CALIFORNIA COASTAL COMMISSION

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Filed: 49th Dav: 180th Day: Staff:

Staff Report:

Hearing Date:

October 3, 2000 November 21, 2000 April 1, 2001

ALK-LB

November 27, 2000 December 12-15, 2000

Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:

5-00-228

APPLICANTS:

Stephen and Denise Hopkins

AGENT:

Todd Skenderian, Morris Skenderian and Associates

PROJECT LOCATION:

2695 Riviera Drive, City of Laguna Beach,

County of Orange

PROJECT DESCRIPTION: Subdivision of an existing 0.65 acre blufftop parcel into two lots of 0.45 acre/19,687 square feet (Parcel 1) and 0.20 acre/8,840 square feet (Parcel 2) in the private, locked gate community of Abalone Point. The project also involves demolition of an existing quest house. No new construction is proposed at this time.

LOCAL APPROVALS RECEIVED: Laguna Beach City Council Adoption of Resolution 00.038, which conditionally approves Tentative Parcel Map 99-218 and the associated Negative Declaration.

SUMMARY OF STAFF RECOMMENDATION:

The applicant proposes to subdivide a 0.65 acre coastal blufftop parcel into two (2) residential lots within a locked gate community in Laguna Beach. No construction is proposed by the current application. Staff recommends that the Commission **DENY** the proposed subdivision.

The primary issue before the Commission is the appropriateness of approving the subdivision based on geologic hazard concerns, the preservation of scenic resources, and the disputed determination of the top of bluff and proper setback. Staff recommends that the subdivision be denied as it would create a new legal lot for a future residence that would have a cumulative adverse impact on coastal resources and would limit the ability to relocate the existing home should a bluff failure occur.

At the time of this staff report, the applicants are in disagreement with the staff recommendation. Commission staff will have a subsequent meeting with the applicant and their representatives to discuss the recommendation prior to the hearing.

SUBSTANTIVE FILE DOCUMENTS: City of Laguna Beach Certified Local Coastal Program; Coastal Development Permits P-5-3-74-3194 (Montgomery), 5-89-180 (Hopkins), 5-97-054 (Price) and 5-97-185 (Schaefer); Preliminary Geotechnical investigation for Proposed Single Family Residence, A Subdivision of 2695 Riviera Drive (A Portion of Lot 9, Tract 4655) Laguna Beach, California prepared by Geofirm (Project No. 71082-01) dated September 26, 2000; Biological Assessment (Coastal Development Permit Application No. 5-00-228) prepared by LSA Associates, Inc. dated August 3, 2000; Revised Biological Assessment (Coastal Development Permit Application No. 5-00-228) prepared by LSA Associates, Inc. dated September 14, 2000; Coastal Commission Staff Memorandum from Mark Johnsson, Senior Geologist dated October 24, 2000; Review of California Coastal Commission Comments Regarding Bluff Conditions prepared by Geofirm dated November 8, 2000; Bluff Edge, Proposed Subdivision of 2695 Riviera Drive, Laguna Beach, California letter prepared by Hetherington Engineering, Inc. dated November 8, 2000; and Coastal Commission Staff Memorandum from Mark Johnsson, Senior Geologist dated November 20, 2000

EXHIBITS

- 1. Vicinity Map
- 2. Assessor's Parcel Map
- 3. Tentative Parcel Map 99-218
- 4. CDP No. P-5-3-74-3194 (Montgomery)
- **5.** CDP No. 5-89-180 (Hopkins)
- 6. CDP No. 5-97-054 (Price)
- 7. CDP No. 5-97-185 (Schaefer)
- 8. Site Photos
- 9. Plate 3 of Preliminary Geotechnical Investigation
- 10. Memorandum from Mark Johnsson, Senior Geologist, dated October 24, 2000
- 11. Supplemental Analysis prepared by Geofirm dated November 8, 2000
- 12. Third Party Review prepared by Hetherington Engineering, Inc. dated November 8, 2000
- 13. Memorandum from Mark Johnsson, Senior Geologist, dated November 20, 2000
- 14. Letter from Renee Robin (on behalf of applicant) dated November 21, 2000

STAFF RECOMMENDATION:

I. STAFF RECOMMENDATION OF DENIAL

Staff recommends that the Commission adopt the following resolution. The motion passes only by affirmative vote of a majority of the Commissioners present.

A. Motion

I move that the Commission approve Coastal Development Permit No. 5-00-228 for the development proposed by the applicant.

B. Staff Recommendation of Denial

Staff recommends a <u>NO</u> vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

C. Resolution to Deny the Permit

The Commission hereby **DENIES** a coastal development permit for the proposed development on the ground that the development will not conform with the policies of Chapter 3 of the Coastal Act and will 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 would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

II. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Project Location, Description and Background

Project Location and Description

The proposed project is located between the first public road and the sea at 2695 Riviera Drive in the private gated community of Abalone Point, which is in an area of deferred certification (Irvine Cove) within the City of Laguna Beach, County of Orange (Exhibits 1 & 2). The subject site is located on a natural promontory known as Abalone Point, situated just seaward of Pacific Coast Highway and south of Crystal Cove State Park. The site is a sloping parcel bound to the north and west by near vertical sea cliffs (with El Morro Mobile Home Park below), to the east by an undeveloped hillside (and Pacific Coast Highway beyond), and to the south by residential development. The site is located in the R-1 Residential Low Density Zoning District.

The subject site is currently developed with a single-family residence, swimming pool, spa and guest house. The applicant proposes to subdivide the existing 0.65 acre blufftop parcel into two lots of 0.45 acre/19,687 square feet (Parcel 1) and 0.20 acre/8,840 square feet (Parcel 2) (Exhibit 3). The project also involves demolition of the existing guest house located on proposed Parcel 2. The existing single-family residence, swimming pool, and spa on Parcel 1 are to remain. No new construction is proposed by the current application. However, development on proposed Parcel 2 is anticipated to consist of a new single-family residence constructed into the slope adjacent to Riviera Drive and extending northerly toward the rear property boundary. The rear property boundary is located along a highly visible sea cliff facing Pacific Coast Highway and Crystal Cove State Park.

Prior Commission Actions at Subject Site

On July 29, 1974, the Commission approved Coastal Development Permit P-5-3-74-3194 (Montgomery), which allowed the construction of a two-story, single family dwelling, swimming pool and tennis court (Exhibit 4). The permit was conditioned so that "the sections of the building which encroach and extend over the bluff edge be relocated in accordance with the Coastal Bluff Development setback requirements as per applicant revised foundation plan." As described in the Staff Summary and Recommendations of P-5-3-74-3194, the structure was proposed as an approximately 9000 square foot, 6 bedroom, 4-car single-family residence with three wings radiating from the core of the building. As constructed, the residence foundation was sited approximately 10 feet back from the designated top of bluff. The portion of the project that is now a guest house was originally a part of the main residence. It is unknown when the guest house was detached from the main house.

On March 23, 1989, the Commission approved Coastal Development Permit 5-89-180 (Hopkins), which allowed "the construction of a new pool and spa with concrete paving, steps and required fencing, new barbecue and concrete patio with landscape, new steps at the tennis court, and a new retaining wall and drive with landscaping" (Exhibit 5). The permit was approved with the following prior to issuance special conditions: 1) submittal of revised project plans which demonstrate that new patios, brickwork, landscaping, or fencing do not encroach into 25 foot setback area; 2) submittal of a revised landscape plan which utilizes native drought resistant plant species; 3) submittal of a drainage plan which directs surface runoff from all patios and impervious surfaces to the street or storm drain and away form the bluff face; and 4) submittal of evidence from the project geologist certifying that that all recommendations have been incorporated into the project design and plans.

Prior Commission Actions in Subject Area

There are two recent permits issued for development in the surrounding residential neighborhood to the south. Each was conditioned to require conformance to the 25-foot setback from the bluff edge. The determination of bluff edge was not disputed in either of those cases.

The site of the former tennis court at the subject property was sold and subdivided to accommodate a new single-family residence. On August 12, 1997, the Commission approved Coastal Development Permit 5-97-054 (Price) at 2675 Riviera Drive, immediately south of the subject site (Exhibit 6). The permit was approved with special conditions which required the following: 1) removal of the pool from the blufftop setback area; 2) adherence to the geotechnical consultant's recommendations; 3) drainage be directed to the street to the maximum extent feasible; 4) use of only low water, drought tolerant vegetation in the blufftop setback area; and 5) recordation of an assumption of risk deed restriction. The primary issues addressed by the staff report were geologic stability and appropriate blufftop setback.

On December 10, 1997, the Commission approved Coastal Development Permit 5-97-185 (Schaefer), which allowed the demolition of an existing single family residence and construction of a new two-story, 30 foot high from existing grade, 10,795 square foot, single-family residence with an attached 957 square foot, 4 car garage on a bluff top lot at 2665 Riviera Drive, two lots south of the subject site (Exhibit 7). The permit was approved with the following special conditions: 1) recordation of an assumption of risk deed restriction; 2) conformance with geologic recommendations; 3) submittal of final plans which demonstrate that no portion of the residence extends seaward of the 25 foot blufftop setback, no portion of the patio extends seaward of the 10 foot blufftop setback, and the deepened footings for the patio have been eliminated; 4) recordation of a deed restriction stating that a) all improvements within the 25 foot blufftop setback zone are considered to be temporary, including landscaping, fences and hardened surfaces, b) no blufftop protective devices, such as caissons, shall be permitted to protect temporary structures in the setback zone, c) if threatened by bluff retreat, improvements in the bluff setback zone shall be removed or relocated inland; 5) submittal of a drainage plan showing that runoff will be directed to the street where feasible; and 6) submittal of a landscaping plan showing that only drought tolerant plant species are allowed and limiting the use of permanent irrigation. The primary issues addressed by the staff report were geologic stability and appropriate blufftop setback.

B. Geologic Hazards

Section 30253 of the Coastal Act states, in pertinent part:

New development shall:

- (I) 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 30253 of the Coastal Act requires new development to minimize risks and assure geologic stability. The primary issue addressed in the following section is the appropriateness of approving a subdivision at the subject site based on geologic hazard concerns and the required setback from the top of bluff. The Commission recognizes that there is a technical dispute regarding the bluff edge determination and proper blufftop setback at the subject site.

The Commission's staff geologist has identified the bluff edge at the inlandmost break in slope, whereas the consultant geologist has identified the bluff edge to be at the top of the sea cliff, approximately 25 feet seaward of staff's determination. The following section describes the technical analyses of both the staff geologist and the consultant geologist and provides the basis for the Commission's denial of the current subdivision.

Site Conditions and Geotechnical Evaluation

The proposed subdivision site is a blufftop parcel located seaward of Pacific Coast Highway in Laguna Beach. As shown in Exhibit 8, the subject site is located on a highly visible promontory known as Abalone Point. As described previously, the western portion of the site (Parcel 1) is currently developed with a single-family residence, swimming pool, spa, hardscape and landscaping. The north/northwestern portion the site is currently developed with a guest house, which was originally attached to the main house located on Parcel 1. The site of proposed Parcel 2 has a relief of about 30 feet and is adjacent to an approximately 110 foot high coastal bluff overlooking El Morro Mobile Home Park (Crystal Cove State Park property) to the north.

Development on a coastal bluff is inherently risky. When originally considered in 1974, the Commission required geotechnical review of the project plans due to the location of the proposed residential development at the subject site. At this time, the applicant wishes to subdivide the property and eventually construct a new single-family residence on proposed Parcel 2. To evaluate the feasibility of future residential development at the subject site, the applicants first commissioned a "Geotechnical Feasibility Review" dated March 14, 2000 prepared by Geofirm. At the request of Commission staff, the applicant provided a more detailed report entitled "Preliminary Geotechnical Investigation for Proposed Single Family Residence" dated September 26, 2000 prepared by Geofirm. The report was based on the Topographic Survey, Portion Lot 9, Tract 4655, Laguna Beach.

The scope of the investigation for this geotechnical report involved review of available geotechnical literature, maps and interpretation of paired stereographic aerial photographs; review of conceptual architectural drawings; field reconnaissance and geologic review of the property and nearby areas on land and by sea; excavation and logging of six exploratory trenches in order to determine the distribution and character of subsurface materials; preparation of two topographic-geologic cross section through the site relating existing and proposed improvements to geologic conditions and depicting geotechnical recommendations; laboratory testing of on-site soils including maximum density/optimum moisture index, Atterberg limits, and soluble sulfate.

The Preliminary Geotechnical Investigation describes the geologic setting of the site as follows:

"The property is situated at the seaward boundary of a regionally extensive marine terrace which lies at the coastal margin of the San Joaquin Hills. The marine terrace was developed as a wave cut platform, underlain by both igneous and sedimentary bedrock, which was uplifted in the geologic past by tectonic forces acting on this region of Southern California. The site and rounded hilltop of Abalone Point were once a near shore island of resistant igneous rock which protruded above this wave cut platform."

According to the geotechnical investigation, earth material at the subject property can be characterized as follows; "the site is underlain near surface and at a depth by igneous bedrock identified as intrusive andesite on published geologic maps. The contact between the andesite and Monterey Formation siltstone is well exposed within the El Morro Mobile Home Park at the base of the sea cliff below the site."

The report indicates that the project site, rounded hilltop, and adjacent sea cliff were created by marine and subaerial erosion of the ancient island and marine terrace. The report also states that the geologic conditions suggest only slight erosion of the andesite has occurred as erosion has removed the formerly juxtaposed sedimentary bedrock materials.

With regard to slope stability, the consultant states that there is no evidence of former gross instability. As stated in the report, "aerial photographs from 1931 suggest shallow slumping of siltstone in the sea bluff northeasterly of the site, although, andesite backed portions of the bluff are essentially unchanged over the past 70± years. Gross instability is considered unlikely due to the hard massive character of the igneous bedrock and a site history without significant recent erosion of these materials. Stability analysis performed herein indicates high factors of safety for arcuate failure within the andesite." The report goes on to say that erosion of the andesite has occurred in the past and will continue to occur as episodic spalling and toppling of small rock blocks controlled by joints and /or wedge failures of small to possible moderate sized rock blocks controlled by intersecting steeply dipping rock joints. Nonetheless, the consultant did not identify any geologic structures that would promote significant instability which could affect proposed development of the bluff top property.

The Preliminary Geotechnical Investigation concludes that the proposed development is considered feasible and safe from a geotechnical viewpoint provided that the recommendations of the report are followed during design, construction and maintenance of the subject property. The following specific conclusions are provided:

- The rear sea cliff is considered grossly stable; however, it may experience episodic joint controlled wedge failures along the cliff face;
- The proposed residence will not be affected by gross or surficial instability assuming proper site maintenance, appropriate foundation design and foundation setback from the adjacent bluff slope.
- Structural design for the foundation system for the proposed residence should use foundation elements embedded entirely in competent bedrock. The northerly perimeter of the house should be supported on a deepened footing system which transfers structural loads to a depth which provides adequate setback from the bluff face.

Additionally, the consultant states that there are no known active faults or projections of active faults transecting the site and indicates that groundwater is not anticipated to be a development constraint. Lastly, wave uprush is not considered a hazard at the subject site due to the presence of a substantially hard earth material (andesite) at the base of the sea cliff.

Although the geotechnical report concludes that the proposed project is feasible from a geotechnical standpoint, there remains a disagreement between Commission technical staff and the consultant geologist as to the appropriate bluff edge determination and blufftop setback as it relates to the applicant's ability to create a buildable lot. These issues will be addressed in the subsequent sections of the current staff report.

Blufftop Delineation and Recommended Setback

The Coastal Act does not specify a particular blufftop setback, but instead requires that development be sited so as to "assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site..." (Section 30253). The primary issue before the Commission is the appropriateness of approving a subdivision based on geologic hazard concerns, the preservation of scenic resources, and determining the top of bluff and the proper setback. In this case, the delineation of the blufftop and the application of a setback are central in determining if the proposed subdivision can be approved.

When approving development with a blufftop setback, the Commission typically applies the standard set forth in Section 13577 paragraph (h), of Title 14 of the California Code of Regulations to determine where the bluff edge is located. Section 13577 states, in relevant part:

"Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge."

The subject site lies within an area of deferred certification in the City of Laguna Beach. Consequently, although the City has a certified Local Coastal Program (LCP), the Coastal Act remains the standard of review. The City's LCP policies regarding the definition of "top of bluff" and the required blufftop setback will only be used as guidance in the current analysis.

Section 25.50.004 of the City of Laguna Beach Zoning Ordinance (incorporated in the certified LCP) defines an oceanfront bluff as an "oceanfront landform having a slope of forty-five degrees or greater from horizontal whose top is ten of more feet above mean sea level." In cases where an oceanfront bluff possesses an irregular or multiple slope condition, the setback will be taken from the most inland forty-five degree or greater slope. Additionally, Section 25.08.036 of the City's Zoning Ordinance defines the "top of slope" as "that point or line of initial break where the terrain changes to a downward direction."

The City's LCP generally requires a structural setback of 25 feet for residences and 10 feet for accessory structures like patios from the edge of the bluff or a setback ascertained by a stringline, whichever is more restrictive. The Commission typically requires a minimum 25-foot setback for residences from the edge of a coastal bluff. It should be noted that the existing single-family residence was approved in 1974 with a less than 25-foot setback. Based on the review of the project file, it appears as though the original structure was approved by the Commission and constructed approximately 10 feet from the edge of bluff.

The Commission also recognizes that in a developed area, where construction is generally infilling and is otherwise consistent with the Coastal Act policies, no part of the proposed new structure, including decks, should be built further seaward than a line drawn between the nearest adjacent corners of the adjacent structures (stringline setback). The site is an oddly-shaped, undulating parcel, which is not located directly adjacent to existing developed parcels. Due to the configuration of the subject parcel, the Commission's stringline concept cannot be applied in establishing a setback requirement for future development at the subject site.

The Laguna Beach Zoning Code states the following in Section 25.50.004(I): "In the event that there is no applicable stringline on adjacent oceanfront lots, the setback shall be at least twenty-five feet from the top of an oceanfront bluff." The Tentative Parcel Map submitted with the application depicts the top of slope between the 123 and 126 foot contour lines and shows the building setback line 25 feet inland of that top of slope depiction. The map indicates that future residential development (no development is proposed by the current application) will comply with the 25 foot building setback from the top of slope identified in Exhibit 3.

The applicant's geotechnical consultant supports the City's 25-foot setback requirement. As stated in their report:

"In order to conservatively allow for limited surficial instability and minor anticipated bluff retreat, new foundations should be setback a minimum horizontal distance of 25 feet inward from the bluff slope face. It is noted that this criteria also provides adequate setback form a 65± degree setback place originating at the base of the sea cliff as depicted on Plate 3." (Plate 3 is included as Exhibit 9 of the current staff report.)

The consultant's report also states that the "northerly portions of the residence may be supported by a caisson and grade beam system which attains support at a depth which

satisfies structural setback requirements." A site visit by Commission district staff on September 22, 2000 raised questions with regard to the applicant's delineation of the top of slope and the appropriate setback for future development adjacent to the northernmost edge of the property. As such, the Commission's Senior Geologist was asked to provide technical assistance.

The Commission's geologist reviewed the Topographic Survey prepared by Toal Engineering, the Preliminary Geotechnical Investigation prepared by Geofirm, and conducted a site visit on October 12, 2000. In addition, the Commission's geologist has spoken with the architects and the consultant geologist for the project. Based on his review of the project, the Commission's geologist provided the district staff analyst with a memorandum dated October 24, 2000 addressing the following issues, 1) the applicant's ability to undertake development under Section 30253 of the Coastal Act and 2) appropriate setback from the bluff edge (Exhibit 10). As described in the subsequent section, the Commission's geologist concurs with the findings of the geotechnical report that the bluff is grossly stable, but disagrees with the "top of bluff" as identified on the topographic survey.

The Commission's geologist has determined that future development at proposed Parcel 2 could be accommodated inland of the 25-foot setback identified on the exhibit attached to the October 24, 2000 memo. The exhibit defines Commission technical staff's interpretation of the edge of bluff at the northeastern portion of the proposed parcel. Staff's interpretation places the edge of bluff approximately 25 feet inland of the edge of bluff identified on the applicant's topographic survey. In coming to staff's conclusion regarding the bluff edge location, the staff geologist reviewed the survey provided by the applicant and conducted a site inspection. The staff geologist then reviewed that data against the standard set forth in Section 13577 paragraph (h), of Title 14 of the California Code of Regulations, quoted previously.

The Commission geologist does not identify a bluff edge for the westernmost portion of the subject property because the survey initially provided by the applicant does not include topographic contours on the steep lower portion of the bluff. However, the westernmost and northwestern portions of the property (Parcel 1) are not under consideration in the proposed application. That area of the property is currently developed with the primary single-family residence, swimming pool and spa approved in 1974. The existing development on Parcel 1 is to remain undisturbed.

As stated in the staff geologist's memo, the upper portion of the bluff in the eastern end of proposed Parcel 2 has been rounded off and contains a "step-like" feature. Based on staff's evaluation of the site, it is apparent that the edge of the bluff curves northward to meet the steeper lower part of the bluff and tapers out east of the property, to form a continuous slope. As such, the topography of the bluff edge changes from a steep cliff face along the northern and northwestern portions of the property to a more gradual, terraced slope (i.e. "step") along the eastern portion of the property.

The bluff edge determination provided by the Commission's geologist is based on the portion of Section 13577 quoted above which states, "In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge." As stated in the staff geologist's memo, "Clearly, a step-like feature exists in the bluff profile on this part of the parcel." (This feature is illustrated in photographs provided in Exhibit 13.) Using the definition provided in Section 13577, the topmost riser, or inlandmost break in slope, must be used to establish the bluff edge at the subject site. The 25-foot blufftop setback must then be measured from this point.

Although the Commission's geologist and the applicant's geologist agree that a 25-foot blufftop setback is appropriate, they disagree on the point at which the bluff edge should be established. The staff geologist contends that the bluff edge is located at the inlandmost break in slope (as defined above), while the consultant contends that the more seaward break in

slope is the true top of bluff. These breaks in slope are approximately 25' apart. As such, the current bluff edge delineation significantly affects the required blufftop setback and ultimately determines whether or not a buildable lot can be created at proposed Parcel 2. Therefore, in order for the Commission to resolve the question of appropriate blufftop setback, it must first determine where the bluff edge is located.

The staff geologist and consultant geologist disagree on the geologic history of the subject site and how the formation of the step-like feature at the top of the bluff affects the Commission's delineation of the bluff edge. The consultant geologist contends that the top edge of the bluff has not been rounded as a result of erosional processes *"related to the presence of the steep cliff."* As such, the consultant geologist argues that the following portion of Section 13577 does not apply to the current situation because the top edge of the bluff was in his opinion not created by erosional processes:

"In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff".

The consultant geologist argues that the erosion responsible for the reduced slope at the top of bluff occurred at an earlier geologic time than the erosion responsible for the steep cliff face below. The consultant indicates that the erosion that formed the reduced slope, or step-like feature, at the top of the bluff occurred when the Abalone Point landform was initially created. Nonetheless, there is currently a "step" feature at the subject site which forms a bluff edge inland of the steep cliff face. As stated in the Commission geologist's memo, "irregardless of the manner by which the top of the bluff was eroded and a step-like feature formed, the landward edge of the topmost riser shall be taken to be the cliff edge." The staff geologist has identified the "landward edge of the topmost riser" to be the inlandmost break in slope shown on the topographic survey. This interpretation is consistent with Section 13577 of the Code of Regulations. Therefore, the Commission will use the bluff edge identified on Exhibit 10 as the "top of bluff" for establishing the appropriate blufftop setback at the subject site.

The Commission's geologist has recommended that future development be set back 25 feet from the bluff edge as shown in the exhibit attached to the October 24, 2000 memo (Exhibit 10). As stated in the staff memo, the recommendation for the 25-foot setback is based in part on "the possibility that wedge failures, such as those exposed on the bluff below the site, could result in sudden collapse of part of the bluff even in the relatively strong rock underlying the site." The staff geologist acknowledges that it could be argued that a reduced setback could assure geologic stability in this area given the strength of the bedrock underlying the site. However, a less than 25-foot setback would be inconsistent with past Commission actions in the subject area [5-97-084 (Price) and 5-97-185 (Schaefer)] and the City's certified LCP, used as guidance in the subject area. Consequently, the Commission finds that a 25-foot setback from the inlandmost break in slope is required at the subject site to ensure geologic stability and maintain consistency with past Commission actions in the area. (The Commission notes that the staff geologist's recommendations address only geologic stability issues and there are other reasons, such as protection of visual resources, to impose a specific blufftop setback. Scenic resources will be discussed in Section C of the current staff report.)

The applicant submitted supplemental materials on November 8, 2000 to primarily respond to the top of bluff issue discussed by the Commission's staff geologist in the October 24, 2000 memo. The materials included a revised survey, an analysis by the consultant geologist, Geofirm, and an analysis prepared by an third party geologist, Hetherington Engineers.

The revised survey now includes extended topography of the bluff face. According to the applicant's agent, the additional topography is intended to "demonstrate the distinct difference

between the plane of the bluff face and the top of bluff as defined in the Geofirm report." The geological response by Geofirm is intended to respond to the Commission staff geologist's memo and also provides photos to "further clarify the top of bluff issue." The agent also states that the third party analysis "provides conclusive and supporting documentation for Geofirm's interpretation of the blufftop." In addition, the applicant's attorney submitted a letter dated November 21, 2000, summarizing the technical disagreement and the applicant's position on the proposed project (Exhibit 14).

The supplemental analysis by Geofirm is included as Exhibit 11. In it, the consultant geologist attempts to refute the analysis by the Commission's staff geologist and provides further discussion regarding geomorphology, geologic history and geologic definitions. The analysis also provides further explanation of the consultant's interpretation of the "technically correct bluff top" based on the time in which the landform was created. Photos are provided to illustrate that interpretation. The Geofirm analysis also discusses slope stability and concludes that the "recommended 25 feet structural setback form the sea cliff face as defined by Geofirm is considered conservative, safe, and geotechnically acceptable. Alternatively, if Mr. Johnsson's bluff edge location is utilized at the northeasterly portion of the property, no setback is geotechnically necessary in this area."

The review by Hetherington Engineering, Inc. dated November 8, 2000 provides concurrence with the consultant geologist's interpretation of the bluff edge (Exhibit 12). The review provides the following reasons for their conclusions:

- "1) The rounded ground above the bluff edge is not the result of erosional processes related to the presence of the steep cliff but simply a part of the adjacent rounded hilltop.
- 2) No step-like feature is present. A riser is defined as the upright part between the horizontal parts of steps. Since the area above the bluff edge is rounded, no risers or horizontal steps exist."

The supplemental information provided by the applicant's consultants did not affect any of the views previously stated by the Commission's geologist. On November 20, 2000, the staff geologist provided a subsequent memo responding to the applicant's most recent submittals (Exhibit 13). The staff geologist provides a discussion of the revised survey and bluff edge determination. As stated in the memo:

"...it is clear from the revised survey that there is a break in slope near the northern property line at the eastern end of the proposed subdivision. Although I do not dispute that the slope increases dramatically at this point, I disagree that this represents the edge of bluff—it rather represents the top of the near vertical seacliff, but the overall coastal bluff continues to rise at a reduced slope south of this line. There is a higher break in slope, at an elevation of 137 to 141 feet (as read from the revised survey), just north of the line of trees indicated on the survey. This break in slope represents the edge of the coastal bluff, pursuant to section 13577, paragraph (h), of Title 14 of the California Code of Regulations as explained in my memorandum of 24 October."

The Commission's geologist also discusses the genetic interpretation of the blufftop topography and creates additional graphics to illustrate the points made within the memo. The photos originally submitted by the applicant have been annotated by the Commission's geologist to indicate the location of the step-like feature in the eastern portion of proposed Parcel 2. As shown in the photo attachments to Exhibit 13, the upper break in slope along this portion of the property constitutes the "top of bluff," as typically interpreted by the Commission. While the Commission's geologist does not challenge the consultant geologist's assertion that a less-than-25 foot setback from the upper bluff edge may, in the long run, prove sufficient, the

Commission has rarely allowed a setback of less than 25 feet. As stated in the staff geologist's memo of November 20, 2000,

"the Commission has generally considered a 25-foot setback to be a minimum distance that allows an adequate margin of safety given the inherent uncertainty involved in projecting geologic processes and conditions into the future.

The 25-foot blufftop setback recommended by technical staff is intended to minimize risks to life and property in an area of potential geologic hazard. The 25-foot setback is consistent with the Commission's past actions in the subject area. The setback identified in Exhibit 10 would limit the area of proposed Parcel 2 that could accommodate future residential development. The City's setback standards for the subject site would require development to be sited 20 feet from the frontage street, Riviera Drive. The remaining buildable width would be approximately 15 feet. Based on the remaining buildable square footage of the proposed lot, Parcel 2 is considered undevelopable.

In addition, the Commission cannot approve development that would necessitate the need for future protective devices. As stated in the applicant's geotechnical investigation, the "northerly portions of the residence may be supported by a caisson and grade beam system which attains support at a depth which satisfies structural setback requirements." (The specific design of the foundation system has not been provided at this time.) Consequently, the Commission cannot approve the subdivision as proposed if the new residence requires such a blufftop protective device.

As will be discussed further in the following section (Scenic Resources), the Coastal Act requires new development to minimize the alteration of natural landforms. The installation of a subterranean foundation system to support a new single-family residence at the subject site would result in substantial disturbance of the existing coastal bluff landform. If a failure were to occur along the bluff edge and the subterranean features of the new residence were exposed, the property would be unsightly. In addition, the applicant has indicated that a new single-family residence at proposed Parcel 2 would require grading of the adjacent hillside. The alteration of the hillside would result in an adverse visual effect when viewed from public vantage points such as Pacific Coast Highway, Crystal Cove State Park and the beach below. As such, the proposed subdivision would be inconsistent with not only the geologic hazard policies of the Coastal Act, but also the scenic resource policies discussed in Section C below.

Lastly, if the site of the existing single-family residence at Parcel 1 experienced a bluff failure, the site of proposed Parcel 2 would be necessary to accommodate relocation of the existing residence. Parcel 1 is currently developed with an approximately 9,000 square foot residence, swimming pool, spa, landscaping and hardscape improvements. The existing development is located as close as 10 feet from the bluff edge in the northwestern portion of the site. If allowed to subdivide, the ability to relocate the existing structure and associated improvements would be removed.

For the reasons stated above, the Commission finds that the current subdivision will result in adverse impacts to geologic stability and is inconsistent with Section 30253 of the Coastal Act, which requires that risks be minimized and geologic stability be assured.

C. Scenic Resources

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

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of

surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas...

The proposed project includes the subdivision of a 0.65 acre blufftop parcel located atop an approximately 110-foot high sea cliff. As shown in Exhibit 8, the site is highly visible when traveling south along Pacific Coast Highway, from Crystal Cove State Park to the north, and from the beach below. Although no construction is proposed by the current application, the applicant intends to construct a single-family residence into the adjacent rounded hilltop at some later date. If not sited appropriately, future residential development at the newly created lot would adversely affect views to and along the coastline and would be visually incompatible with the character of the surrounding area.

The subject site is located in the private community of Abalone Point (within Irvine Cove) that is between the first public road (Pacific Coast Highway in this area) and the sea. The existing single-family residence and guest home are the northernmost structures within the community and therefore, the only structures visible on the blufftop when traveling south along this segment of Pacific Coast Highway. The proposed subdivision would create a new residential lot just northeast of the existing single family residence. (The existing guest home would be demolished.) Any new residence constructed on the new lot would be highly visible from public vantage points such as Pacific Coast Highway, Crystal Cove State Park and the beach, particularly if located too close to the existing bluff edge. Therefore, the proposed subdivision and future development of proposed Parcel 2 would result in an obvious intensification of use of the subject site.

As discussed previously, the City's certified Local Coastal Program (LCP) is not effective in Irvine Cove because the area is considered a "white hole," or an uncertified portion. However, the LCP can be used for guidance. The LCP generally requires a structural setback of 25 feet from the edge of the bluff or a setback ascertained by a stringline, whichever is more restrictive. The Commission has consistently required in Orange County that development be set back a minimum of 25 feet from the edge of a coastal bluff. The Commission has also recognized that in a developed area, where new construction is generally infilling and is otherwise consistent with the Coastal Act policies, no part of the proposed development should be built further seaward than a line drawn between the nearest adjacent corners of either decks or structures of the immediately adjacent homes. As discussed earlier, the stringline concept cannot be applied to the subject site. The site is an oddly shaped lot bounded by residential development to one side and by undeveloped open space to the other. Therefore, a stringline setback is not applicable in the current proposal.

Instead, the applicant intends to comply with the 25-foot setback. However, the proposed Tentative Parcel Map uses the consultant's outermost "top of bluff" determination discussed in Section B to establish the required setback. The Commission's technical staff has recommended a 25-foot setback from the upper break in slope, located further inland. By applying the more restrictive setback standard, future residential development would be less visible from Pacific Coast Highway and Crystal Cove State Park. The view upward from the public beach below will also be protected if future residential development is set further inland of the bluff edge than currently proposed.

Additionally, a 25-foot setback from the Commission-designated bluff edge would reduce the need for an extensive subterranean foundation system (i.e. caisson and grade beam system), as recommended by the consultant geologist. If the site is ever subject to a failure, the caissons could become exposed, resulting in significant adverse visual effects. Although a failure is not considered likely by the consultant geologist, the Commission geologist's recommendation for the 25-foot setback is based in part on "the possibility that wedge failures, such as those exposed on the bluff below the site, could result in sudden collapse of part of the bluff even in the relatively strong rock underlying the site." As such, the applicant's proposed 25-foot setback from the outermost "top of bluff" does not assure conformance with the scenic

resource policies of the Coastal Act, which require development to "be sited and designed to protect views to and along the ocean and scenic coastal areas."

The Coastal Act also requires new development to be sited to "minimize the alteration of natural land forms." The geotechnical report indicates that a new single-family residence would be constructed into the existing hillside. The existing bluff and adjacent rounded hilltop are natural landforms visible for a substantial length of Pacific Coast Highway and from various points of Crystal Cove State Park and the beach below. Any alteration of these landforms would affect the scenic views of the coastline when traveling along the highway or when viewed from the State Park and beach. As such, new development at the subject site must be appropriately sited to minimize adverse effects to existing scenic resources.

The applicant is proposing to subdivide and eventually construct a new single-family residence. This proposed intensification of use of the site will create an incremental degradation of the subject site. As currently proposed, future development at proposed Parcel 2 would require substantial disturbance of the existing landform though 1) the construction of a subterranean foundation system and 2) the alteration of the adjacent hillside to create a buildable area. Therefore, the proposed project would be inconsistent with Section 30251 of the Coastal Act.

Lastly, the proposed subdivision would be incompatible with surrounding development. The site is located in an area surrounded by an undeveloped hillside to the east and single-family residential development to the south. The proposed Parcel 2 would be located seaward of the existing hillside, seaward of Pacific Coast Highway, and adjacent to the existing single-family residence at Parcel 1. Currently, the existing single-family home is highly visible from Pacific Coast Highway, Crystal Cove State Park and the public beach. As such, the creation of a new single-family lot just north of the existing residence would result in a visible intensification of use of the site, inconsistent with the surrounding undeveloped area. However, a greater blufftop setback may serve to screen new development as viewed from Pacific Coast Highway, Crystal Cove State Park and the beach below.

Not only would geologic stability be assured with a greater setback, but also the existing scenic resources would be preserved. The Commission finds that the subdivision, as currently proposed, is not sited and designed to protect views to and along the ocean and scenic coastal areas. Additionally, the Commission finds that the proposed project would result in an intensification of use of the site, which would lead to the alteration of natural landforms and would not be visually compatible with the character of surrounding areas. Therefore, the proposed subdivision would increase adverse impacts upon visual quality in the subject area. Therefore, the Commission finds that the proposed project is inconsistent with Section 30251 of the Coastal Act.

D. <u>New Development</u>

Section 30250 of the Coastal Act states, in pertinent part:

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

Section 30250 of the Coastal Act requires that new development be located in areas able to accommodate the development without adverse impacts. The proposed development involves a two-lot subdivision of an existing 0.65-acre coastal blufftop parcel. The subject site is currently developed with a single-family residence, pool, spa and guesthouse. The proposed project involves demolition of the existing guesthouse and would allow for future construction of a new single-family home in its approximate location. (No construction is proposed by the current application.) The site is located in an area surrounded by undeveloped open space and existing single-family residential development.

The proposed subdivision would be inconsistent with the requirements of Section 30250 for a variety of reasons. The principal reason is that it would create a new legal lot in a hazardous area. In hazardous areas, the Commission typically requires that development be setback to minimize the adverse impacts of the proposed development. In this case, the existing lot already has a single family residence on it. Allowing the subdivision would create two small lots. Should a block failure occur relocating the homes on these smaller lots would be difficult. The homeowners would consequently request retaining walls, which would have adverse impacts. Denying the subdivision maintains the ability of the property owner to relocate the home if it is in danger of being destroyed through a natural disaster.

The Commission finds that the proposed development (in this case, subdivision) cannot be accommodated at the subject site due to the application of an improper blufftop setback and the resulting inconsistencies with the geologic hazard and scenic resource policies of the Coastal Act. Also, as will be discussed below, by applying the appropriate setbacks from the bluff edge and the frontage street, the applicant is not left with a buildable lot. Lastly, the site currently has a viable economic use, the existing single-family home.

Buildable Lot

The subject site is a 0.65-acre parcel located at the terminus of Riviera Drive in the private gated community of Abalone Point. Ingress and egress to the existing development is provided via an existing driveway; however, the proposed subdivision would create a new residential lot that would necessitate substantial driveway improvements. Although the applicant is not proposing construction of a new single-family residence at this time, access improvements can be anticipated in the current analysis. As a condition of local approval, the turn-around at the terminus of Riviera Drive will have to be widened to comply with the City's standards when a new residence is proposed. All other infrastructure supporting the existing residential development (sewer, water, etc.) is already established; therefore, no significant utility extensions will be required if subdivision is permitted.

While the size of proposed Parcel 1 (.45 acre/19,687) conforms to the size of nearby lots, the size of the proposed Parcel 2 (.20/8,840) is smaller than existing residential lots within the Abalone Point community. Lots within the surrounding neighborhood are typically 20,000± square feet and support homes of at least 10,000 square feet. As such, the proposed subdivision would create a lot somewhat inconsistent with the current pattern of development.

More importantly, if new development were to conform to the rear yard setback recommended by Commission staff in Sections B and C of the staff report, the newly created Parcel 2 could not accommodate a new single-family residence. The City of Laguna Beach Municipal Code requires a minimum lot size of 6,000 square feet, a minimum lot width of 75 feet and a minimum depth of 80 feet. The Municipal Code also requires a front yard setback of 20 feet at the subject site. As discussed in the Geologic Hazards and Scenic Resources Sections, any new development at Parcel 2 must be set back a minimum of 25 feet from the existing top of bluff. Applying a 25-foot setback from the edge of bluff, as recommended by Commission technical staff (identified on Exhibit 10), the remaining buildable portion of the lot would be approximately 15 feet wide. The City requires that a building footprint be no narrower than 80 feet. Therefore, the proposed subdivision is unallowable as it would create an unbuildable lot.

Alternatives

Commission staff has identified potential alternatives to the proposed subdivision. The following section provides an analysis of these alternatives for comparative purposes.

No Project

The applicant currently owns one (1) residential lot developed with a single-family home, swimming pool, spa, hardscape improvements and a guest home. As such, the property retains a viable economic use.

No changes to the existing site conditions would result from the "no project" alternative. As such, there would be no disturbance of the bluff edge or the adjacent hillside. This alternative would result in the least amount of effects to the environment. In addition, in the event that a failure occurs at the site of the existing single-family residence (Parcel 1), the site of proposed Parcel 2 could be used for relocation of the structure.

2. Subdivision / Limit Size of Residential Structure(s)

- A. Expand Existing Guest House—The applicant has briefly discussed the possibility of subdividing with the intent of remodeling the existing guest house to create a single-family residence, rather than demolishing the guest house and constructing an entirely new residence. The existing guest house is located as close as 11 feet from the bluff edge (based on both the Commission's and the consultant's blufftop determination). If this option were pursued, the Commission would still be faced with resolving the issue of appropriate blufftop setback and restricting the allowable building area of proposed Parcel 2.
- B. <u>Limit Buildable Area of Both Lots</u>—Under this alternative, the applicant would be allowed to subdivide the parcel with a condition that allows the Commission to consider the allowable building footprint on each of the two (2) residential lots. The Commission would then be able to designate appropriate setbacks from the bluff edge to ensure geologic stability and possibly reconfigure the two lots to accommodate development within designated footprint areas, consistent with the geologic hazard and scenic resource protection policies of the Coastal Act. As such, the applicant would be required to submit a new tentative parcel map for Commission review.

The existing single-family residence is approximately 9,000 square feet and sited less than 10 feet from the bluff edge in some locations. This alternative would likely reduce the allowable building area on Parcel 1 if any substantial improvements were proposed in the future. However, the Commission does not have the nexus to require a redesign of the existing single-family structure at this time.

3. As Proposed

The applicant proposes to subdivide the existing 0.65 acre blufftop parcel into two lots of 0.45 acre/19,687 square feet (Parcel 1) and 0.20 acre/8,840 square feet (Parcel 2). The project also involves demolition of the existing guest house located on proposed Parcel 2. The existing single-family residence, swimming pool, and spa on Parcel 1 are to remain. No new construction is proposed by the current application. However, development on proposed Parcel 2 is anticipated to consist of a new single-family residence constructed into the slope adjacent to Riviera Drive and extending northerly toward the rear property boundary. The current staff report has discussed the potential adverse effects of approving the subdivision as proposed. The primary issue discussed is appropriate blufftop setback as it relates to 1) geologic stability, 2) scenic and visual resources, and 3) the creation of a non-buildable lot.

The applicant is proposing to go forward with Alternative 3, which would contribute to cumulative adverse effects to the geologic stability and scenic resources of the subject site. Therefore, the Commission finds that the proposed development can not be accommodated in the subject area, poses adverse effects to coastal resources, and is inconsistent with Section 30250 of the Coastal Act.

E. <u>Local Coastal Program</u>

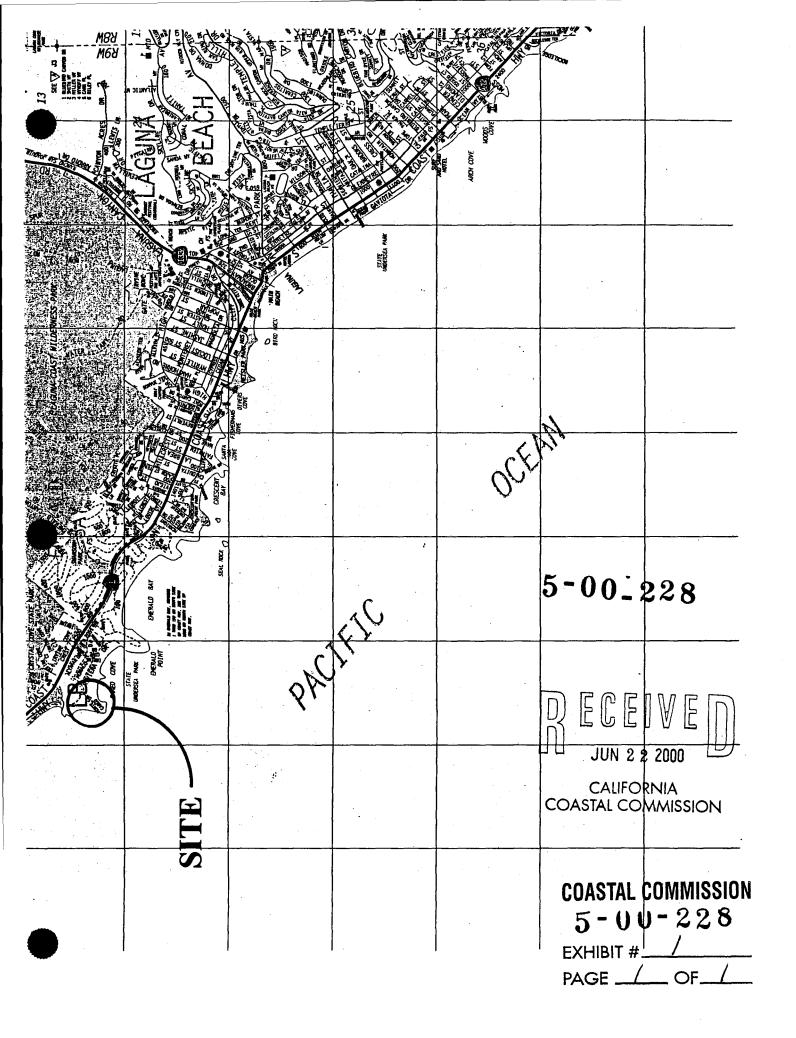
Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

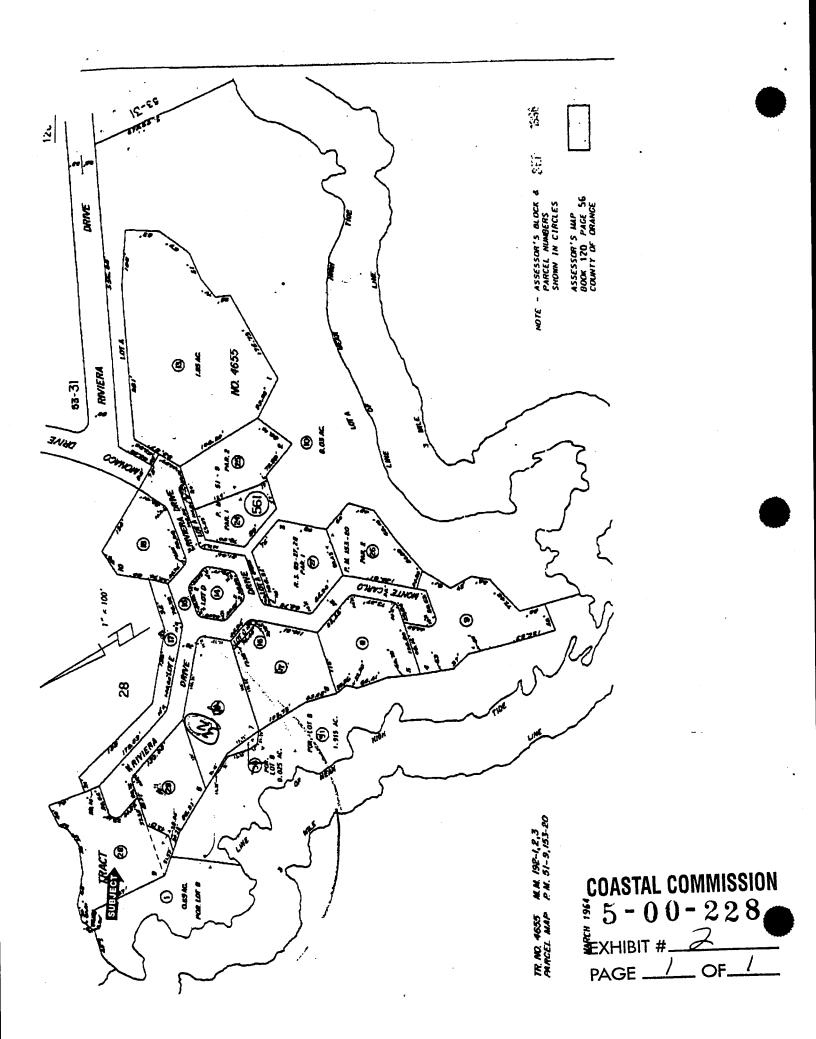
The City of Laguna Beach Local Coastal Program was certified with suggested modifications, except for four areas of deferred certification, in July 1992. In February 1993, the Commission concurred with the Executive Director's determination that the suggested modifications had been properly accepted and the City assumed permit-issuing authority at that time. The subject site is located within the Irvine Cove area of deferred certification. Certification in this area was deferred due to issues of public access arising from the locked gate nature of the community. However, as previously discussed above, the proposed development itself will not further decrease public access which is already adversely affected by the existing locked gate community. Therefore, the Commission finds that approval of this project will not prevent the City of Laguna Beach from preparing a total Local Coastal Program for the areas of deferred certification. However, the project was found inconsistent with the geologic hazard and scenic resource protection policies of the Coastal Act, which is the standard of review in the current analysis.

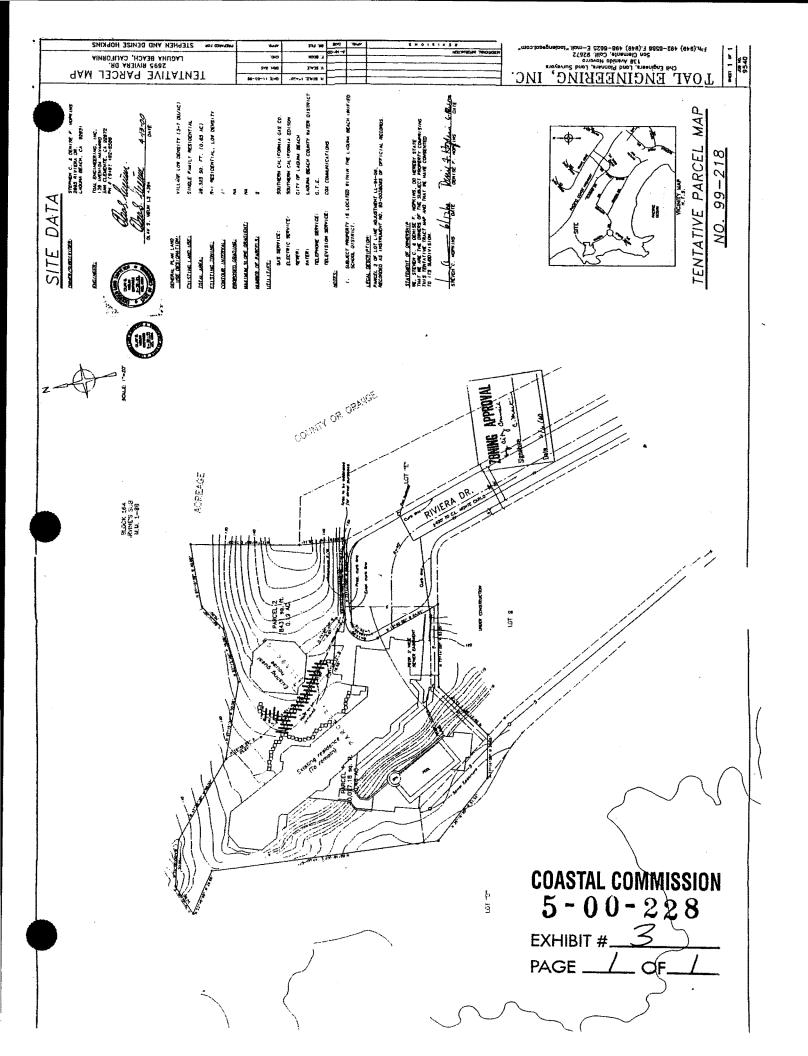
F. California Environmental Quality Act

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, 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.

As described above, the proposed project would have adverse environmental impacts. There are feasible alternatives or mitigation measures available, such as application of the 25-foot setback from the Commission's determination of the bluff edge, that would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the proposed project is not consistent with CEQA or the policies of the Coastal Act because there are feasible alternatives which would lessen significant adverse impacts which the activity would have on the environment. Therefore, the project must be denied.







CALIFORNIA COASTAL ZONE CONSERVATION COMMISSION

SOUTH COAST REGIONAL COMMISSION 655 E. OCEAN SOULEVARD, SUITE 3107 P. O. EOX 1450 LONG SEACH, CALIFORNIA 50801 (213) 436-4201 (714) 846-0648



RESOLUTION OF APPROVAL AND PERMIT

App:	lica	tion Number: P-5-3-74-3194		
Name	e of	Applicant: Robert F. Montgomery		
		708 N. West St., Anaheim, CA 92801		
Pen	mit '	Type: 🔀 Standard		
		<pre>Emergency</pre>		
Dev	elop	ment Location: 2695 Riviera Dr., Abalone Point, Laguna Beach		
		•		
Dev	elop	ment Description: Construction of a 2-story single-family		
		lling, swimming pool and tennis court.		
		•		
Com	miss	ion Resolution:		
I.	The South Coast Conservation Commission finds that the proposed development:			
	A.	Will not have a substantial adverse environmental or ecological effect.		
	В.	Is consistent with the findings and declarations set forth in Public Resources Code Sections 27001 and 27302.		
	C.	Is subject to the following other resultant statutory provisions and policies: City of Laguna Beach ordinances.		
	D.	Is consistent with the aforesaid other statu COASTAL COMMISSION and policies in that: approval in concept. 5-00-228		

E. The following language and/or drawings clarify and/or/facilitate carrying out the intent of the South Coast Regional Zone Conservation Commission:

application, site map, plot plan and approval in concept.

II.	Whereas, at a public hearing held onJuly 29, 1974			
	(date)			
	at Long Beach by a 8 to 3 vote here-			
	(location)			
	by approves the application for Permit Number P-5-3-74-3194			
	pursuant to the California Coastal Zone Conservation Act of			
	1972, subject to the following conditions imposed pursuant to			
	the Public Resources Codes Section 27403:			
	That the sections of the building which encroach and extend			
	the bluff also be releasted in eccordance with the Constal			
	over the bluff edge be relocated in accordance with the Coastal			
	Bluff Development setback requirements as per applicant revised			
	Pruti Deveropment Seconda reduriementos as per appricano revised			
foundation plan.				
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- III. Said terms and conditions shall be perpetual and bind all future owners and possessors of the property or any part thereof unless otherwise specified herein.
- IV. The grant of this permit is further made subject to the following:
 - A. That this permit shall not become effective until the attached verification of permit has been returned to the South Coast Regional Conservation Commission upon which copy all permittees have acknowledged that they have received a copy of the permit and understood its contents. Said acknowledgment should be returned within ten working days following issuance of this permit.
 - B. That said development is to be commenced on or before 360 days from effective date of issuance.
 - V. Therefore, said Permit (Standard, Exergency) No. P-5-3-74-3194 is hereby granted for the above described development only, subject to the above conditions and subject to all terms and provisions of the Resolution of Approval by the South Coast Regional Conservation Commission.
- VI. Executed at Long Beach, California on behalf of the South Coast Regional Conservation Commission on _____August 12 , 1974

COASTAL COMMISSION 5-00-228 EXHIBIT # -4

PAGE 2 OF 2

M.J. Cardenter Executive Director

2474

CALIFORNIA COASTAL COMMISSION

SOUTH COAST AREA 245 WEST BROADWAY, SUITE 380 LONG BEACH, CA 90802 (213) 590-5071 Page 1 of <u>5</u>
Permit Application No. <u>5-89-180</u>
Date <u>23 March 1989</u>

ADMINISTRATIVE PERMIT

APPLICANT: Mr. Stephen Hopkins

PROJECT DESCRIPTION: The construction of a new pool and spa with concrete paving, steps and required fencing, new barbeque and concrete patio with landscape, new steps at the tennis court, and a new retaining wall and drive with landscaping.

PROJECT LOCATION: 2695 Riviera Drive

Laguna Beach, Orange County APN 120-561-28

EXECUTIVE DIRECTOR'S DETERMINATION: The findings for this determination, and for any special conditions, appear on subsequent pages.

NOTE: P.R.C. Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

April 11-14, 1989 U.S. Grant Hotel 326 Broadway San Diego, CA

IMPORTANT - Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgement and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN OBTAIN ANY LOCAL PERMITS AND PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

COASTAL COMMISSION 5-00-228

EXHIBIT # 5
PAGE / OF 7

PETER DOUGLAS Executive Director

By: Don Schnig

Title: Coastal Planning Analyst

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 this permit is reported to the Commission. 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>Compliance</u>. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
- 6. <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.
- 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.

EXECUTIVE DIRECTOR'S DETERMINATION (continued):

The Executive Director hereby determines that the proposed development is a category of development which, pursuant to PRC Section 30624, qualifies for approval by the Executive Director through the issuance of an administrative permit. Subject to Standard and Special Conditions as attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3, and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. If located between the nearest public road and the sea, this development is in conformity with the public access and public recreation policies of Chapter 3.

FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:

The applicant proposes the construction of a pool and spa, with patios, walkways, barbecues, and landscaping. The total project will result in 1,607 sq. ft. of landscaped area, and 2.944 sq. ft. of hardscape. The proposed project is located on a coastal cliff in the North Laguna Beach community of Irvine Cove (Vicinity Map).

Section 30240 states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30251 states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character 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 30253 states in part:

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.

In numerous past actions the Commission has found that alteration of coastal bluffs, blufftops, faces, or bases by excavation or other means should be minimized; that development on a bluff face should only be allowed to stabilize slopes when there is no less environmentally damaging alternative, and when required to maintain public recreational services or to protect principal structures threatened by erosion.

COASTAL COMMISSION

5-00-228 EXHIBIT #_5 PAGE _3_OF_7 In addition, the City of Laguna Beach Certified LUP states that coastal bluffs "constitute a fragile natural resource particularly susceptible to damage and erosion". The city's LUP states that special design criteria should be applied to bluff top development projects for:

1. Protection of public health and safety.

2. Reduction of environmental degradation, such as soil and vegetative loss.

3. Reduction of public and private economic loss due to structural or property damage.

4. Preservation of the physical characteristics of bluffs, including their aesthetic and scenic qualities.

The Commission has routinely applied a 25 foot blufftop setback or a setback determined by stringline to protect fragile bluffs from landform alteration and from damage during construction, as well as to protect the structure and private property from the hazards created by erosion of the bluff edge over time. The erratic and irregular nature of the bluff line makes it difficult applying the stringline for bluff protection in this case, and the 25 foot blufftop setback is more applicable.

The existing landscaping extends well into the 25 foot blufftop setback, the present distance from the bluff edge to the landscaping varying from 8 ft. to less than 1 ft.. However, the applicant has agreed to utilize only endemic or drought resistant ornamental species for the landscaping, which will result in an improvement over the existing conditions. In addition, the new landscaping will extend no further into the blufftop setback than that which already exists.

The applicant, who wishes to extend the hardscape and pool into the designated sensitive area of the 25 ft. blufftop setback, could compound the potential for slope failure, and bluff erosion (Exhibit #1). The encroachment of the hardscape further seaward into the 25 ft. setback is inconsistent with sections 30240, 30251, and 30253 of the Coastal Act, and the City of Laguna Beach Certified LUP. Therefore, only as conditioned requiring revised plans showing no hardscape or pool development within the 25 ft. blufftop setback, landscaping plans utilizing only endemic vegetation, approval of the construction plans by the geologist, and a drainage plan which diverts all surface run off from impervious surfaces away from the bluff face to the street or a city storm drain, can the Commission find the project consistent with sections 30240, 30251, and 30253 of the Coastal Act.

SPECIAL CONDITIONS:

#1. BLUFF SETBACK

Prior to the issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Executive Director, revised plans which show that new patios, brickwork, landscaping, or fencing, does not extend into the 25 ft. setback area from the edge of the sea cliff.

#2. LANDSCAPING.

Prior to the issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Executive Director, a landscaping plan which utilizes native drought resistant plant species to minimize the need for irrigation, control erosion, and to soften the visual impact of development.

#3. DRAINAGE PLAN.

Prior to the issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Executive Director, a drainage plan which directs surface run off from all patios and impervious surfaces to the street or storm drain and away from the bluff face.

#4. GEOLOGISTS RECOMMENDATIONS. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval, a letter from the project geologist certifying that all recommendations made in the report prepared by Soil and Testing Engineers Inc., dated 10 November 1988, have been incorporated into the project design and plans for the construction of the proposed project.

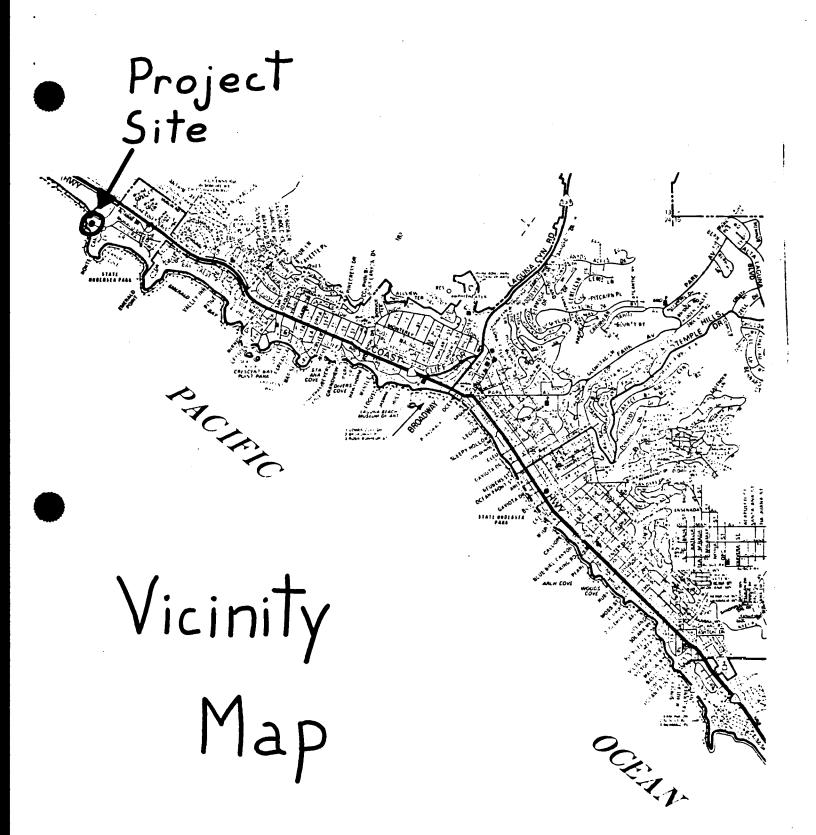
ACKNOWLEDGMENT OF PERMIT RECEIPT/ACCEPTANCE OF CONTENTS:

I/We acknowledge that I/we have received a copy of this permit and have accepted its contents including all conditions.

Applicant's Signature	Date of Signing
71A	

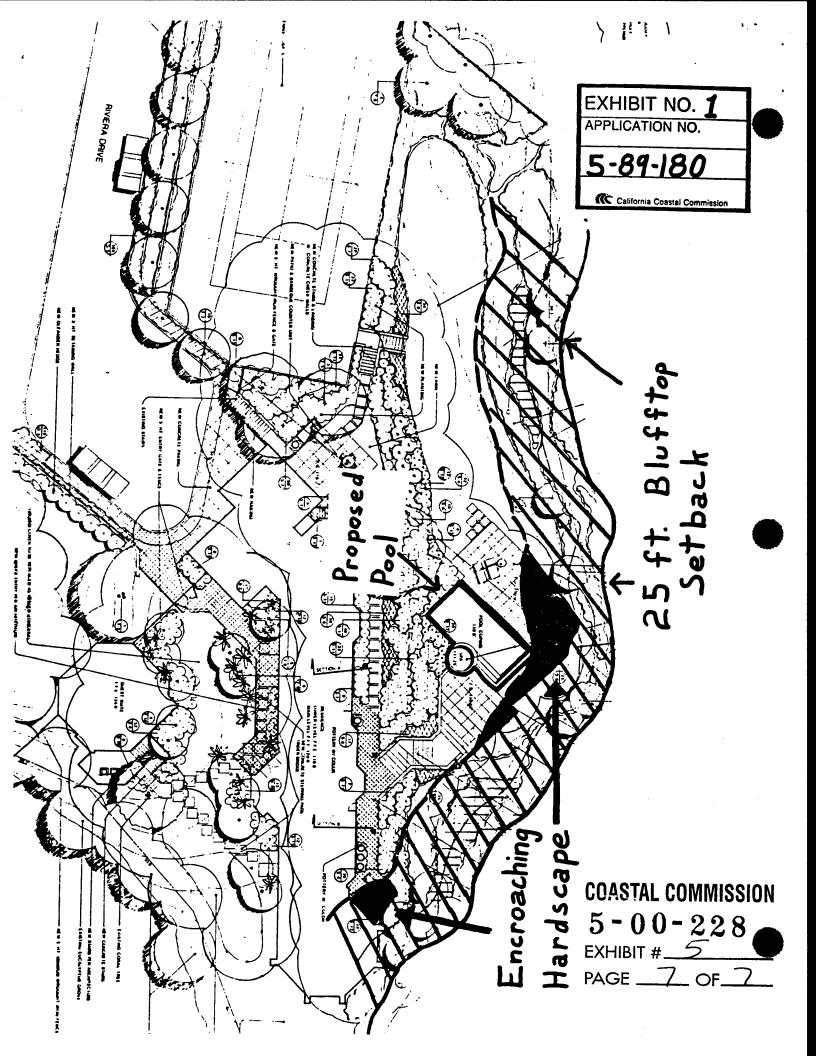
COASTAL COMMISSION 5 - 00 - 228

EXHIBIT # 5
PAGE 5 OF 7



 $\begin{array}{c} \text{COASTAL COMMISSION} \\ \textbf{5-00-}228 \end{array}$

EXHIBIT # 5
PAGE _ OF 7



CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302 (562) 590-5071 Page: 1 of 4

Date: January 9, 1998

Permit No: 5-97-054



COASTAL DEVELOPMENT PERMIT

On 12 August 1997, the California Coastal Commission granted to The Price Family Trust Coastal Development Permit 5-97-054, subject to the attached Standard and Special Conditions, for development consisting of: demolition of existing retaining wall and tennis court and construction of new 11,733 square foot, three story, 23 feet maximum height (as measured from centerline of frontage road), single family residence with an attached four car garage. Also proposed is 1286 cubic yards of cut and 573 cubic yards of fill. The net export is 713 cubic yards. More specifically described in the application file in the Commission offices.

The development is within the coastal zone in Orange County at 2675 Riviera Dr., Laguna Beach.

Issued on behalf of the California Coastal Commission on January 9, 1998.

PETER DOUGLAS Executive Director

By:

Coastal Program Analyst

ACKNOWLEDGMENT

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance . . . of any permit . . ." applies to the issuance of this permit.

IMPORTANT: THIS PERMIT IS NOT VALID UNLESS AND UNTIL A COPY OF THE PERMIT WITH THE SIGNED ACKNOWLEDGMENT HAS BEEN RETURNED TO THE COMMISSION OFFICE. 14 CAL. ADMIN. CODE SECTION 13158(a).

	CUASIAL COMMISSION 5 - 0 0 - 2 2 8
Date	Signature of Permittee EXHIBIT #

Please sign and return one copy of this form to the Comacostion office of the 4 above address.

No. 5-97-054 Page 2 of 4

STANDARD CONDITIONS

- Notice of Receipt and Acknowledgment. The permit is not valid and 1. 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 set forth in the application for permit, subject to any special conditions 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 project during its development, 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. COASTAL COMMISSION

SPECIAL CONDITIONS:

1. Revised Final Plans

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, final plans indicating that the pool has been deleted or has been relocated so that no portion extends seaward of the 25 foot bluff top setback line as depicted on the site plan prepared

No. 5-97-054 Page 3 of 4

by Robert L. Earl, AIA, Architect, dated June 17, 1996 and revised through January 21, 1997.

Development shall occur consistent with the approved plans.

2. Geotechnical Recommendation

Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, final revised grading and foundation plans. These plans shall include the signed statement of the geotechnical consultant certifying that these plans incorporate the recommendations contained in the geotechnical investigation prepared by GeoSoils, Inc. (W.O. 2974-A1-OC) for Mr.& Mrs. Westcott W. Price dated June 27, 1997, April 18, 1997 and May 4, 1995. The approved development shall be constructed in accordance with the final revised plans as approved by the Executive Director. Any deviations from said plans shall be submitted to the Executive Director for a determination as to whether the changes require an amendment to this permit. Any deviations that require an amendment shall not occur without an amendment to this permit.

3. Drainage Plans

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, a drainage plan, prepared by a licensed engineer, that identifies how drainage will be collected and directed and that demonstrates that all site drainage will be conducted off site in a non-erosive manner. To the maximum extend feasible, drainage shall be directed to the street. If a portion of the site is drained over the bluff, a written explanation of why the area drainage cannot be directed to the street shall be included with the drainage plans. The drainage plan shall be reviewed and approved by a licensed engineer.

COASTAL COMMISSION

Site drainage shall occur consistent with the approved drainage plan. T 0.0 – 2.2.8

4. Landscape Plan

EXHIBIT #_______ PAGE __3__ OF_______

Prior to issuance of the coastal development permit the applicant shall submit to the Executive Director for review and approval, a landscaping plan that shows the location and types of all plantings for the area seaward of the 25 foot setback and which indicates that only drought tolerant, low water use plants will be planted seaward of the 25 foot setback. Temporary irrigation to allow establishment of the plantings is allowed. No permanent irrigation system shall be allowed within the 25 foot setback area. The landscaping plan shall be prepared by a licensed landscape architect.

No. 5-97-054 Page 4 of 4

Landscaping shall occur consistent with the approved landscaping plan.

5. Assumption of Risk Deed Restriction

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, which shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazard from bluff retreat and erosion and the applicant assumes the liability from such hazards, and (b) the applicant unconditionally waives any claim of liability on the part of the Commission or its successors in interest for damage from such hazards and agrees to indemnify and hold harmless the Commission, its offices, agents and employees relative to the Commission's approval of the project for any damage resulting from such hazards. The document shall be recorded free of all prior liens and encumbrances which the Executive Director determines affect said interest and shall run with the land and bind all successors and assigns.

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COASTAL COMMISSION
5-00-228
EXHIBIT #

PAGE 4 OF 4

CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 ang Beach, CA 90802-4302 .62) 590-5071 Page: 1 of 4

Date: May 22, 1998 Permit No: 5-97-185



COASTAL DEVELOPMENT PERMIT

On 10 December 1997, the California Coastal Commission granted to John & Kathleen Schaefer Coastal Development Permit 5-97-185, subject to the attached Standard and Special Conditions, for development consisting of: demolition of existing single family residence and construction of a new 2 story, 30 foot high from existing grade, 10,795 square foot, single family residence with an attached 957 square foot, 4 car garage, on a bluff top lot. Also proposed are 320 cubic yards of cut and 120 cubic yards of fill. More specifically described in the application file in the Commission offices.

The development is within the coastal zone in Orange County at 2665 Riviera Drive, Laguna Beach.

Issued on behalf of the California Coastal Commission on May 22, 1998.

PETER DOUGLAS
Executive Director

By: Kin Muny - Cunu

ACKNOWLEDGMENT

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance . . . of any permit . . ." applies to the issuance of this permit.

IMPORTANT: THIS PERMIT IS NOT VALID UNLESS AND UNTIL A COPY OF THE PERMIT WITH THE SIGNED ACKNOWLEDGMENT HAS BEEN RETURNED TO THE COMMISSION OFFICE. 14 CAL. ADMIN. CODE SECTION 13158(a).

Date	Signature of Fermittee UNIVII 5510N
Please sign and return one copy of this form address.	Signature of Fermittee OMMISSION 5 - 0 0 - 2 2 8 n to the Commission office at the above EXHIBIT #
	PAGE _/ OF 4

No. 5-97-185 Page 2 of 4

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 set forth in the application for permit, subject to any special conditions 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 project during its development, 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 COASTAL COMMISSION and conditions.

PAGE _2 OF 4

SPECIAL CONDITIONS:

1. Assumption of Risk

Prior to the 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, which shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazard from landslide and soil erosion, and the applicant assumes the liability from such hazards and (b) the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and

No. 5-97-185
Page 3 of 4

hold harmless the Commission, its officers, agents and employees relative to the Commission's approval of the project for any damage due to natural hazards. 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 restrictions.

2. Conformance with Geologic Recommendations

Prior to the issuance of the coastal development permit, the appliant shall submit, for the review and approval of the Executive Director, grading, foundation and drainage plans. The approved foundation plans shall include plans for the foundation, retaining walls, subdrains and footings. These plans shall include the signed statement of the geotechnical consultant certifying that these plans incorporate the recommendations, with the exception of the deepened footings for the patio, contained in the geotechnical investigation prepared by Geofirm (Project No. 70740-00, Report No. 7-2514) and Response to Coastal Commission Comments (Project No. 70740-01, Report No. 7-2543) for Mr. John Schaefer dated June 17, 1997 and July 28, 1997.

The approved development shall be constructed in accordance with the plans approved by the Executive Director. Any deviations from said plans shall be submitted to the Executive Director for a determination as to whether the changes are substantial. Any substantial deviations shall require an amendment to this permit or a new coastal development permit.

3. Final Plans

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, final plans indicating that:

1) no portion of the proposed residence shall extend seaward of the 25 foot bluff top setback, 2) no portion of the patio development will extend seaward of the 10 foot bluff top setback, and 3) deepened footings for the patio have been eliminated.

4. Temporary Structures in Setback Area

Prior to the issuance of a coastal development permit the applicant shall submit for the review and approval of the Executive Director a deed restriction stating the following:

- a. All improvements in the 25 foot bluff top setback zone are considered to temporary, including landscaping, fences, and hardened surfaces 5 00 228
- b. no bluff protective devices, such as caissons, shall be permitted to protect temporary structures in the setback zone from the threat of bluff exeat, and of

No. 5-97-185 Page 4 of 4

c. if threatened by bluff retreat, improvements in the bluff setback zone shall be removed or relocated inland.

The document shall be recorded free and clear of all prior liens and encumbrances which the Executive Director determines affect said interest and shall run with the land and bind all successors and assigns.

5. <u>Drainage Plans</u>

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and approval, a drainage plan, prepared by a lecensed engineer, that identifies how drainage will be collected and directed and that demonstrates that all site drainage will be conducted off site in a non-erosive manner. To the maximum extent feasible, drainage shall be directed to the street. If a portion of the site is drained over the bluff, a written explanation of why the area drainage cannot be directed to the street shall be included with the drainage plans.

Site drainage shall occur consistent with the approved drainage plan.

6. Landscape Plan

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for the review and written approval, a landscape plan that shows the location and types of all plantings for the area seaward of the 25 foot setback line and which indicates that only drought tolerant, low water use plants will be planted seaward of the 25 foot setback. Temporary irrigation to allow establishment of the plantings is allowed. No permanent irrigation system shall be allowed within the 25 foot setback area. The landscaping plan shall be prepared by a licensed landscape architect.

Landscaping shall occur consistent with the approved landscaping plan.

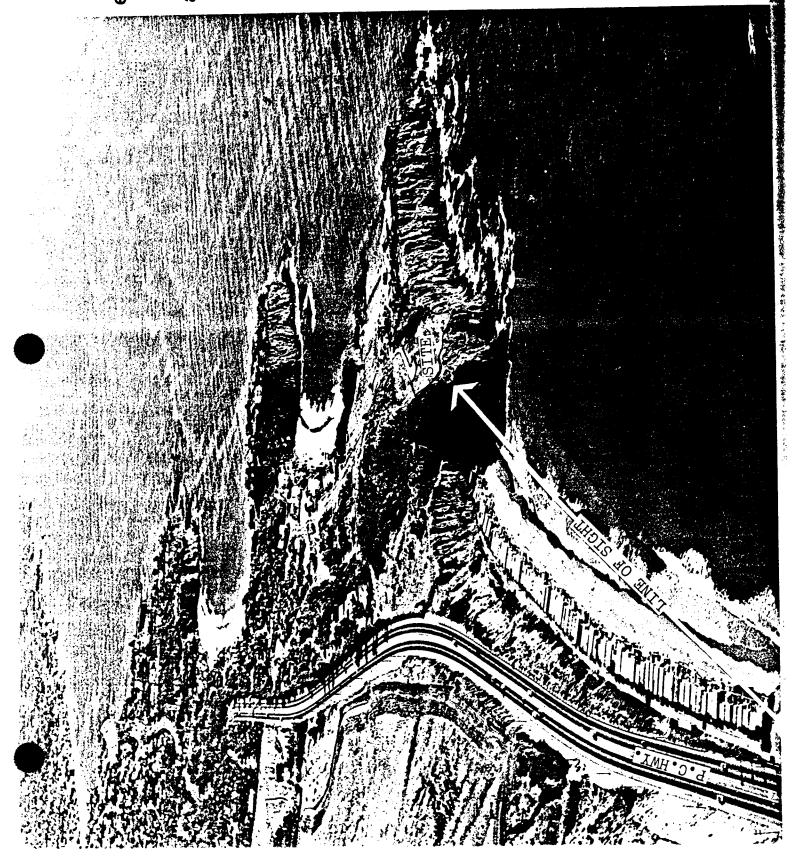
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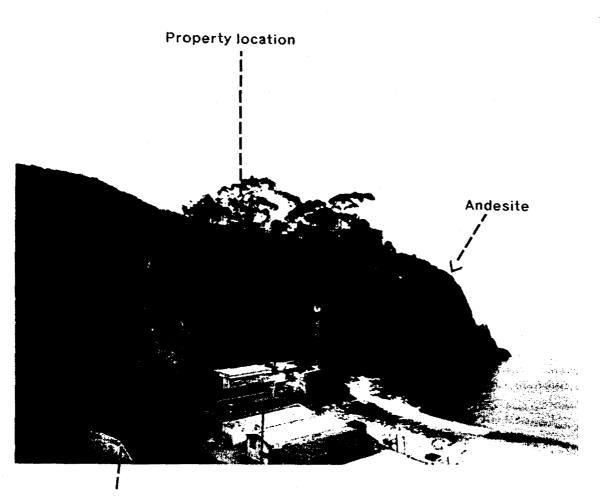
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COASTAL COMMISSION 5-00-228

COASTAL COMMISSION 5 - 00 - 228
EXHIBIT #

setter's point el morro beach abalone point



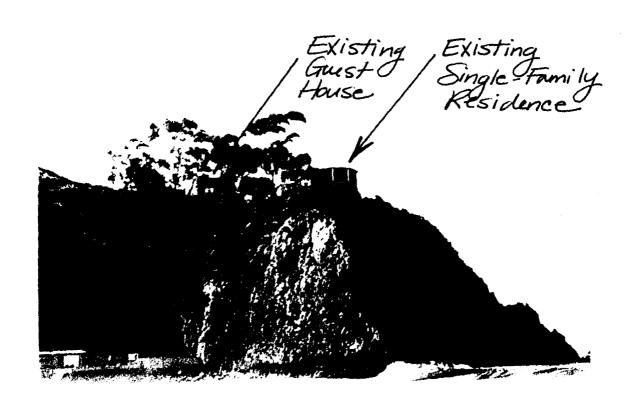


Monterey Formation Siltstone

Site Overview

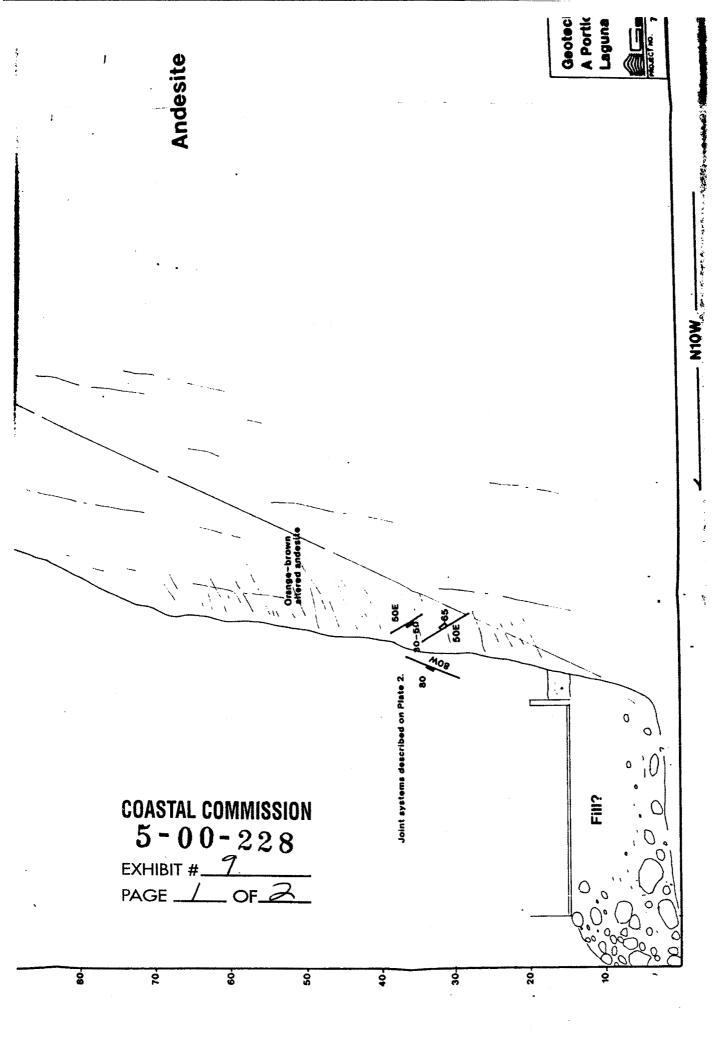
COASTAL COMMISSION

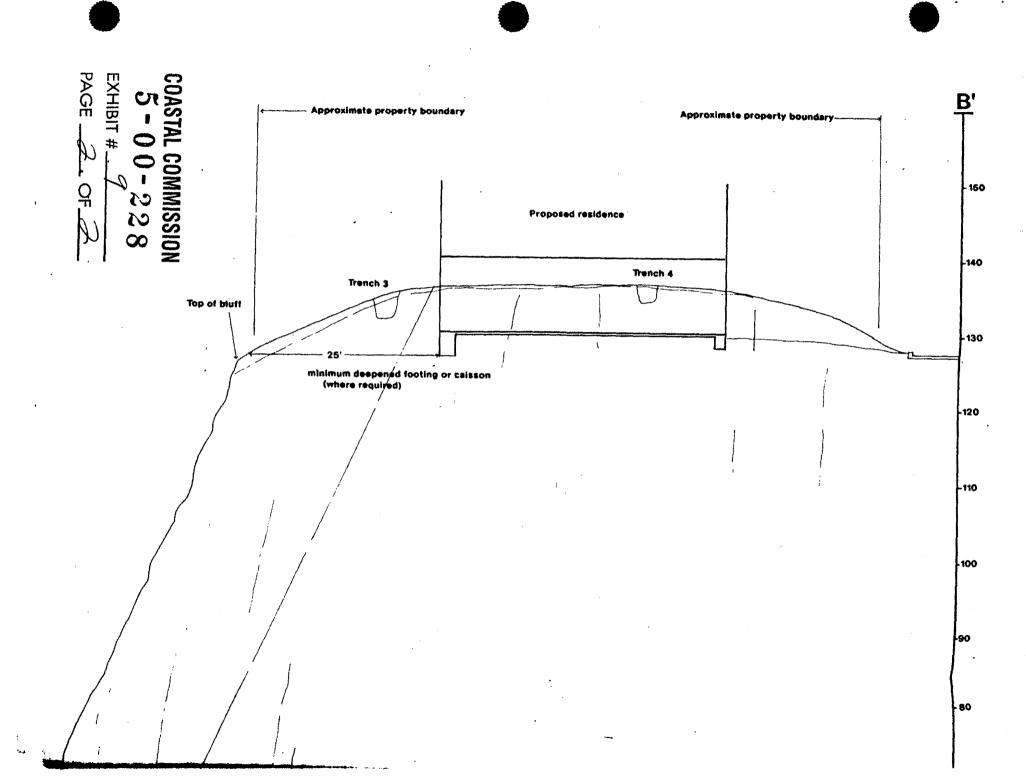
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CALIFORNIA COASTAL COMMISSION

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





24 October 2000

CALIFORNIA COASTAL COMMISSION

MEMORANDUM

To: Anne Kramer, Coastal Program Analyst

From: Mark Johnsson, Senior Geologist

Re: Hopkins subdivision

I have reviewed the following documents in reference to the proposed subdivision of the Hopkins property at 2695 Riviera Drive, Laguna Beach, California:

- 1) Toal Engineering, Inc. "Topographic Survey, Por. Lot 9, Tract 4655, Laguna Beach, California" dated 3 August 00, signed by Olav S. Meum (LS)
- 2) Geofirm geology report "Summary of geotechnical conditions and geotechnical feasibility review, proposed single family residence, Parcel 2, Irvine Cove, A portion of 2695 Riviera Drive, Laguna Beach, California" dated 14 March 2000 and signed by Michael Childs (CEG 1664) and Hannes Richter (GE 717)
- 3) Geofirm geology report "Preliminary geotechnical investigation for proposed single family residence, a subdivision of 2695 Riviera Drive (A portion of Lot 9, Tract 4655), Laguna Beach, California" dated 26 September 2000 and signed by Michael Childs (CEG 1664) and Hannes Richter (GE 717)

In addition, I have spoken with Todd and Morris Skenderian, architects for the project, and with Mike Childs of Geofirm, consultant geologist for the project. I visited the site on 12 October 2000.

The pertinent questions, from a geologic point of view, are: 1) Can the site be developed safely (consistency with section 30253 of the Coastal Act) and 2) What are appropriate setbacks from the bluff top to ensure safety?

After reviewing the above documents, I find that structures can be safely constructed on a small portion of the lot (detailed below). Given the small size of the lot, the required geologic setback, and any zoning constraints, it is not clear to **fg. ASTAL convergs** subdivision of the subject parcel leaves a legally buildable lot. I leave that analysis to

5-00-228 EXHIBIT #_/0 PAGE _/_ OF_5 you, and present here only the geologic considerations that will need to go into such an analysis.

Attached is an exhibit (exhibit 1) defining my interpretation of the edge of bluff at the eastern part of the parcel. This line differs from the top of bluff line supplied by the applicant. In reaching my conclusions about the bluff top, I have reviewed a survey provided by the applicant and have conducted a site inspection. I have reviewed those data against the standard set forth in section 13577, paragraph (h), of Title 14 of the California Code of Regulations. It provides in relevant part:

Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge.

Note that I have been unable to define a bluff top for the westernmost portion of the property because the survey provided by the applicant does not include topographic contours on the steep lower portion of the bluff, which is approximately 100 feet high, and so the upper termination of the bluff cannot be determined.

On the eastern end of the parcel, however, the upper portion of the bluff consists of a flattened profile--the top of the bluff has been rounded off and contains a step-like feature--and so the top of bluff is well-defined on the survey. To the east of the subject parcel the bluff edge becomes less distinct, and is particularly difficult to identify on the survey provided because of the wide spacing of elevation control points (circled on the exhibit). During my site visit, it was apparent that the edge of the bluff curved northward to meet the steeper lower part of the bluff in this area; that is, the step-like feature present at the eastern end of the subject property tapers out to nothing east of the property.

The edge of the bluff on the eastern end of the parcel is shown on exhibit 1. This determination is based on that portion of section 13577 of the California Code of Regulations quoted above which states "In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge." Clearly, a step-like feature exists in the bluff profile on this part of the parcel.

The applicant's geological consultant, Mr. Childs, maintains that another section of the same regulation applies. The portion of section 13577(h) on which Mr. Childs relies states:

COASTAL COMMISSION

5-00-228 EXHIBIT #_/0 PAGE _2 OF 5 ...In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff."

Mr. Childs contends that this section of the regulation defines the bluff edge only when the top edge of the cliff has been rounded as a result of erosional processes "related to the presence of the steep cliff." He argues that the upper portion of the bluff at the subject site was not rounded as a result of erosional processes related to the presence of the steep cliff. He instead argues that the erosion responsible for the reduced slope at the top of the bluff occurred earlier than the erosion responsible for the steep cliff face below. He presents in references (2) and (3) a geologic interpretation which relates the creation of this topographic feature to an earlier episode of erosion not related to the formation of the seacliff below. He then goes on to identify the bluff edge as the top of the steep cliff face below the more gently inclined "step" described above, and therefore relies on the first sentence of the part of the regulation, which states "bluff line or edge shall be defines as the upper termination of a bluff, cliff, or seacliff."

Without addressing Mr. Child's interpretation of the geologic data, I feel that its validity does not enter into the determination of bluff edge. Mr. Child's definition of the bluff edge is, in my opinion, incorrect, because nothing in the part of the regulation quoted by Mr. Childs negates that part to which I refer. In other words, irregardless of the manner by which the top of the bluff was eroded and a step-like feature formed, the landward edge of the topmost riser shall be taken to be the cliff edge.

Although the Laguna Beach LCP specifies a 25-foot setback for bluff top development, the subject site lies in an area for which, although lying within the city limits, the Coastal Act is the standard of review. The Coastal Act does not specify any particular setback, but instead requires that development be sited so as to "assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site..." (Section 30253). Due to the strength of the bedrock underlying the site and to the decrease in slope at the top of the bluff at the eastern part of the parcel, it could be argued that a setback of less than 25 feet could assure geologic stability in this area. Nevertheless, I recommend a 25 foot setback from the bluff edge shown on exhibit 1. I base this recommendation in part on the possibility that wedge failures, such as that exposed on the bluff below the site, could result in sudden collapse of part of the bluff even in the relatively strong rock underlying the site. This recommendation is consistent with the Laguna Beach LCP and past Commission decisions. I emphasize that this setback is solely on the basis of geologic stability; there may be other reasons, such as protection of visual resources, to impose a larger setback.

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EXHIBIT # 10
PAGE 3 OF 5

I hope that this evaluation is useful. Please do not hesitate to contact me if you have any further questions.

Sincerely,

Mark Johnsson Senior Geologist

Exhibit 1 Hopkins proposed subdivision Bluff edge determination



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EXHIBIT #	
PAGE	_OF <u>/4</u> _

Project No: 71082-02

Report No: 00-3562

November 8, 2000

Mr. Steve Hopkins c/o Morris Skenderian and Associates 2094 South Coast Highway Laguna Beach, California 92651

nia 92651

Review of California Coastal Commission Comments Regarding Bluff Conditions

2695 Riviera Drive

Laguna Beach, California

Reference: See Attached List

Dear Mr. Hopkins;

Subject:

This letter is presented in response to the California Coastal Commission Memorandum prepared by Mr. Mark Johnsson, dated October 24, 2000. Based upon the content of that memorandum it is my opinion that Mr. Johnsson's interpretation and depiction of the location of the bluff top is technically incorrect and has been inappropriately defined. Additionally, his assessment of possible instability affecting the bluff and bluff top areas which are landward of our recommended bluff setback is presented without adequate geologic discussion or geotechnical basis. In order to provide a more defined perspective on my disagreement with Mr. Johnsson's position, a description of site geologic and geomorphic conditions is provided herein.

Site Description

The roughly triangularly shaped bluff top parcel is located at the northerly end of Riviera Drive and consists of the upslope portions of the larger property currently identified as 2695 Riviera Drive. The parcel fronts 50± feet on the Riviera Drive cul-de-sac and extends northerly through northwesterly 100± to 120± feet to the rear property boundary located close to the bluff top. The northerly facing, 110± feet high, near vertical sea bluff descends to the shoreline and the southeasterly end of El Morro Mobile Home Park. The property consists mostly of gently sloping terrain along a subtle westerly trending ridgeline located at the base of the rounded hilltop above Abalone Point. The terrain appears to be mostly natural with the exception of a 10 to 18± feet high cutslope constructed into this ridgeline adjacent to Riviera Drive and the existing guesthouse situated on the westerly portion of the lot. Maximum relief across the site is

COASTAL COMMISSION 5-00-228

November 8, 2000

Project No: 71082-02 Report No: 00-3562

Page No: 2

30± feet. With the exception of the guesthouse and a few ancillary improvements, the property is unimproved. Several mature trees are scattered across the lot.

The sea bluff extends off site to the north from the rear property boundary. It is 110± feet high and consists of a single faceted cliff face with a generally uniform slope angle near 75 degrees, generally steepening toward the base of the cliff. The cliff is backed primarily by resistant cliff forming igneous rock. Both the cliff profile and irregularities in the cliff face are formed by rock joints and intersecting rock joints and fractures. Portions of the cliff immediately westerly of the lot are exposed to the ocean waves; however, the El Morro Mobile Home Park is located at the cliff base below most of the subdivided parcel. Most of the bluff slope is therefore classified as a former sea cliff. A rock revetment protects the mobile home park road, coaches, and the base of the sea cliff from wave erosion.

Geologic Setting

The property is situated at the seaward boundary of a regionally extensive marine terrace which lies at the coastal margin of the San Joaquin Hills. The marine terrace was developed as a wave cut platform, underlain by both igneous and sedimentary bedrock, which was uplifted in the geologic past by tectonic forces acting on this regional of Southern California. The site and rounded hilltop of Abalone Point were once a near shore island of resistant igneous rock which protruded above this wave cut platform. Marine terrace deposits (ancient beach deposits) occur along all sides of this topographic high where the wave cut platform has been preserved. A talus deposit composed of angular cobbles and boulders in a sandy matrix is exposed in the upper sea cliff on the northerly landward side of this former island and underlies a small bluffward portion of the site at the northeasterly property margin. The talus deposit is inferred to have formed at the base of an ancient sea cliff which bordered the island. Marine and subaerial erosion of this ancient island and marine terrace surface during recent geologic time has created the site, rounded hill top and adjacent sea bluff. Differential erosion of the relatively soft sedimentary versus the hard resistant igneous rock exposed in the bluff has created the northerly facing cliff face. The brecciated and baked intrusion contact between these rock units is exposed at the base of the cliff. The similarity between the contact orientation and the sea cliff morphology suggest only slight erosion of the andesite occurred as erosion removed the formerly juxtaposed sedimentary bedrock materials. The site location is depicted on the Geologic Index Map, Figure

Geomorphology

The site and immediate vicinity consists of three topographic/geomorphic features which include 1) a generally circular well rounded hilltop with an elongated westerly trending ridge line, 2) a regionally extensive marine terrace surface and 3) a 110± feet high sea bluff/sea cliff.

The rounded hill top is the remnant of the ancient near shore island which protrudes above the elevated ancient wavecut bench and present marine terrace surface. The marine terrace occurs on all sides of this feature except along the narrow westerly trending ridge line on which the

November 8, 2000

5-00-228

EXHIBIT # __//
PAGE _3_ OF_/4

Project No: 71082-02 Report No: 00-3562 Page No: 3

The marine terrace surface extends seaward from the rounded hilltop to create the headland of Abalone Point, which as well is underlain by resistant igneous bedrock, and also extends northwesterly and southeasterly of the site vicinity where it is underlain mostly by sedimentary bedrock strata. The marine terrace surface extends regionally from Newport Mesa southerly beyond Camp Pendleton near Oceanside. A remnant of the marine terrace surface encroaches onto the northeasterly property corner, where it converges with the rounded hilltop and westerly trending ridgeline. It occurs as a narrow leveled surface immediately adjacent to the bluff top. The remnant marine terrace surface widens to the northeast below the rounded hilltop where it merges with the broad marine terrace surface along the base of the San Joaquin Hills. It is noted that the marine terrace surface occurs at an elevation 10 to 15± feet lower than the elevated ridgeline which forms the site. The marine terrace surface has been completely removed by wave erosion below westerly portions of the northerly property boundary where the bluff slope directly abuts the ridgeline.

The sea bluff/sea cliff is also regionally extensive and typically defines the seaward boundary of the marine terrace surface. The sea cliff (and locally former sea cliff where currently protected from wave erosion) in nearby areas has been destroyed or modified by road construction of Coast Highway and other grading. Below the property the sea bluff consists of a northerly facing subvertical cliff face backed primarily by andesite bedrock. Below easterly portions of the property, lower portions of the cliff are backed by siltstone bedrock with somewhat flatter slope angles and the upper cliff face is backed by an ancient talus deposits perched above an elevated ancient cut bench. The talus deposit is exposed as a subvertical facet of the cliff face.

In the site vicinity the sea cliff forms a northwesterly facing crescent resulting from landward erosion behind the andesite of the relatively soft sedimentary bedrock which underlies the marine terrace surface northerly and northeasterly of the site. The northerly facing sea cliff below the rear northerly property margin was created through removal of the Monterey Formation which was formerly juxtaposed to the hard and resistant andesite. The inclination of the sea cliff is similar to the exposed intrusion contact between the andesite and Monterey Formation. The similarity of these conditions suggests little erosion of the sea cliff has occurred subsequent to removal of the adjacent sedimentary rock.

Geologic History

An outline of the geologic history is outlined below:

- 1. Deposition of middle to late Miocene Age sedimentary bedrock strata of the Monterey Formation.
- 2. Intrusion of Andesite bedrock also during Miocene times (Tan, Edgington, 1976).

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- 3. Uplift of the San Joaquin Hills during the late Pliocene and Pleistocene.
- 4. Marine erosion of the ancient elevated wave cut bench behind and initial erosion of the near shore island 122± thousand years ago (Grant et al, 1999).
- 5. Deposition of marine and nonmarine terrace deposits above the wavecut bench and erosion of the former near shore island rounded hilltop.
- 6. Uplift and erosion of the marine terrace surface and rounded hilltop resulting in creation of the adjoining sea bluff and current site conditions.

Geologic Definitions

As defined in the Glossary of Geology (Bates and Jacobson, 1987), a sea cliff is defined as "A cliff or slope produced by wave erosion, situated at the seaward edge of the coast or the landward side of the wave-cut platform, and marking the inner limit of beach erosion."

The California Coastal Commission's California Coastal Resource Guide, excerpts of which are presented on the California Coastal Commission web pages states the "Coastal bluffs are actually the seaward edges of marine terraces, shaped by ocean waves and currents, and uplifted from the ocean floor."

California Coastal Commission defines the edge of bluff as follows: "Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increased more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge."

Interpretation of Bluff Top

The top of bluff in the site vicinity occurs where the sea cliff, a younger and distinct geomorphic feature, intersects the adjoining older landforms, the marine terrace surface and/or the adjoining preexisting hillside and ridgeline. On the basis of the preceding discussion of geomorphology, geologic history, and geologic definitions, the top of bluff is correctly assigned at the intersection of the individually distinct landforms which are different in both age and genesis. This technically correct top of bluff is graphically depicted on the attached photographs as is the incorrect interpretation of Mr. Johnsson. Geomorphic features and geologic units are also labeled on the photographs. Mr. Johnsson's depiction of the bluff edge is also presented on Figure 2.

Additionally, because the sea cliff and the marine terrace surface are regionally continuous features, the top of bluff must also be a continuous feature occurring where these separate

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November 8, 2000

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landforms meet. Mr. Johnsson's interpretation and designation of the bluff top is not a continuous feature, as it terminates in the middle of the northerly facing slope of the older "rounded hilltop" above the marine terrace surface easterly of the site (Refer to Figure 2). Mr. Johnsson admits his designated bluff edge becomes difficult to identify in this area because the topographic data depicts the existing gradual uniform slope descending from the hilltop above. On this basis it is apparent that his interpretation and designation of the bluff top is incorrect.

Mr. Johnsson attempts to justify his interpretation and designation of the bluff top on the basis of the last sentence of the Coastal Commission definition, which state "In a cases where there is a step like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge." Mr. Johnsson states that the upper "bluff consists of a flattened profile - the top edge has been rounded off and contains a step like feature" and he defines the top of bluff as the top of the ridgeline descending from the rounded hilltop. The suggested step like feature he describes is in reality the remnant of the marine terrace surface, which, as well as the slope ascending to the ridgeline, predates the presence of the sea cliff by many thousands of years and is not related to the erosional processes which created the sea bluff. This portion of the Coastal Commission definition of bluff edge, as well as the second sentence, refers to bluffs which possess two distinct topographic elements, consisting of a lower steep sea cliff usually backed by bedrock, and a flatter upper bluff segment which is commonly backed by terrace deposits. The rounded or step like feature common in many sea bluffs throughout coastal California occurs as a result of differential weathering of the less resistant materials backing the upper bluff. This condition does not occur at the subject site where the bluff consists of a singularly faceted steep sea cliff backed almost entirely by bedrock and where the terrain above is also backed almost entirely by andesite bedrock. Mr. Johnsson's interpretation of this upper area as a portion of the bluff is incorrect because these areas, the remnant terrace surface, and older ridgeline are distinctly separate geomorphic features. A terrace surface is not a bluff/cliff face and a bluff/cliff face cannot be a marine terrace surface.

Slope Stability

Mr. Johnsson's conclusions regarding bluff instability and recommended slope setback requirements are presented without adequate geologic discussion and geotechnical basis. The brief comments provided are not a sufficient explanation of geologic conditions, description of controlling geologic structure and slope stability assessment necessary to support his structural setback requirement.

As described in the referenced Geofirm report (September 26, 2000) no evidence of former gross slope instability affecting the site has been detected on the basis of literature and map review, interpretation of aerial photographs, and geologic reconnaissance. Aerial photographs from 1931 suggest andesite backed portions of the bluff are essentially unchanged over the past 70± years. Review of the cliff morphology in relation to the controlling geologic structure (the intrusion contact) suggests little erosion has occurred over the past few hundred years. Gross instability is considered unlikely due to the hard massive character of the igneous bedrock and a site history without significant recent erosion of these materials. Stability analysis performed in the

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referenced report by this office indicates high factors-of-safety for arcuate failure within the andesite. Limited erosion of the andesite has occurred in the past and will continue to occur as episodic spalling and toppling of small rock blocks controlled by joints and/or wedge failures of small to possibly moderate sized rock blocks controlled by intersecting steeply dipping rock joints. No intersecting geologic structures are present which would promote significant instability involving large rock wedges or blocks which could affect proposed development of the bluff top property. On this basis the recommended 25 feet structural setback from the sea cliff face as defined by Geofirm is considered conservative, safe, and geotechnically acceptable. Alternatively, if Mr. Johnsson's bluff edge location is utilized at the northeasterly portion of the property, no setback is geotechnically necessary in this area.

Please call this office if you have any questions.

Sincerely,

ØEOFIRM.

Michael B. Childs, E.G. 1664

Engineering Geologist

Registration Expires 3-31-02

Attachments: Figure 1, Geologic Index Map

Figure 2, Coastal Commission Bluff Edge Determination

Appendix A, References Appendix B, Photographs

MBC:kaa

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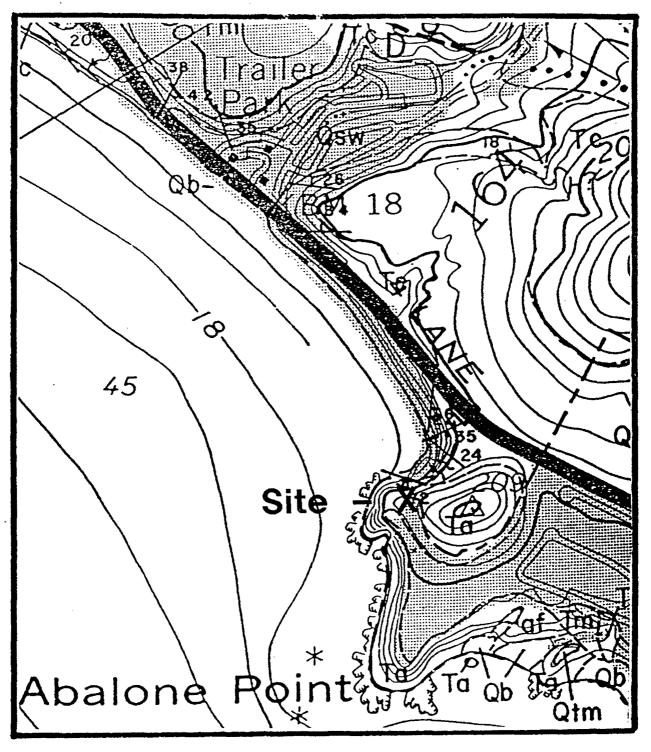


Figure 1. Geologic Index Map (Tan, Edgington, 1976)
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Scale: 1" = 500'EXHIBIT #_//
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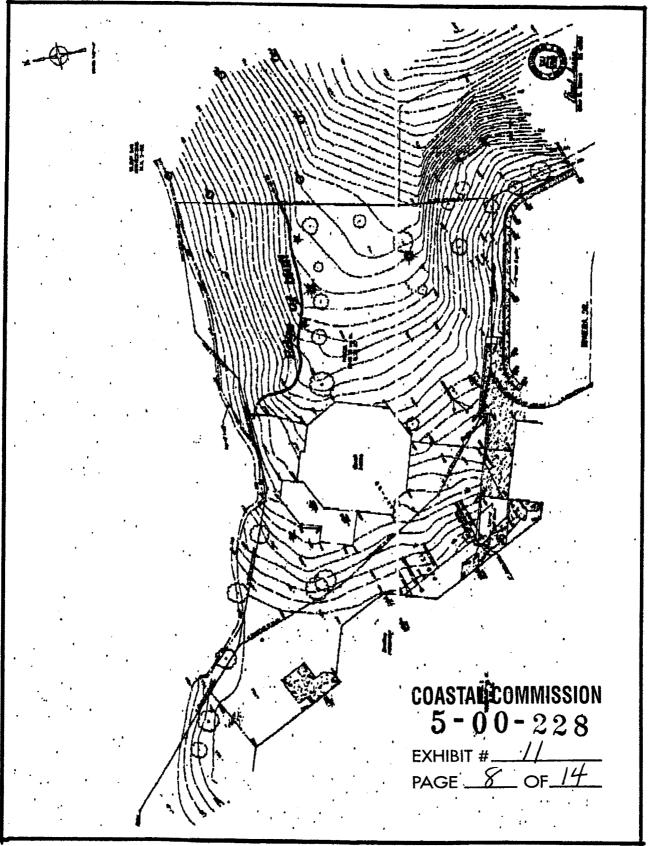


Figure 2. Coastal Commission Bluff Edge Determination

APPENDIX A

REFERENCES

- 1. Bates, Robert, Jackson, Julia, 1987, "Glossary of Geology," Alexandria, Virginia, American Geological Institute.
- 2. California Coastal Commission, 2000, "Memorandum Hopkins Subdivision," prepared by Mark Johnsson, dated October 24, 2000.
- 3. California Coastal Commission, 'http://ceres.ca.gov/ceres/calweb/coastal/bluffs.html."
- 4. California Divisions of Mines and Geology, 1976, "Geology and Engineering Geologic Aspects of the Laguna Beach Quadrangle, Orange County, California," Special Report 127.
- 5. Geofirm, 2000, "Preliminary Geotechnical Investigation For Proposed Single Family Residence, A Subdivision of Lot 2695 Riviera Drive, (A Portion of Lot 9, Tract 4655), Laguna Beach, California," dated September 26, 2000, Project No. 71082-01, Report No. 00-3526.
- 6. Grant et al, 1999, "Late Quaternary Uplift and Earthquake Potential of the San Joaquin Hills, Southern Los Angeles Basin, California," Geology, November 1999, V. 27, No. 11, P1031-1034.
- 7. Komar, Paul D. PhD, 1983, "CRC Handbook of Coastal Processes and Erosion," Boca Raton Florida, CRC Press, Inc.

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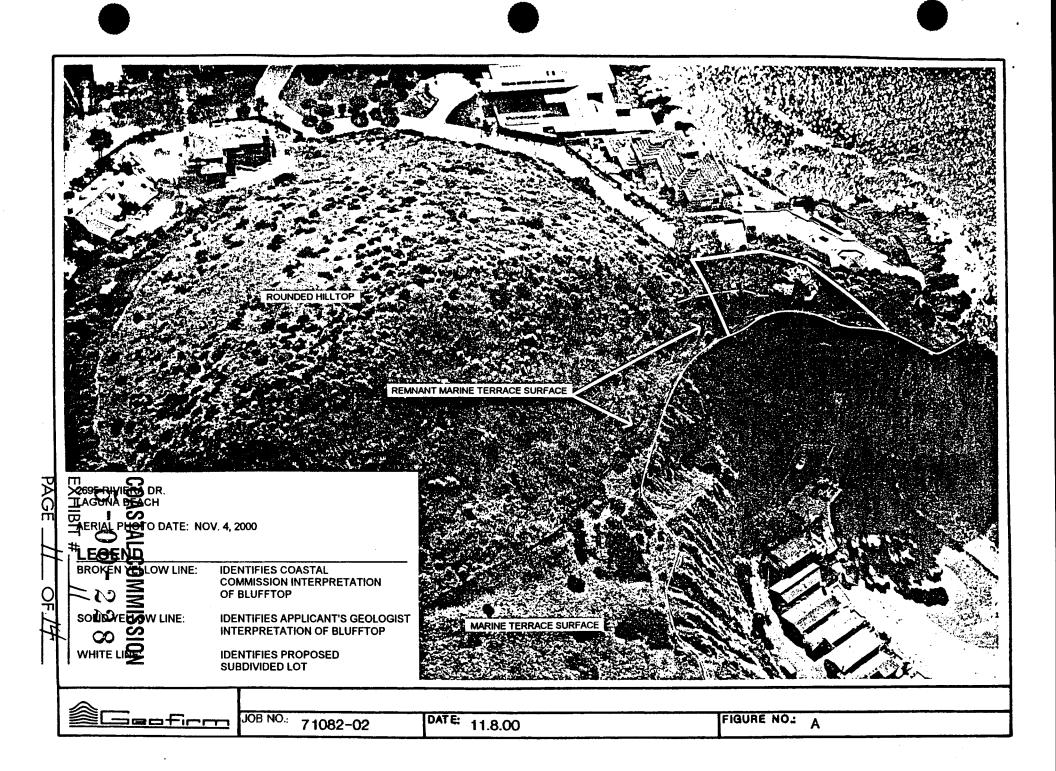
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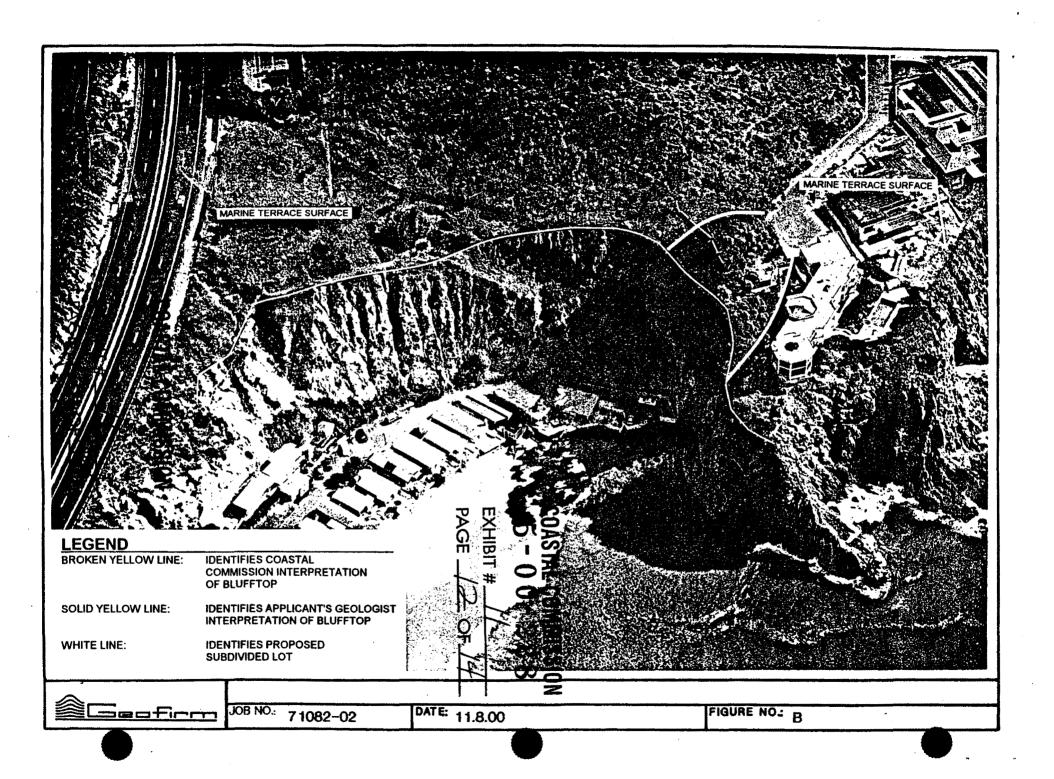
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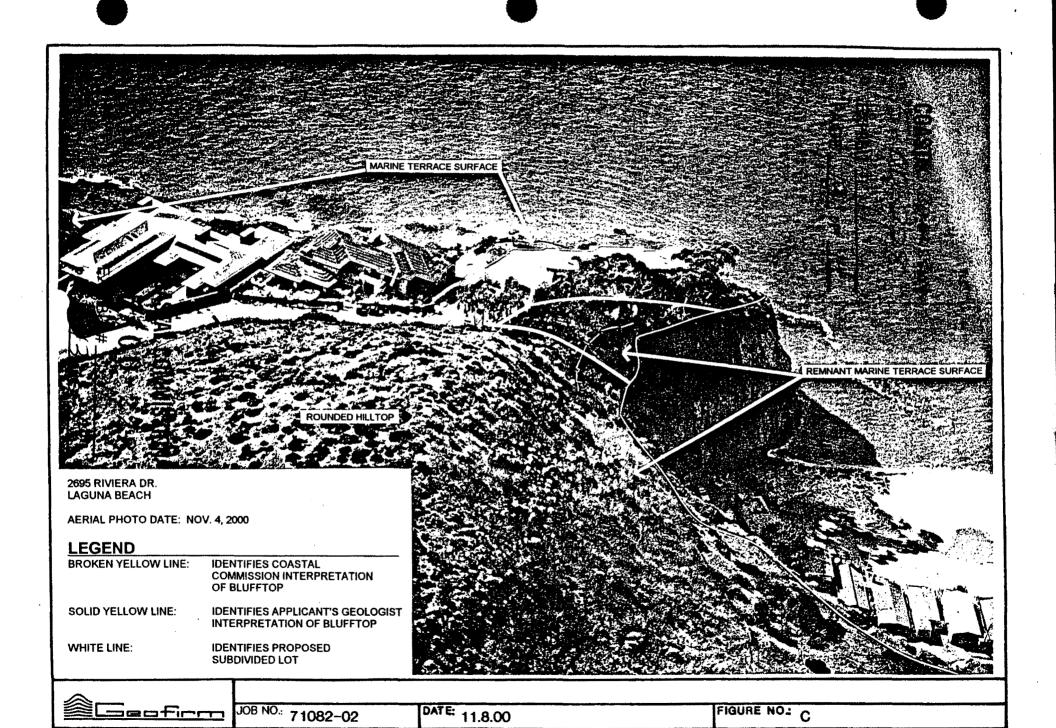
COASTAL COMMISSION

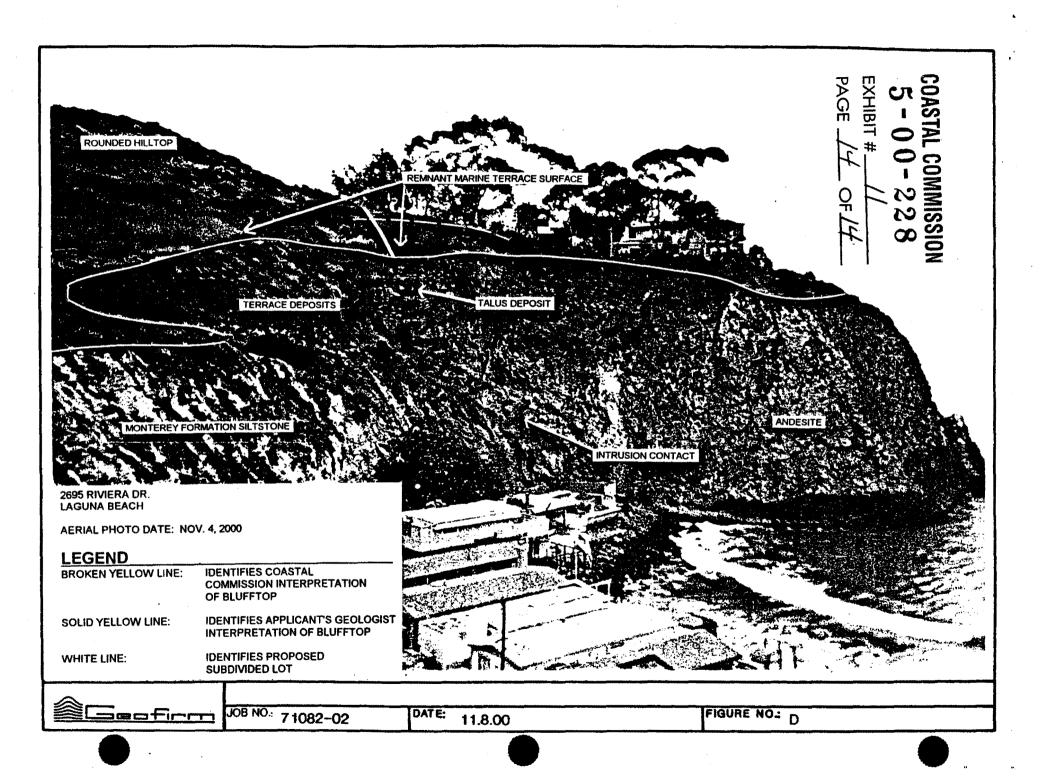
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HETHERINGTON ENGINEERING, INC.

SOIL & FOUNDATION ENGINEERING • ENGINEERING GEOLOGY • HYDROGEOLOGY

November 8, 2000 Project No. 3783.1 Log No. 7209

Morris Skenderian and Associates 2094 South Coast Highway Laguna Beach, California 92651

Attention:

Mr. Todd Skenderian

Subject:

BLUFF EDGE

Proposed Subdivision of 2695 Riviera Drive

Laguna Beach, California

References:

Attached

Gentlemen:

In response to your request we have reviewed the referenced documents and visited the subject site. The purpose of our work was to provide an independent assessment of the bluff edge at the site.

Based on our work, we conclude that the bluff edge at the site is identified as the "top of bluff" on the Geotechnical Plot Plan, Plate 1 included in Reference 2. In our opinion this line marks the upper termination of the bluff.

We are not in agreement with the assessment of Mark Johnsson, California Coastal Commission Senior Geologist (Reference 3) because of the following:

- 1) The rounded ground above the bluff edge is not the result of erosional processes related to the presence of the steep cliff but simply a part of the adjacent rounded hilltop.
- 2) No step-like feature is present. A riser is defined as the upright part between the horizontal parts of steps. Since the area above the bluff edge is rounded, no risers or horizontal steps exist.

Since neither modifying condition to the primary definition of a bluff edge applies, the bluff edge should be defined as the upper termination of the bluff as is depicted on the Geotechnical Piot Plan, Plate 1 included in Reference 2.

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BLUFF EDGE Project No. 3783.1 November 8, 2000 Page 2

If you have any questions please call.

Very truly yours,

HETHERDIGIES NEW PROPERTING, INC.

Mark D. Hetherington Civil Engineer 30488

Geotechnical Engineer 3 (expire 3/31/04)

MDH/ dkw

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REFERENCES

- 1) Toal Engineering, Inc., "Topographic Survey, Por. Lot 9, Tract 4655, Laguna Beach, California," dated 3 August 00, signed by Olav S. Meum (I.S.)
- Geofinn geologic report, "Preliminary geotechnical investigation for proposed single family residence, a subdivision of 2695 Riviera Drive (A portion of Lot 9, Tract 4658), Laguna Beach, California," dated 26 September 2000 and signed by Michael Childs (CEG 1664) and Hannes Richter (GE 717).
- 3) Letter from Mark Johnsson, California Coastal Commission Senior Geologist to Anne Kramer, California Coastal Commission Coastal Program Analyst, dated October 24, 2000.
- 4) Aerial Photos 5/22/31 (Photos 1 and 2, Flight X-8), 10/14/39 (Photos 157 and 158, Flight 5925) and 7/30/70 (Photos 27 and 28) Flight 40.
- 5) Geofirm letter, "Review of California Coastal Commission Comments Regarding Bluff Conditions, 2695 Riviera Drive, Laguna Beach, California," dated November 8, 2000.

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CALIFORNIA COASTAL COMMISSION

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



20 November 2000

GEOTECHNICAL REVIEW MEMORANDUM

To: Anne Kramer, Coastal Program Analyst

From: Mark Johnsson, Senior Geologist

Re: Hopkins proposed subdivision (Coastal Development Permit application 5-00-

228)

I have reviewed the following documents in reference to the proposed subdivision at 2695 Riviera Drive, Laguna Beach:

- 1) Toal Engineering survey, "Revised topo by Toal Eng. 11.8.00, supplement to Job #9540 (8.3.00), 2695 Riviera Dr., Abalone Point, Scale 1/8" = 1'0"," dated 8 November 2000, unsigned (credit to Olav S. Meum, LS 4384), 1 sheet.
- 2) Geofirm letter report (to Mr. Steve Hopkins) "Review of California Coastal Commission Comments Regarding Bluff Conditions, 2695 Riviera Drive, Laguna Beach, California" dated 8 November 2000 and signed by Michael B. Childs (E.G. 1664), 6 p. plus appendices.
- 3) Hetherington Engineering, Inc. letter report (to Mr. Todd Skenderian) "Bluff Edge, proposed subdivision 2695 Riviera Drive, Laguna Beach, California," dated 8 November 2000, and signed by Mark D. Hetherington (CE 30488, GE 397), 2 p.

I visited the site on 12 October 2000, at which time I met with Todd and Morris Skenderian, architects for the project, and with Mike Childs of Geofirm, consultant geologist for the project. In addition, I had a telephone conference on 19 October 2000 with Mr. Todd Skenderian and Mr. Childs, in which we discussed our differing interpretations of the bluff top configuration and the geologic history of the site.

To summarize this review, nothing in the recent submittal causes me to alter the review and recommendations laid out in my 24 October 2000 memorandum in any way. I interpret the bluff edge to lie in the position indicated on exhibit 1 of that memorandum, and recommend a 25-foot setback for development.

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Revised Survey and Bluff Edge Determination

The recent submittal includes an expanded survey of the proposed subdivision and its immediate environs (reference 1). This survey allows for a more accurate determination of the bluff edge in the western part of the proposed new parcel than did the survey in the original submission (reference 1 of my 24 October memorandum). Although the bluff edge in this area is not indicated on the revised survey, it was marked on the original survey. As I understand the applicant's position, there is no dispute regarding the location of the bluff edge in this area.

The applicant does not agree, however, with my determination of the bluff edge in the eastern part of the proposed subdivision. The revised survey submitted by the applicant provides no additional information to cause me to change my interpretation of the edge of bluff. First, it is clear from the revised survey that there is a break in slope near the northern property line at the eastern end of the proposed subdivision. Although I do not dispute that the slope increases dramatically at this point, I disagree that this represents the edge of bluff—it rather represents the top of the near vertical seacliff, but the overall coastal bluff continues to rise at a reduced slope south of this line. There is a higher break in slope, at an elevation of 137 to 141 feet (as read from the revised survey), just north of the line of trees indicated on the survey. This break in slope represents the edge of the coastal bluff, pursuant to section 13577, paragraph (h), of Title 14 of the California Code of Regulations as explained in my memorandum of 24 October.

This break in slope is not as apparent on the revised survey as the lower one, partly because it is, in fact, a less dramatic topographic feature but also, as indicated in my 24 October memorandum, because the spacing of survey control points is wide in this area. The survey control data simply are not ideally located to pick up this break in slope. Further, the contour lines provided are evenly interpolated between control points, resulting in a generalization of the topography. While this procedure is conservative, and is commonly adopted in a survey of this type, it must be stressed that the widely-spaced control points do not allow for the full delineation of more subtle topographic features. In fact most of the contour lines on the survey are dashed, which by convention indicates "approximately located" (there is no key or explanation provided with the survey). The fact that subtle features are not recorded by the survey is evident when the planar seacliff face on the survey is compared to the photographs (Exhibits 1-4) provided by the applicant: a prominent break in slope is evident in these photographs about 1/3 of the way from the top of the seacliff. This break in slope is not indicated on the survey. Finally, I note that the revised survey is not signed or stamped by a licensed surveyor, although it is attributed to Olaf S. Muem (LS 4384).

To better illustrate the topography at the site, I have drafted a cross section along the line indicated on the revised survey (exhibits 5 and 6). I have oriented the cross section so that it passes near the maximum number of control points possible TALCENTIFICATION

5-00-228 EXHIBIT #_/3 PAGE _2 OF_/4 circles), while still oriented approximately perpendicular to the bluff face. Inasmuch as the cross section does not lie exactly perpendicular to the seacliff, the apparent slope of the cliff as depicted is shallower than the actual slope. Nonetheless, it is apparent on this figure that several cross-sections can be drawn that are consistent with the survey data. Reference (1) evenly interpolated between control points, and is shown as a dashed line in exhibit 6. I have added a solid line which also is consistent with the survey data (control points), but is refined based on my observations of both the photographs provided (Exhibits 1-4) and my own observations in the field (see Exhibits 7 and 8, photographs that I took in the field). This cross section not only shows the break in slope in the seacliff, but also shows the step-like feature formed by the two breaks in slope at the top of the bluff. As explained in my memorandum of 24 October 2000, section 13577, paragraph (h), of Title 14 of the California Code of Regulations would clearly indicate that the top of bluff should be located at the most landward location of the top riser, as indicated on exhibit 6.

Genetic interpretation of bluff top topography

The applicant's geotechnical expert relies on a genetic argument for his interpretation of the bluff edge. In reference (2), the Mr. Michael Childs reiterates many of the points raised in his earlier reports (references 2 and 3 of my 24 October memorandum). He asserts that the erosion responsible for the rounded feature at the top of bluff (he does not acknowledge it to be a "step-like feature") took place at a point in the geologic history pre-dating the formation of the seacliff now present below the site. Although this is not my interpretation of the genesis of this landform, I do not feel that the genetic history of the landform is germane to the question of bluff edge determination, as set forth in the regulation cited above and discussed in my 24 October memorandum.

The photographs submitted by the applicant (Exhibits 1-4) clearly indicate the arcuate feature in the eastern portion of the parcel, as well as a similar feature in the Monterey Formation and marine terrace deposits east of the site. I have annotated these photographs to indicate the location of these features. Mr. Childs relates the feature on the subject parcel to an early episode of erosion contemporaneous with the formation of the uplifted marine terrace in the area, and pre-dating the formation of the seacliff below. I would suggest an alternative explanation: that the terrace or talus deposits still found in patches on this topographic feature (and identified in the Geofirm report of 26 September 2000—reference 3 of my 24 October memorandum) have been eroded or slumped away from the cliff at this point, resulting in the arcuate landform now found. Mr. Childs has argued to me (verbal communication,) that the presence of a residual soil on this feature (test pit 2 of the 26 September 2000 report) argues against any recent erosion. If actual residual soil is present, I would agree with this argument. The material encountered at the top of test pit 2 could, however, be colluvium (Earth materials transported down slope by soil creep or other slope processes) or even additional terrace deposits, and not residual soil. Drawing a distinction between these materials

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can be very difficult, and Mr. Childs does not claim to have found clear intact soil structures such as distinct subhorizontal soil horizons or other unequivocal evidence for residual soils. As explained above, however, the genesis of the landform is in my opinion not germane to the bluff edge determination. Accordingly, I interpret the bluff edge to be at the upper break in slope, as shown on the exhibit attached to my 24 October 2000 memorandum.

Building setbacks and section 30253

As I indicated in my 24 October 2000 memorandum, the building setback from this bluff edge must be consistent with section 30253 of the Coastal Act—that is, it must provide sufficient protection so as to "assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site..." Mr. Childs argues in reference (2) that a 25 foot setback from the top of the steep cliff face; not the upper bluff edge as described above, would be "conservative, safe, and geotechnically acceptable." The resultant setback from the top of bluff as defined above would be only approximately 4 feet (as scaled from the drawings in Geofirm's report of 26 September 2000). I concur with Mr. Child's conclusion that the slope stability calculations provided in his 26 September report indicate that an arcuate failure within the andesite is very unlikely. The presence of joint planes within the andesite, and evidence of previous wedge-type failures along those planes, raises some cause for concern, however. Attached as exhibit 9 is a stereogram showing the intersection of three lines—two joint sets (one striking N20E and dipping 30 degrees west, the other striking N50E and dipping 65 degrees east) taken from the Geofirm map (reference 3 of my 24 October memorandum) and the face of the bluff, which strikes approximately N85E and dips 65 degrees or steeper to the north, taken from the reference (1), above. The intersection of these three lines forms an unsupported wedge. At least one such failure is easily identified in the cliff face, and other joints belonging to these same sets could result in additional failures. The possibility of such failures requires a setback from the bluff edge to assure stability of any development on the bluff edge. While I do not challenge Mr. Child's assertion that a less-than-25 foot setback from the upper bluff edge may, in the long run, prove sufficient, the Commission has rarely allowed a setback of less than 25 feet. The Commission has generally considered a 25-foot setback to be a minimum distance that allows an adequate margin of safety given the inherent uncertainty involved in projecting geologic processes and conditions into the future. In addition, there may be other reasons (for example, protection of visual resources) that would suggest the imposition of the full 25-foot setback.

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Third-party review

Reference (3), an independent third-party review, provides little additional information. Although the Hetherington report agrees with the principal conclusions of the Geofirm report, no additional information is provided to explain how these conclusions are reached. Given that, the arguments presented above apply to reference (3) as well.

Conclusion

In summary, the new submittal provides little additional information regarding the determination of the bluff edge or the geotechnical conditions found at the subject site, except that the photographs provided do a good job of illustrating the arcuate step-like feature that I referred to in my 24 October 2000 memorandum. Accordingly, I recommend that the bluff edge be defined as per exhibit 1 of that memorandum, and a 25 foot setback from the bluff edge be imposed on any future development. This recommendation is consistent with the Laguna Beach LCP and past Commission decisions. Given front and side-yard setbacks, it is not at all clear to me that this leaves sufficient buildable space to allow the subdivision.

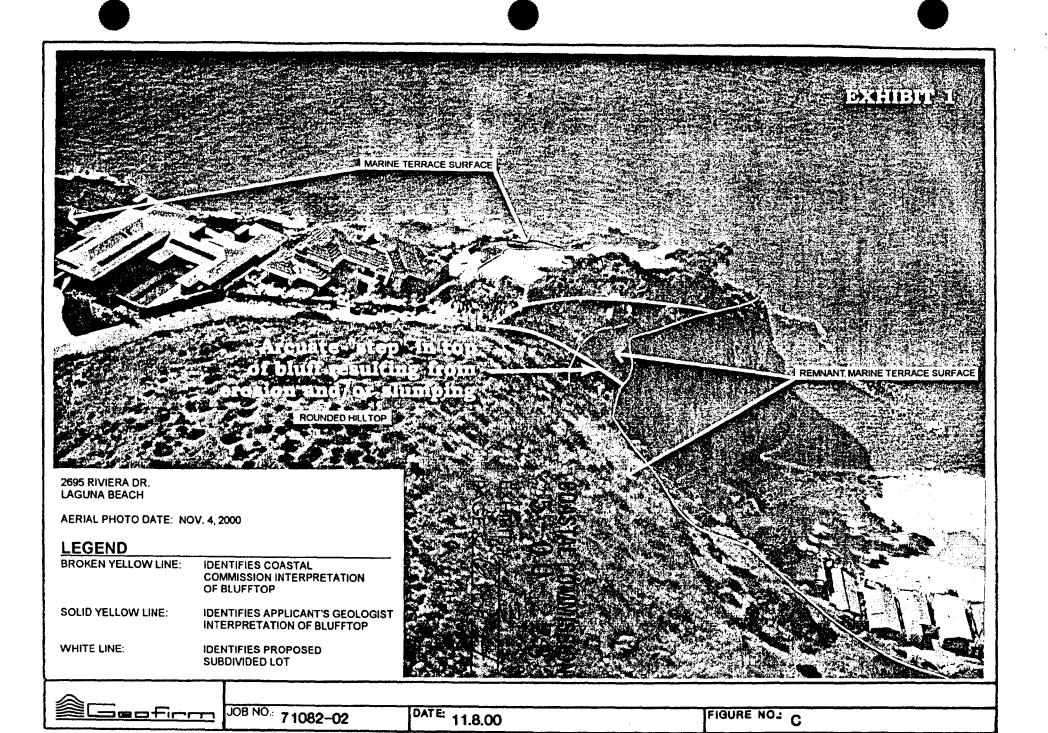
I hope that this information is useful in formulating your recommendation. Please do not hesitate to contact me if you have further questions.

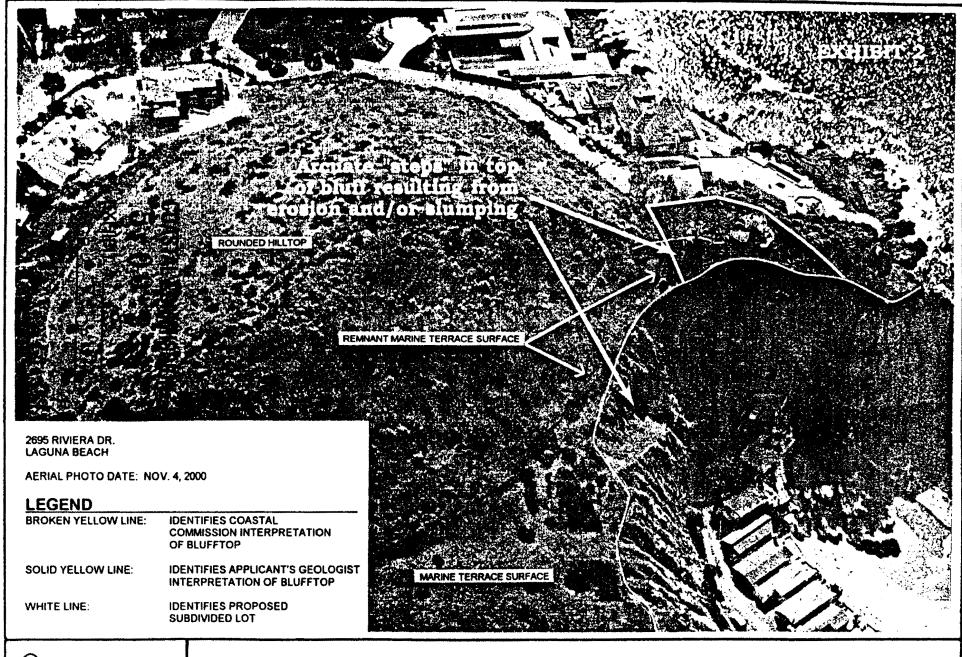
Sincerely,

Mark J. Johnsson Senior Geologist

COASTAL COMMISSION 5-00-228

EXHIBIT # 13



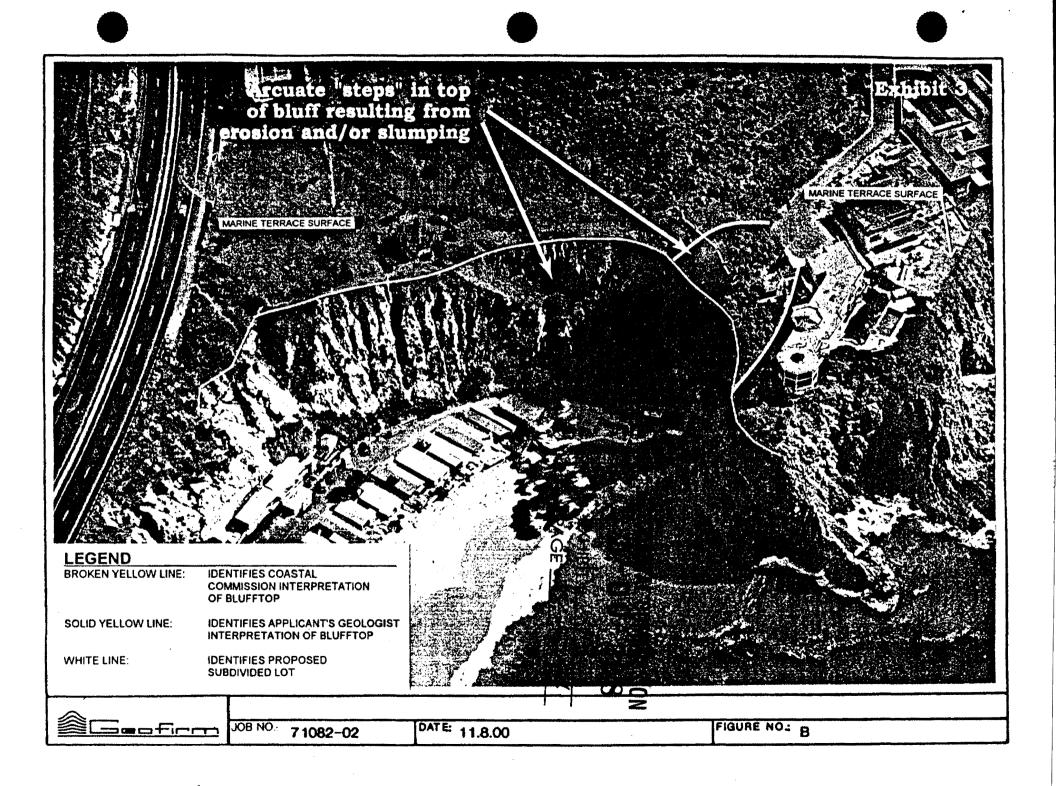


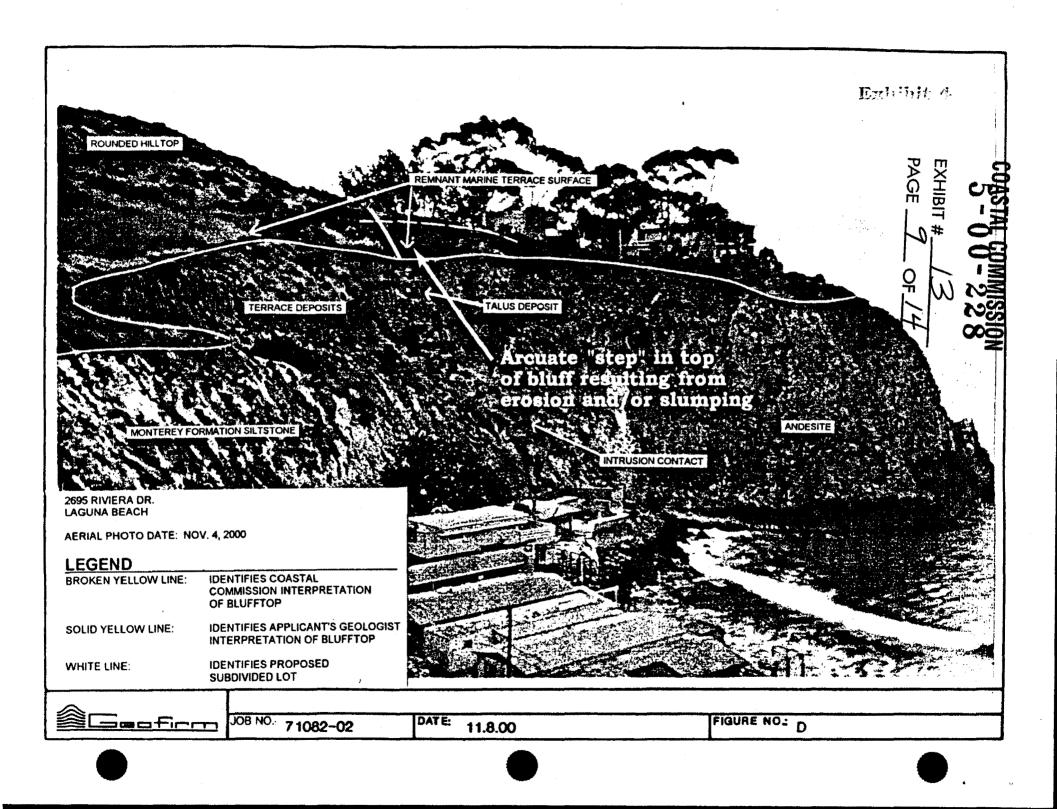
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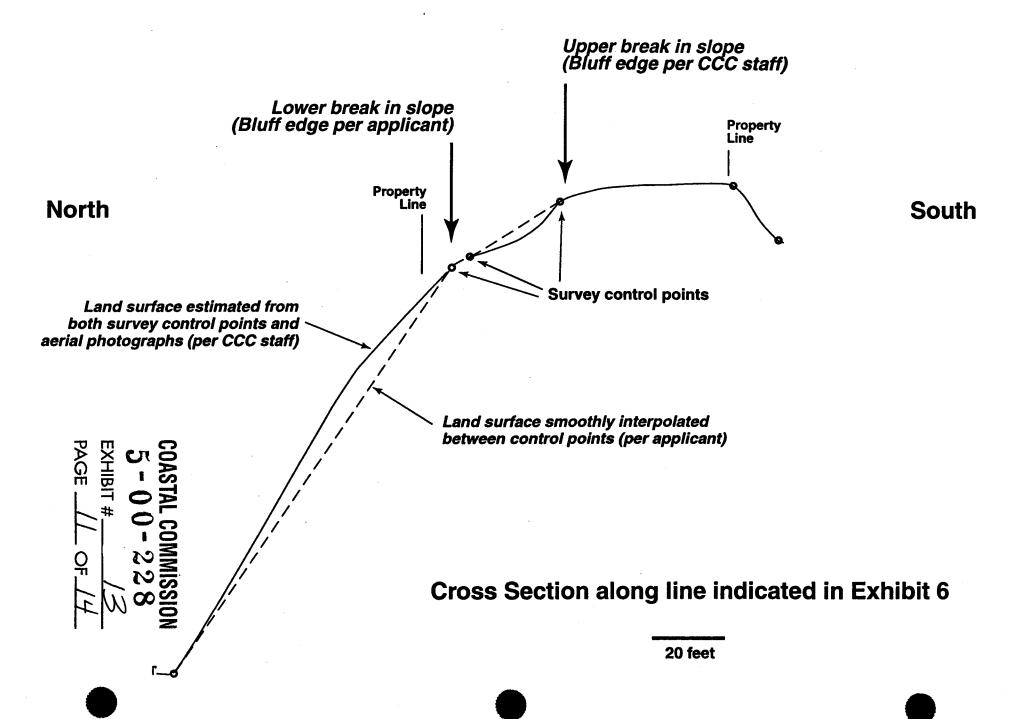
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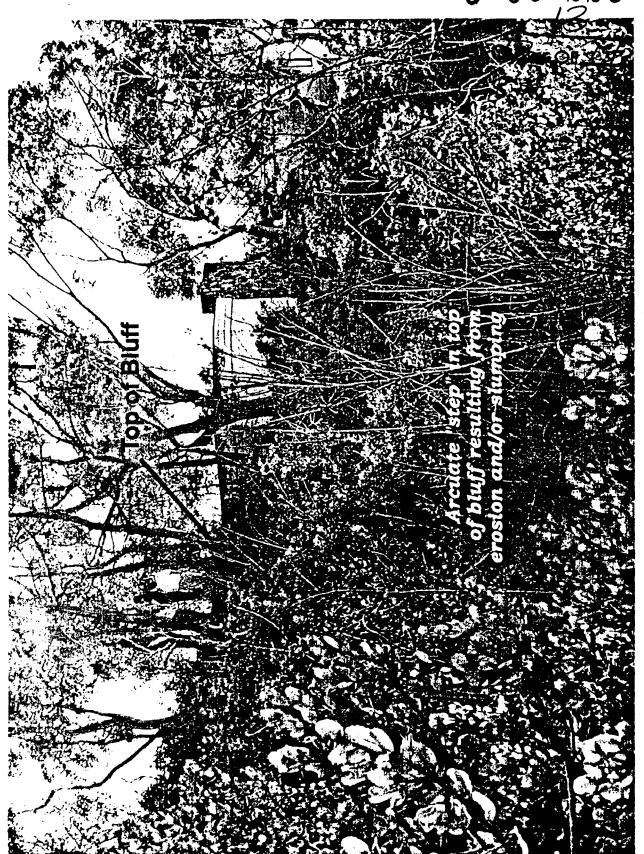
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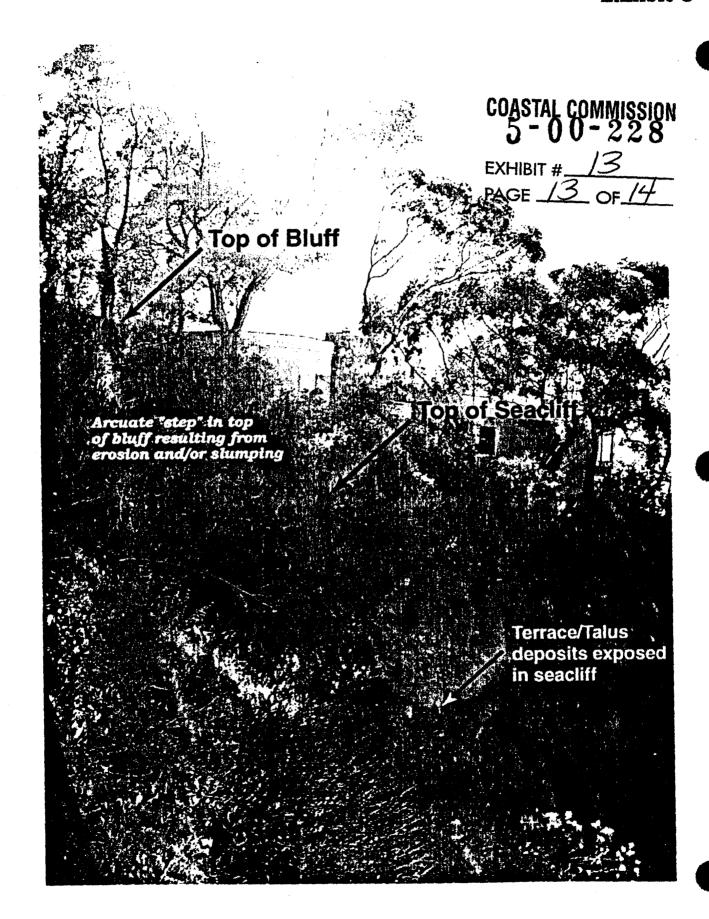


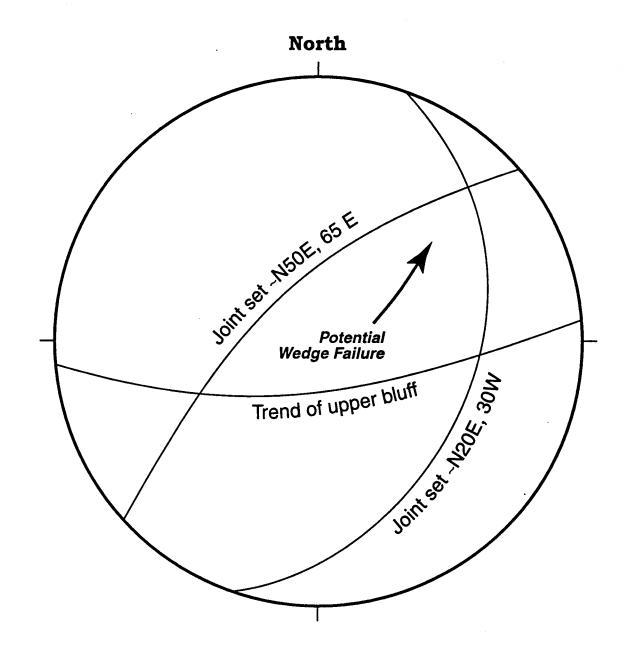




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PAGE /4 OF /4

SHEPPARD, MULLIN, RICHTER & HAMPTON LE A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIO

ATTORNEYS AT LAW

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FOUR EMBARCADERO CENTER SAN FRANCISCO, CALIFORNIA 94III-4I06

CALIFORNIA COASTAL COMMISSION

TELEPHONE (415) 434-9100

OUR FILE NUMBER

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(415) 774-3215 rlrobin@smrh.com

WRITER'S DIRECT LINE

100-92126

November 21, 2000

Anne Kramer Coastal Program Analyst California Coastal Commission 200 Oceangate, Suite 1000 Long Beach, CA 90802

Re:

Coastal Permit Application No. 5-00-228

2695 Riviera Drive, Laguna Beach

Dear Anne:

This letter is to provide you with additional analysis and discussion of the site planning issues associated with the Hopkins Property at 2695 Riviera Drive. Laguna Beach. As you know we have taken considerable effort to obtain additional geotechnical, engineering and geological information on this property to clarify the designation of the top of bluff issue. This material was provided on November 8, 2000 as you requested, and these letters (and photographs if feasible) should be included in any reports to the Commission.

We believe the information we have provided is conclusive — and should put to rest any of the initial questions raised by the Commission's geologist, Mark Johnsson. This material reconfirms that the top of bluff is located as originally designated in our application. Assertions to the contrary are simply not supported by any of the technical materials provided to the Commission staff by two separate **COASTAL COMMISSION** experts.

> 5-00-228 EXHIBIT #___/

Anne Kramer Coastal Program Analyst November 21, 2000 Page 2

While Mr. Johnsson may continue to question some aspects of top of bluff designation, we believe that the material we provided should be the basis of any setback baseline from the blufftop or bluffline determined for this property. Moreover, we would also like to note that regardless of the top of bluff designation, the particular geologic composition of this property does not make it susceptible to instability. As noted at p. 5 of the letter from Mr. Michael Childs of GeoFirm on November 8, 2000:

Aerial photographs from 1931 suggest andesite backed portions of the bluff are essentially unchanged over the past 70 years. Review of cliff morphology in relation to controlling geologic structure (the intrusion contact) suggests little erosion has occurred over the past few hundred years.

The bedrock composition of this site, in fact, is so stable that it allows for some flexibility in the setback from our proposed top of bluff without compromising the coastal act policies to ensure geologic or other safety concerns. If the top of bluff suggested by Mr. Johnsson were used, the technical experts suggest that no additional set back would be required from safety or stability purposes (Childs letter, p.6).

In order to further ensure the accuracy of this bluff analysis, a third review of the technical information was undertaken by Mr. Mark Hetherington of Hetherington Engineering, Inc. After reviewing all technical materials, including the Commission staff's earlier letter of October 24, 2000, Mr. Hetherington specifically challenges the conclusion and disputes Mr. Johnsson's earlier analysis of the top of bluff. (See attached letter of November 8, 2000 from Hetherington Engineering.)

On this basis we believe that a viable project site exists on this property as approved by the City of Laguna Beach. If the Commission staff has additional concerns regarding the proposed lot designation, we are confident these concerns can be addressed in conditions to the permit. Specific design constraints that may follow

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for development of a residence on this site can be addressed in any CDP application that follows for this property.

We look forward to meeting with you on November 29, 2000, to discuss the specific options for this property.

Sincerely yours,

Renée L. Robin

Renée L. Robin

by d. barer

for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

Enclosures

cc:

Steven Hopkins

Todd Skendarian

Deborah Lee

Robert Philibosian

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