to in the future.

No shoreline protective device is proposed as part of this project, however, future construction of a shoreline protective device on the proposed project site would result in potential adverse effects to coastal processes, shoreline sand supply, the public's beach ownership interests, public access, and scenic resources. Shoreline protective devices alter and fix the shoreline slope profile, which in turn alters beach width and the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area of public property available for public use. Additionally, such protective devices fix the shoreline and reduce the amount of natural shoreline retreat causing a progressive loss of sand and beach area, as shore material is not available to nourish adjacent beaches and the offshore sand bar. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore, where they are no longer available to nourish the beach. This affects public access by resulting in a loss of area between the mean high water line and the actual water. Shoreline protective devices, such as revetments and bulkheads, also cumulatively affect public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually along a shoreline, eventually affecting the profile of a public beach. Furthermore, if not sited landward in a location that insures that the shoreline protective device is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy. Finally, revetments and bulkheads interfere directly with public access by their occupation of beach area that will not only be unavailable during high tide and severe storm events but also potentially throughout the winter season.

In addition, Section 30235 of the Coastal Act allows for the construction of a shoreline protective device only when necessary to protect existing development or to protect a coastal dependent use. Approval of a shoreline protective device to protect new residential development, such as the proposed project, would not be consistent with Section 30235 of the Coastal Act. Construction of a shoreline protective device to protect a new residential development would also conflict with Section 30253 of the Coastal Act which states that new development shall neither create nor contribute to erosion or geologic instability of the project site or surrounding area. Construction of a shoreline protective device to protect new residential development would also conflict with Section 30251 of the Coastal Act, which states that permitted development shall minimize the alteration of natural land forms, including sandy beach areas which would be subject to increased erosion from such a device. Thus, the Commission can only find the proposed project consistent with the applicable sections of the Coastal Act if the development as proposed, and the site as predicted to perform during the project's useful life (as determined by the project's consulting geologists), will not require the construction of a shoreline protection device. Therefore, to ensure that the proposed project is consistent with Sections 30235, 30251 and 30253 of the Coastal Act, and to ensure that the proposed project does not result in future adverse effects to coastal processes, Special Condition Number Six (6) requires the applicants to record a deed restriction that would prohibit the applicants, or future landowners, from constructing a shoreline protective device for the purpose of protecting any of the development proposed as part of this application including the residence, septic system, driveway, patios or any other structure on the subject site.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30235 and 30253 of the Coastal Act.

#### C. Sensitive Habitat Areas and Visual Resources

Section 30240 of the Coastal Act states that:

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

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

Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values. The proposed project site includes a bluff top and

a bluff face that descends steeply to the sandy beach below. The steep bluff faces in Malibu, particularly those on Point Dume, contain a rare and restricted Southern Coastal Bluff Scrub plant community, and have been considered by the Commission as environmentally sensitive habitat areas (ESHA). In past permit actions, the Commission has required that new development provide adequate setbacks from the edge of coastal bluffs both to minimize impacts to sensitive habitat as well as to minimize risks from geologic hazards.

As previously discussed, the proposed project involves construction of a new residence, garage, pool, patios, driveway, septic system, and residential landscaping on a bluff top parcel. As conditioned, the new development will be located entirely landward of the established geologic setback line, approximately 47 ft. from the bluff edge. The project site is a small bluff top lot with minimal square footage available for development and, as conditioned to locate all development landward of the geologic setback line at the site, the proposed development will be located as landward as feasible from the bluff face.

Vegetation currently existing at the project site is highly disturbed with ice plant being the dominating plant species near and on the face of the coastal bluff. A few remnant individuals of natural shrubs and grasses are established near the bluff edge. Landscaping plans submitted for the proposed development include residential landscaping directly adjacent to and landward of the proposed residence, a lawn seaward of the proposed residence, and a coastal bluff restoration area incorporating several native plant species at the extreme seaward portion of the site.

The Commission finds that the use of non-native and/or invasive plant species for residential landscaping results in both direct and indirect adverse effects to native plant species indigenous to the Malibu/Santa Monica Mountains area. Adverse effects from such landscaping result from the direct occupation or displacement of native plant communities by new development and associated non-native landscaping. Indirect adverse effects include offsite migration and colonization of native plant habitat by non-native/invasive plant species (which tend to outcompete native species) adjacent to new development. Use of exotic plant species for residential landscaping has already resulted in significant adverse effects to native plant communities in the Malibu/Santa Monica Mountains area. Therefore, in order to minimize adverse effects to the indigenous plant communities of the Malibu/Santa Monica Mountains area, **Special Condition Three (3)** requires that landscaping of the project site consist primarily of native plant species and that invasive plant species shall not be used.

The applicants are proposing to restore the seaward edge of the coastal bluff, which has been invaded by non-native/invasive plant species, with native vegetative cover adaptive to the coastal bluff environment. Restoration of the coastal bluff area seaward of the residence will provide a buffer zone between the proposed development and sensitive coastal bluff habitat, and the restored area will provide a transition area between ornamental landscaping proposed for the upper building pad and remaining natural vegetation of the bluff face. Therefore, the Commission finds it necessary to ensure that a coastal bluff habitat restoration plan is successfully implemented with the proposed landscaping plan as specified in **Special Condition Three (3)**. As specified by **Special Condition Three (3)**, the Landscaping and Coastal Bluff Habitat Restoration Plan shall clearly delineate the top of bluff and a coastal bluff habitat restoration buffer area which extends from 20 ft. seaward of the proposed structure to the coastal bluff edge (Exhibit 3). The Plan shall include specific measures for removal of any non-native, invasive vegetation existing in the restoration zone and revegetation of any disturbed areas in the restoration zone with adequate native and drought tolerant plant species.

All areas located within the coastal bluff habitat restoration area, measured from 20 ft. seaward of the proposed residence to the bluff edge, shall be cleared of non-native, invasive vegetation and restored entirely with appropriate native vegetation, and native plant material presently established shall be maintained without significant disturbance. The plan also requires termination of any supplemental irrigation upon successful establishment of planted stock.

**Special Condition Three (3)** also requires the applicants to submit, on an annual basis for a period of five (5) years (no later than December 31<sup>st</sup> each year), a written report, for the review and approval of the Executive Director, prepared by an environmental resource specialist, indicating the success or failure of the restoration project. At the end of a five-year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If the report indicates that the restoration project has in part, or in whole, been unsuccessful, based on the approved performance standards, the applicants 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 coastal bluff habitat restoration program shall be processed as an amendment to this Coastal Development Permit.

Finally, the Commission finds that the due to the existence of designated sensitive coastal bluff habitat on the project site, the amount and location of any new development, including structures, pools, patios, and additional landscaping on the subject site is constrained by the presence of sensitive habitat. Therefore, in order to ensure that any future structures, additions, or landscaping that may be exempt from coastal permit requirements are reviewed by the Commission for consistency with the resource protection policies of the Coastal Act, **Special Condition Seven (7)**, the future development deed restriction, has been required.

Therefore, the Commission finds that, as conditioned, the proposed project is consistent with Section 30240 of the Coastal Act.

#### D. Scenic and Visual Impacts

Section 30251 of the Coastal Act states that:

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

Section 30251 of the Coastal Act requires public views to and along the ocean and scenic coastal areas to be considered and protected when siting new development. The proposed project includes construction of a new two-story, 21 ft. high, single family residence and attached 2-car garage, with 2,470 cu. yds. of cut grading. As previously mentioned, due to the secluded nature of the site the proposed development and grading will not be significantly visible from any inland public viewing area, or scenic highway. The proposed development will

be located on a bluff top lot that ascends steeply from the sandy beach existing below the subject site. Due to the project's location above the steeply ascending bluff, and the 47 ft. setback of the project from the bluff edge, the proposed residence will be minimally visible from access points along the public beach below. The proposed development does not include any structural improvements on the bluff face or the area at the base of the bluff which would be visible from the public beach. Therefore, the Commission finds that the project will not significantly impact public coastal views and is consistent with Section 30251 of the Coastal Act.

#### E. <u>Water Quality</u>

The Commission recognizes that new development in the Santa Monica Mountains has the potential to adversely impact coastal water quality through the removal of native vegetation, increase of impervious surfaces, increase of runoff, erosion, and sedimentation, introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutant sources, as well as effluent from septic systems. 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.

As described above, the proposed project includes construction of a new single family residence with an attached garage, pool, new driveway, septic system, retaining walls, and approximately 2,470 cu. yds. of cut grading. The site is considered a bluff top development, as it involves steeply sloping terrain with soils that are susceptible to erosion.

The proposed development will result in impervious surface, which in turn decreases the infiltrative function and capacity of existing permeable land on site. The reduction in permeable space therefore leads to an increase in the volume and velocity of stormwater runoff that can be expected to leave the site. Further, pollutants commonly found in runoff associated with residential use include petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and household cleaners; soap and dirt from washing vehicles; dirt and vegetation from yard maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The discharge of these pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

Therefore, in order to find the proposed development consistent with the water and marine resource policies of the Coastal Act, the Commission finds it necessary to require the incorporation of Best Management Practices designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. Critical to the successful function of post-construction structural BMPs in removing pollutants in stormwater to the Maximum Extent Practicable (MEP), is the application of appropriate design standards for sizing BMPs. The majority of runoff is generated from small storms because most storms are small. Additionally, storm water runoff typically conveys a disproportionate amount of pollutants in the initial period that runoff is generated during a storm event. Designing BMPs for the small, more frequent storms, rather than for the large infrequent storms, results in improved BMP performance at lower cost.

The Commission finds that sizing post-construction structural BMPs to accommodate (infiltrate, filter or treat) the runoff from the 85<sup>th</sup> percentile storm runoff event, in this case, is equivalent to sizing BMPs based on the point of diminishing returns (i.e. the BMP capacity beyond which, insignificant increases in pollutants removal (and hence water quality protection) will occur, relative to the additional costs. Therefore, the Commission requires the selected post-construction structural BMPs be sized based on design criteria specified in **Special Condition Two (2)**, and finds this will ensure the proposed development will be designed to minimize adverse impacts to coastal resources, in a manner consistent with the water and marine policies of the Coastal Act.

Furthermore, interim erosion control measures implemented during construction and post construction landscaping will serve to minimize the potential for adverse impacts to water quality resulting from drainage runoff during construction and in the post-development stage. Therefore, the Commission finds that **Special Condition Three (3)** is necessary to ensure the proposed development will not adversely impact water quality or coastal resources.

Finally, the proposed development includes the installation of an on-site septic system to serve the residence. The applicants' geologic consultants performed percolation tests and evaluated the proposed septic system. The report concludes that the site is suitable for the septic system and there would be no adverse impact to the site or surrounding areas from the use of a septic system. Finally, the City of Malibu Environmental Health Department has given in-concept approval of the proposed septic system, determining that the system meets the requirements of the plumbing code. The Commission has found that conformance with the provisions of the plumbing code is protective of resources.

Therefore, the Commission finds that the proposed project, as conditioned to incorporate and maintain a drainage and polluted runoff control plan, is consistent with Section 30231 of the Coastal Act.

#### F. 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 applicants. 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).

#### G. <u>CEQA</u>

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 which 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.











First Floor Plan



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