

CALIFORNIA COASTAL COMMISSION

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RECORD PACKET COPY

Filed: January 6, 2000
49th Day: February 24, 2000
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Staff: ALK-LB **ALK**
Staff Report: May 25, 2000
Hearing Date: June 13-16, 2000
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 5-99-206

APPLICANTS: Joan Irvine Smith & James Irvine Swinden

AGENT: James F. Gillen

PROJECT LOCATION: Riviera Drive at Monaco Drive, City of Laguna Beach,
County of Orange

PROJECT DESCRIPTION: Subdivision of a single 2.04 acre parcel into three parcels of
.92 acre/40,279 square feet (Parcel 1), .62 acre/27,012 square
feet (Parcel 2) and .49 acre/21,500 square feet (Parcel 3).

LOCAL APPROVALS RECEIVED: Approval in Concept 98-212 from City of Laguna Beach
Planning Department dated May 18, 1999.

SUBSTANTIVE FILE DOCUMENTS: City of Laguna Beach Certified Local Coastal Program;
*Report of Geotechnical Studies, Parcels 1, 2 and 3, Tentative Parcel Map 98-212, Laguna
Beach, California* prepared by Goffman, McCormick & Urban, Inc. (Project 98-104) dated
November 19, 1999; *Wave Runup at Abalone Point* prepared by Favreau Engineering, Inc.
dated April 7, 2000; and Coastal Commission Staff Memorandum from Mark Johnsson, Senior
Geologist dated May 11, 2000.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission **APPROVE** the proposed subdivision with five (5) special conditions, which require recordation of deed restrictions concerning 1) an increased minimum bluff top setback; 2) no future shoreline protective devices; 3) assumption of risk; 4) drainage, erosion and run-off control measures; and 5) landscaping measures.

The applicant proposes to subdivide a 2.04 acre parcel into three (3) residential lots within a locked gate community. No construction is proposed by the current application. The subject site is an undeveloped coastal bluff top lot. The primary issues addressed by this staff report include new development and geologic hazards.

STAFF NOTE: *The subject application was originally agendized as a Consent Calendar item for the February 2000 Commission hearing, but was removed for further evaluation of wave uprush conditions and the need for future protective devices.*

STAFF RECOMMENDATION:

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

MOTION:

I move that the Commission approve CDP No. 5-99-206 pursuant to the staff recommendation.

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

RESOLUTION:

I. APPROVAL WITH CONDITIONS

The Commission hereby **GRANTS** a permit, subject to the conditions below, for the proposed development on the grounds that the development, located between the nearest public roadway and the shoreline, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 including the public access and recreation policies of Chapter 3, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse effects on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and construction 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 construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application, or in the case of administrative permits, the date on which the permit is reported to the Commission. Construction 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 construction 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. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.
5. **Inspections.** The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.

6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Blufftop Setback

- A. No development, as defined in Section 30106 of the Coastal Act, shall occur in the designated blufftop setback area as defined below and generally depicted on Exhibit 4 of the current staff report:
 - (1) Forty-feet (40') from the identified top of bluff between the western property line and the midpoint of the promontory between proposed Parcels 1 and 3 as identified on Tentative Parcel Map No. 98-212; and
 - (2) Twenty-five feet (25') from the identified bluff top from the midpoint of the promontory between proposed Parcels 1 and 3, to the eastern property boundary as identified on Tentative Parcel Map No. 98-212.
- B. Within the designated blufftop setback area, only native, drought-tolerant plant species shall be allowed.
- C. The following development may be allowed within the setback area, if approved by the Coastal Commission or successor agency, as an amendment to this coastal development permit:
 - (1) Construction of the realigned sewer line
- D. **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 reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

2. **No Future Shoreline Protective Device**

- A. By acceptance of this permit, the applicant agrees, on behalf of himself and all other successors and assigns, that no shoreline protective device(s) shall ever be constructed to protect the lots approved pursuant to Coastal Development Permit No. 5-99-206, including future improvements, in the event that the property is threatened with damage or destruction from waves, erosion, storm conditions or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of himself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

3. **Assumption of Risk**

- A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from bluff retreat and erosion; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

4. **Drainage and Run-off Control Measures**

- A. To minimize potential adverse effects on blufftop stability, the applicant hereby agrees to the following drainage and runoff control measures:

- (1) Discharge runoff from all roofs, patios, driveways and other impervious surfaces and slopes constructed on the site shall be collected and conveyed directly to the street by pipe;
- (2) No in-ground irrigation systems shall be allowed. Temporary above-ground irrigation for the purpose of establishing vegetation is allowed.

B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

5. **Landscaping Requirements**

- A. To reduce adverse visual and geologic impacts due to erosion and adverse impacts to environmentally sensitive habitat areas through the spread of non-native invasive plant species, the applicant hereby agrees to the following landscaping requirements:
- (1) Landscaped areas in the blufftop setback area shall be planted and maintained for erosion control and visual enhancement purposes. To minimize the need for irrigation and to screen or soften the visual impact of development, all landscaping shall consist of native, drought resistant plants.
 - (2) Invasive, non-indigenous plant species which tend to supplant native species shall not be used;
 - (3) All required plantings will be maintained in good growing conditions through-out the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the landscape plan;
 - (4) Landscaped areas in the front and side yards can include ornamental or native, drought-tolerant plants. Vegetation installed in the ground shall consist of native, drought tolerant plants. Other vegetation which is placed in above ground pots or planters or boxes may be non-invasive, non-native ornamental plants. Sod or non-native ground covers which require watering shall not be placed on the site; and
 - (5) No in-ground irrigation systems shall be installed. Temporary above-ground irrigation is allowed to establish plantings.

V. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Project Description and Location

The proposed project is located between the first public road and the sea at Riviera Drive and Monaco Drive in the private 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 applicant proposes to subdivide a single 2.04 acre parcel into three parcels of .92 acre/40,279 square feet (Parcel 1), .62 acre/27,012 square feet (Parcel 2) and .49 acre/21,500 square feet (Parcel 3) for future residential development (Exhibit 3). No construction is proposed by the current application. The site is located in the R-1 Residential Low Density Zoning District. The site is a vacant sloping parcel bound to the north, west and east by residential development and to the south by a coastal bluff. A private beach estate is located at the base of the bluff, directly seaward of proposed Parcels 1 and 2.

B. New Development

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.*

The Coastal Act requires that new development be located in areas able to accommodate the development without adverse impacts. The proposed development is a three-lot subdivision in an area of existing single-family residential development. The size of the proposed lots conforms to the size of existing lots within the Abalone Point community. The parcel abuts Riviera Drive and Monaco Drive; therefore ingress and egress to all three lots is provided. In addition, the infrastructure supporting surrounding residential development (sewer, water, etc.) is already established; therefore no significant utility extensions will be required. Lastly, the proposed subdivision will not adversely impact native coastal vegetation, as the subject site is a denuded vacant parcel that supports only a sparse volunteer growth of grass and weeds. Therefore, the Commission finds that the proposed development is in an area able to accommodate it, poses no adverse effects to coastal resources and is consistent with Section 30250 of the Coastal Act.

C. Geologic Hazards

Section 30253 of the Coastal Act states, in pertinent 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.*

Site Conditions

The proposed subdivision site is a gently sloping bluff top parcel. The buildable portion of the site has a relief of about 20 feet and is adjacent to an approximately 60 foot high coastal bluff. Development on a coastal bluff is inherently risky. To evaluate the feasibility of future residential development at the subject site, the applicants commissioned a geotechnical investigation by Goffman, McCormick & Urban, Inc. The scope of the investigation involved review of previous research and surface mapping; surface reconnaissance; excavation of 5 drill holes to depths of up to 70 feet; laboratory testing of site materials; and analysis of the exploration and laboratory data to develop recommendations pertaining to use of the site, bluff stability and grading.

The *Report of Geotechnical Studies, Parcels 1, 2 and 3, Tentative Parcel Map 98-212, Laguna Beach, California* (Project 98-104) prepared by Goffman, McCormick & Urban, Inc. dated November 19, 1999 concludes, "site development is feasible from a geological and geotechnical standpoint." The report states that the site is underlain by marine and non-marine Quaternary terrace deposits overlying Tertiary Monterey formation siltstone, which has been locally intruded by volcanic andesite. According to the report, "the underlying soil and rock materials are typically suitable for support of structures and improvements assuming that any necessary corrective grading has been performed." The engineering consultants found no evidence of deep seated or shallow landsliding within the site during their reconnaissance or review of literature. Additionally, the consultant found no indications of active faulting in the subject area. Bluff retreat at the site was evaluated by performing a review of topography surveyed by U.S. Geological Survey and comparing historical aerial photographs. The report indicates that no change was discernable over the 33 year period (1948-1981) from the comparison of available USGS topographic maps. Additionally, the consultant reports:

"Geologic reconnaissance of the beach areas below the site indicates that andesite bedrock is exposed at the face of the bluff. No significant surficial deposits (i.e. talus or scree) that would be associated with mass wasting of the bluff were observed during the recent geologic mapping or on the historical aerial photographs. Therefore, gross instability (e.g. topple, fall, slide) is not considered an operative process on the bluffs at the site."

The geotechnical report concluded that the bluffs along the southwest side of the property show evidence of erosion and rock falls typical of natural coastal bluff retreat, but found the building setback identified on the Tentative Parcel Map to be "reasonable for preliminary planning

purposes." The consultant states that the rate of coastal retreat should be further analyzed prior to finalizing structure and improvement locations. The consultant also adds that a more detailed geotechnical investigation, including subsurface exploration, laboratory testing, and slope stability analysis should be performed prior to grading and construction at the site. The Commission's technical staff concurs with the findings of the geotechnical report that the bluff is grossly stable, but recommends a greater bluff top setback than 25' in selected areas, as discussed on page 9 of the current staff report.

Wave Uprush

The subject site is a bluff top parcel located directly inland of a sandy beach. With regard to beach erosion and wave runup, the geotechnical report states the following:

"...review of the aerial photographs indicate that the beach below the site has been continuously well supplied with sand and that erosion of the bluff by waves is also not a significant impact at the site. In other words, the geologic location of the site in a small embayment slightly north and east of the Abalone Point promontory appears to protect the bluff below the site from dominant wave direction (i.e., out of the west to west-southwest)."

While the above-referenced geotechnical studies prepared by Goffman, McCormick & Urban, Inc. indicate that the site is protected from wave attack, the applicant provided a supplemental project study report entitled *Wave Runup at Abalone Point* prepared by Favreau Engineering, Inc. dated April 7, 2000 to further describe wave conditions at the subject site. The report was prepared to determine the *"maximum wave runup elevation at the natural beach located in a protected cove immediately to the northeast of Abalone Point, and west of Emerald Bay."* The report describes the beach seaward of the subject site as being approximately 1,500 feet in length, spanning between two rocky points. As the report states, *"these points, or headlands, can be considered as 'Natural Protective Devices' to the oncoming waves, although no attempt has been made to evaluate their effectiveness or lack thereof against wave forces."* The consultant also describes the beach as being covered with sand at the time of the site reconnaissance survey.

Using a variety of methodologies to calculate wave runup, the study concludes the following:

"Based on a beach profile of 10% (ten percent), a depth of scour of one foot and a maximum water depth of 6.2 feet, the runup elevation on the existing 1:1.5 (rise/run) bluff was determined to be at approximate elevation of 17.7 MSL. The time interval associated with this runup was $T=22$ seconds."

The toe of the bluff is located at an elevation of approximately 40 feet above MSL. Therefore, the toe of bluff is not currently subject to wave attack. No shoreline protective device is proposed.

Bluff Top Setback

The City's certified LCP (not effective in this area of deferred certification, but useful in providing guidance) 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's typically requires a minimum 25 foot

setback for residences from the edge of a coastal bluff in this area. 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.

The Laguna Beach Zoning Code, which the Commission uses as guidance, 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 varying between the 55' and 65' contour lines and shows the building setback line 25' inland of the top of slope. A site visit by Commission staff confirmed the applicant's delineation of the top of slope and 25' setback. 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.

However, the Tentative Parcel Map includes a new 10' wide sewer easement, which does extend beyond the 25' building setback in two locations at the northern and southern property boundaries, as shown on Exhibit 3. The new sewer easement is intended to replace an existing easement located considerably seaward of the proposed location. The location of the easement has been established by the City of Laguna Beach and the local utility provider based on site topography and the location of existing sewer connections to the north and south. The existing sewer line is to be abandoned and vacated upon installation of the new sewer line. The City of Laguna Beach has required the relocation of the sewer line prior to the issuance of building permits at the subject site. The Commission recognizes that the proposed sewer line configuration is preferable to the existing location and will not contribute to blufftop instability. Therefore, the Commission finds the new easement location appropriate for subdivision purposes. Nonetheless, a subsequent coastal development permit or amendment to the current permit will be required at the time construction of the sewer line realignment is proposed.

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

"The natural sea bluff descending to the beach is expected to be grossly stable due to its hard, mostly massive intact nature...the potential for any type of failure surface to develop within the rock mass is considered negligible. The potential for bluff failures along joint surfaces to effect future residential structures over their design life is also considered negligible given the generally steeply dipping nature of the joints in combination with the bluff-set back which will place all structures behind an average 1.7:1 (horizontal to vertical) projection extended from the toe of the bluff."

The Commission's Senior Geologist has reviewed the consultant's geotechnical investigation and conducted a site visit on May 5, 2000. The Commission's Senior Engineer also has evaluated the associated technical documents. In their review of the proposed subdivision, the Commission's technical staff concur with the findings of the geotechnical report that the bluff is grossly stable. However, they recommended a greater setback along the western portion of the property (Parcels 1 and 3) than currently proposed by the applicant.

As stated in a Coastal Commission staff memo dated May 11, 2000 (Exhibit 5), the Commission's Senior Geologist notes:

"A thick wedge of artificial fill extends across the western half of the undivided parcel (including all of proposed parcel 3 and the western 2/3 of parcel 1); its thickness reaches a maximum in Parcel 3, where it is 8-9 feet in thickness. Further, as much as 15 feet of colluvium underlies part of parcel 3, these materials will tend to erode at a much greater rate than the underlying bedrock. The bluff face on the western portion of the property contains a drainage swale that is experiencing some slumping of fill and/or colluvium. A small retaining wall has been built here, presumably to protect the sewer line at this location. The presence of the fill and colluvium, the concentration of drainage in the swale, and the evidence of instability in the form of surficial slumps lead us to be somewhat concerned that the anticipated low bluff retreat rates for other portion of the property may not apply at this location. Accordingly, we recommend a 40-foot building setback from the identified top of bluff between the western property line and the midpoint of the promontory between proposed parcels 1 and 3. From the midpoint of the promontory between proposed parcels 1 and 3, to the eastern property boundary, we concur in the recommended 25-foot setback from the identified bluff top"

The staff memo also indicates that the applicant may request a reduction in the 40-foot setback in the future if evidence is provided that the long-term stability of this portion of the property compares with the stability of the eastern portion of the property. As stated in the memo, such evidence would consist of the following:

- "1) A quantitative slope stability analysis, using geotechnical parameters (cohesion, unit weight, friction angle) from undisturbed samples obtained from all materials underlying the site, assuming saturated soil conditions, for both static and pseudostatic conditions. The pseudostatic analysis should use a seismic coefficient, k, of 0.2 g. Both analyses should use assumed slip surfaces that test for both surficial and deep-seated failures.*
- 2) A better constrained estimate of bluff retreat rate for proposed parcel 3 taken from either survey data or from aerial photographs taken at a scale of 1:6000 or greater. The time interval covered by the analysis should include the winter storms of 1982-1983 and 1997-1998."*

The setbacks recommended by staff would limit the area of each parcel that will be available for future development, but there will still be sufficient area on each parcel to support a single-family residence. Also, the increased setback will minimize risks to life and property in an area of potential geologic hazard. Therefore, the Commission finds that the proposed subdivision is allowable if conditioned for appropriate bluff top setbacks.

As such, the Commission imposes Special Condition No. 1, which requires a deed restriction be recorded which establishes a bluff top setback of 40' from the westernmost property line to the midpoint of the promontory between proposed parcels 1 and 3, and a 25' bluff top setback from the midpoint of the promontory between proposed parcels 1 and 3 to the easternmost property boundary (Exhibit 4). The Commission will have further opportunity to review the adequacy of the setback requirement at the time that development on each of these three lots is proposed. (Development includes, but is not limited to, all grading, utility line realignment and construction activities.) Supplementary project-specific geotechnical evaluations will be required at that time and a greater setback may be required if deemed necessary for purposes of minimizing risks. In

addition, the applicant may request a reduction in the setback requirement as an amendment to the coastal development permit.

Future Protective Devices

The subject site is a blufftop ocean front lot. In general, blufftop lots are inherently hazardous. It is the nature of bluffs to erode. Bluff failure can be episodic, and bluffs that seem stable now may not be so in the future. Even when a thorough professional geotechnical analysis of a site has concluded that a proposed development is expected to be safe from bluff retreat hazards for the life of the project, it has been the experience of the Commission that in some instances, unexpected bluff retreat episodes that threaten development do occur (5-84-046 & 5-98-039: Denver/Canter; 5-95-023 & 5-99-056: Bennett; 6-88-515 & 6-99-114G [pending]; McAllister). In the Commission's experience, geologists cannot predict with absolute certainty if or when bluff erosion on a particular site may take place, and cannot predict if or when a house or property may become endangered.

Section 30253 of the Coastal Act requires that new development shall not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed development could not be approved as being consistent with Section 30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a shoreline protection device.

The Coastal Act limits construction of protective devices because they have a variety of negative impacts on coastal resources including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. Under Coastal Act Section 30235, a shoreline protective structure must be approved if: (1) there is an existing principal structure in imminent danger from erosion; (2) shoreline altering construction is required to protect the existing threatened structure; and (3) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply.

The Commission has generally interpreted Section 30235 to require the Commission to approve shoreline protection for residential development only for existing principal structures. The construction of a shoreline protective device to protect a new residential development would not be required by Section 30235 of the Coastal Act. In addition, the construction of a shoreline protective device to protect new residential development would conflict with Section 30251 of the Coastal Act which states that permitted development shall minimize the alteration of natural landforms, including coastal bluffs which would be subject to increased erosion from such a device. No shoreline protection device is currently proposed. The geotechnical report prepared for the subject development addresses bluff stability and expected bluff retreat. Review of aerial photographs over the last fifty years indicates that the slope, bluff and property are virtually unchanged during that time. The consultant states that the lot lies in a protected cove where very little bluff erosion has occurred according to the aerial photographs. Wave diffraction patterns and wave orthogonal patterns show that this area is not subject to intense wave action.

As stated previously, the geologic consultant maintains that the "*potential for bluff failure along the joint surfaces to effect future residential structures over their design life is considered negligible...*" and the slopes "*are expected to be grossly and superficially stable.*" For these reasons, the geologic consultant has indicated that, though nothing can be guaranteed on a bluff

top lot, the site is expected to remain geologically stable. The geologic consultant finds that the proposed bluff top setback is adequate to assure stability and structural integrity.

In the current project, the applicant proposes to subdivide a parcel into three lots to accommodate future residential development. This constitutes new development. As new development, the proposed project can only be found consistent with Section 30253 of the Coastal Act if a shoreline/bluff protection device is not expected to be needed in the future. The applicant's geotechnical consultant has indicated that the site is stable and that no shoreline protection devices will be needed. If not for the information provided by the applicant that the site is safe for development, the Commission could not conclude that the proposed development will not in any way "require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs." However, as stated above, the record of coastal development permit applications and Commission actions has also shown that geologic conditions change over time and that predictions regarding site stability based upon the geologic sciences are inexact. Even though there is evidence that geologic conditions change, the Commission must rely upon, and hold the applicant to their information which states that the site is safe for development without the need for protective devices.

Therefore, the Commission imposes Special Condition 2, which requires the applicant to record a deed restriction against the property placing the applicant and their successors in interest on notice that no protective devices shall be permitted to protect the proposed development and that the applicant waives, on behalf of itself and all successors and assigns, any rights to construct protective devices that may exist under Coastal Act Section 30235.

Assumption of Risk

While the applicant is not proposing any construction at this time, the lots are being created with the intent to develop three (3) single-family residential units at a future date. Although adherence to the geotechnical consultant's recommendations at the time of development will minimize the risk of damage from erosion, the risk is not eliminated entirely. Therefore, Special Condition 3, the standard waiver of liability condition, has been attached as a special condition of approval. By this means, the applicant is notified that the subdivision is located in an area that is subject to wave attack and bluff erosion that can damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. In addition, the condition insures that the applicant will indemnify and hold harmless the Commission for any damages related to the Commission's approval of the coastal development permit. Finally, recordation of the condition insures that future owners of the property will be informed of the risks and the Commission's immunity from liability.

Drainage and Runoff Control Measures

Infiltration of water has been shown to contribute to blufftop instability in similar project sites throughout Orange County. To further ensure site stability and appropriate development of the subject site, the Commission imposes Special Condition No. 4, which requires the applicant to record a deed restriction requiring implementation of specific drainage and run-off control measures. In keeping with typical geotechnical recommendations, the measures require that all run-off be taken to the street and that irrigation be minimized. As such, the roof drainage will discharge directly from roof gutters into a pipe system to the street. Additionally, surface water will be directed toward drain inlets and does not allow it to percolate into the ground, as groundwater has been determined to contribute to slope instability on bluff top lots. In recent

actions on unstable bluffs (5-98-469 Ferber), the Commission has required that no in-ground irrigation systems be installed on bluff-top lots. This special condition conforms with the previous actions of the Commission regarding in-ground irrigation systems. The condition does acknowledge that temporary above ground watering is allowed for plant establishment and growth.

Landscaping Requirements

There is ample evidence throughout Orange County that bluffs are adversely impacted by human development. Specifically, the installation of lawns, in-ground irrigation systems, inadequate drainage, and watering in general are common factors precipitating accelerated bluff erosion, landsliding and sloughing, thereby necessitating protective devices. For developments on blufftop lots, the Commission has typically imposed a special condition to require landscaping plans that include native and drought tolerant plants to minimize the introduction of water into the ground. These plants promote stability by controlling erosion and holding soil in place through deep roots.

To ensure that an appropriate landscape plan is prepared for each of the three (3) lots created by the current subdivision, the Commission imposes Special Condition 5, which requires the applicant to record a deed restriction requiring adherence to specific landscaping requirements. The landscaping plan shall include primarily of native, drought-tolerant plants and no in-ground irrigation systems. Special Condition 5 requires that areas not occupied by hardscape be planted primarily with native, drought tolerant plants indigenous to the area. The condition distinguishes between the types of plants allowed in the rear, side and front yards. Non-native ornamental plants are allowed in the front and side yards only if they are kept in containers. Rear yard, bluff top plantings consist entirely of native, drought-tolerant plants. Native, drought-tolerant plants common to coastal bluffs serve the following functions: drought-tolerant plants have deep root systems which tend to stabilize soils, are spreading plants and tend to minimize the erosive impact of rain, and provide habitat for native animals. The condition allows for the placement of non-drought-tolerant, water-dependent plants in containers, i.e., boxes and planters, along the side and front yards. However, the condition requires planting within the blufftop setback area to consist entirely of native, drought-tolerant plants.

Conclusion

Therefore, the Commission finds that the current subdivision, as conditioned, will not result in any adverse impacts to geologic stability and is consistent with Section 30253 of the Coastal Act, which requires that risks be minimized and geologic stability be assured.

D. Public Access and Recreation

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the nearest public road and the sea include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3. The proposed development is located between the sea and the nearest public road.

Section 30212 of the Coastal Act states, in relevant part:

(a) *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*

(2) *adequate access exists nearby.*

The proposed development is located within an existing locked gate community (Abalone Point) located between the sea and the first public road paralleling the sea. Public access through this community does not currently exist. However, the proposed development, subdivision of a 2.04 acre parcel in an area inaccessible to the public, will not affect the existing public access condition. It is the locked gate community, not this subdivision, that impedes public access. Access is provided in the project vicinity at Crystal Cove State Park, located immediately north of the subject site. The proposed development will not result in any adverse impacts to existing public access or recreation in the area. Therefore, the Commission finds that the project is consistent with the public access and recreation policies of the Coastal Act.

E. Local Coastal Program

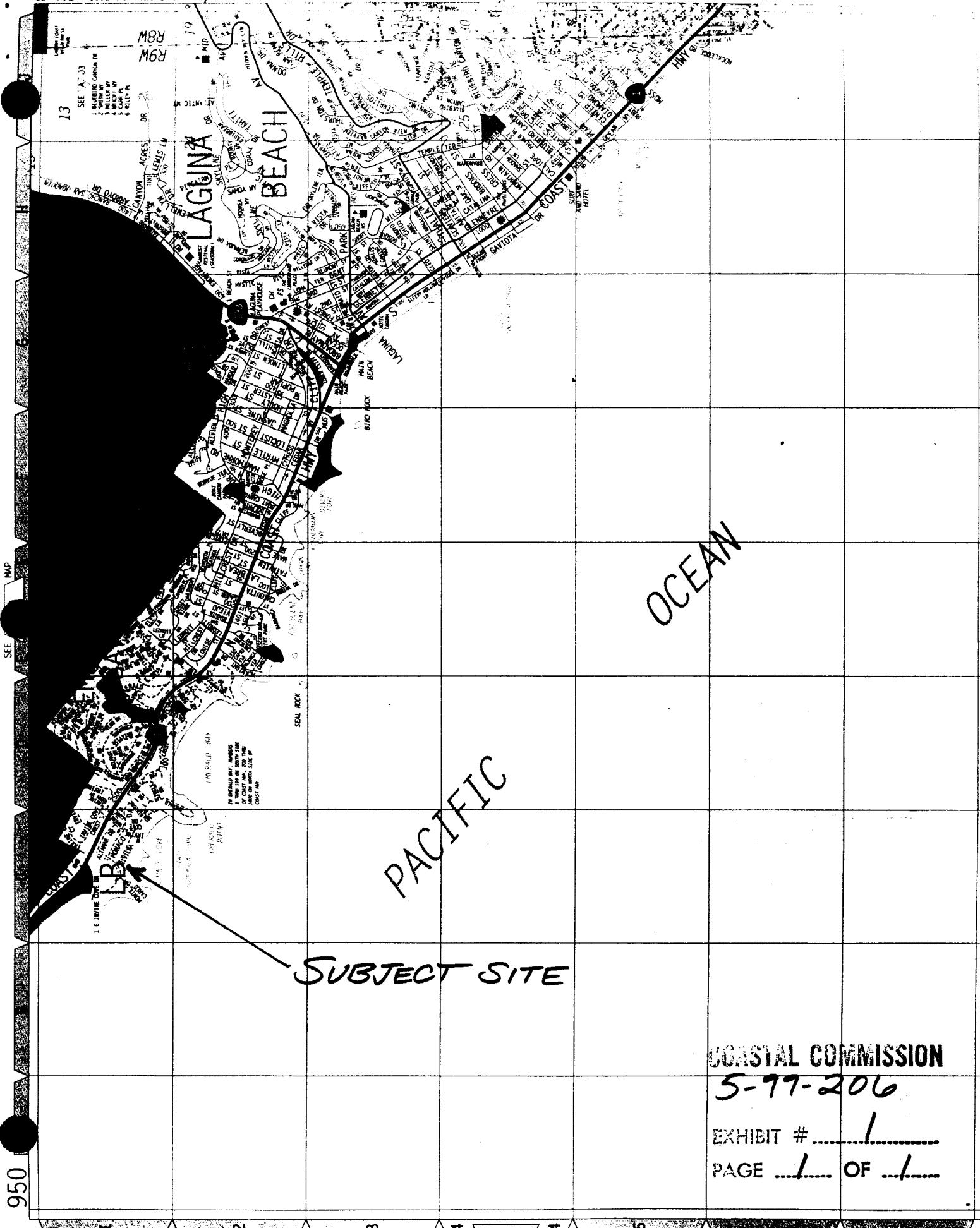
Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

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. Further, the project has been found to conform to the hazard policies of the Coastal Act. 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.

F. California Environmental Quality Act

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

The proposed project has been conditioned in order to be found consistent with the hazard policies of the Coastal Act. As conditioned to require 1) an increased minimum bluff top setback; 2) recordation of a deed restriction prohibiting the construction of any future shoreline protective devices; 3) recordation of an assumption of risk deed restriction; 4) submittal of a drainage, erosion and run-off control plan at time of proposed development; and 5) submittal of landscaping plans at time of proposed development, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of the Coastal Act to conform to CEQA.



13
 SEE MAP J3
 1. BUREAU OF LAND MANAGEMENT
 2. MILLER ST
 3. BIRD ST
 4. BIRD ST
 5. BIRD ST
 6. BIRD ST

R9M
 R8M

SEE MAP

950

1 2 3 4 4 5
 MAP SEE

OCEAN

PACIFIC

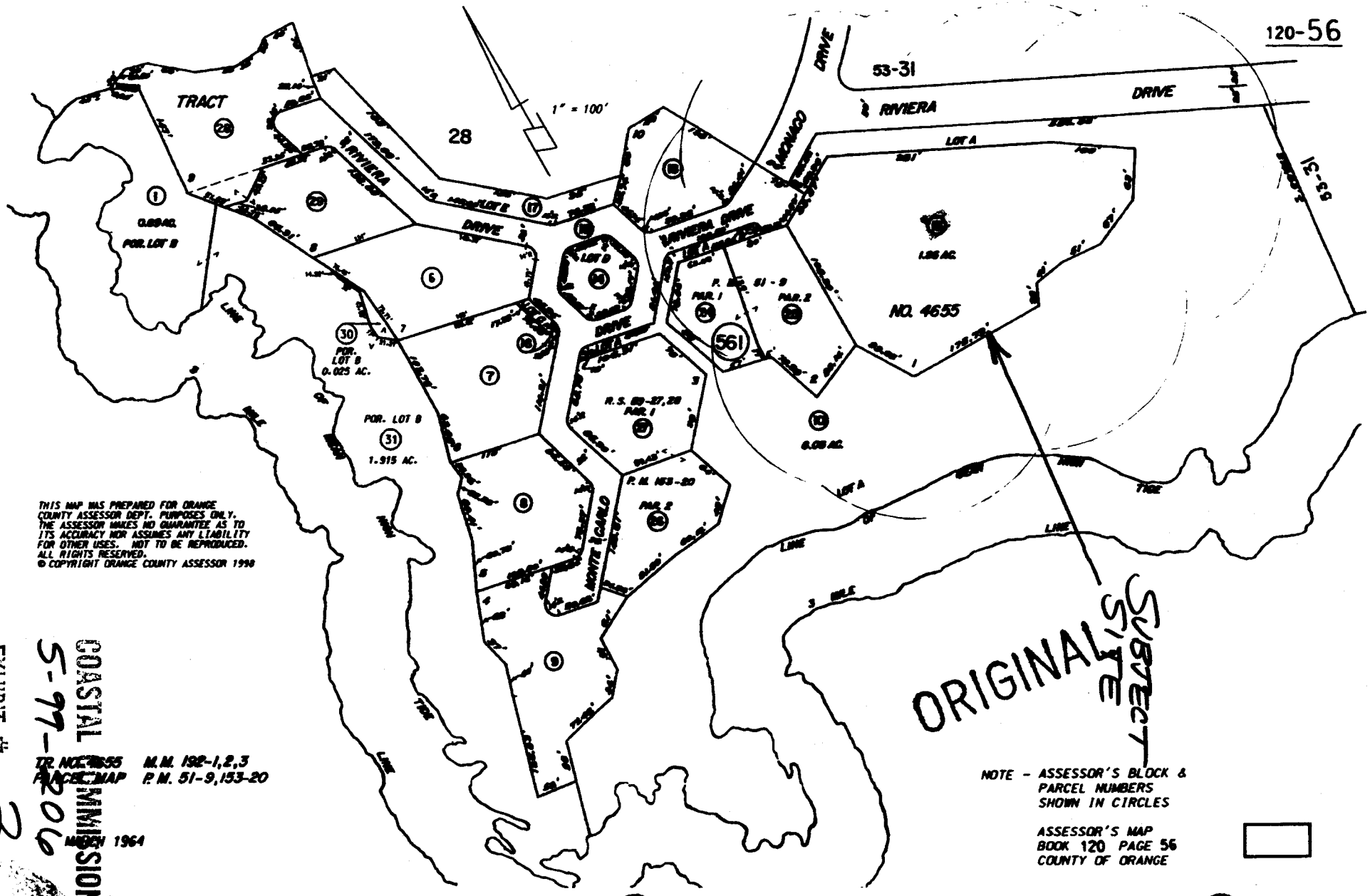
SUBJECT SITE

COASTAL COMMISSION

5-99-206

EXHIBIT # 1

PAGE 1 OF 1



120-56

53-31

TRACT

28

1" = 100'

RIVIERA DRIVE

DRIVE

1
0.00 AC.
POR. LOT B

29

6

17

DRIVE

18

LOT B

P. M. 51-9

PAR. 1

PAR. 2

561

NO. 4655

30
POR. LOT B
0.025 AC.

7

31
POR. LOT B
1.915 AC.

19

DRIVE

R.S. 20-27, 28

PAR. 1

PAR. 2

P. M. 153-20

PAR. 1

PAR. 2

32

20

0.00 AC.

LOT A

SUBJECT ORIGINAL SITE

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NOTE - ASSESSOR'S BLOCK & PARCEL NUMBERS SHOWN IN CIRCLES

ASSESSOR'S MAP BOOK 120 PAGE 56 COUNTY OF ORANGE



COASTAL COMMISION
5-99-2006
EXHIBIT # 2
PAGE 1 OF 1

TR. NO. 1955 M.M. 192-1,2,3
PARCEL MAP P.M. 51-9,153-20

MARCH 1964

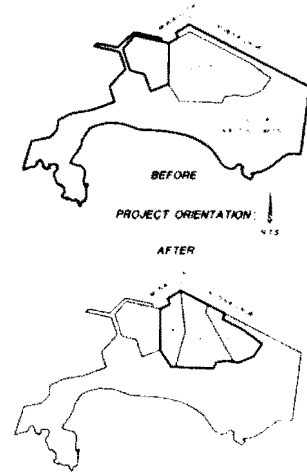
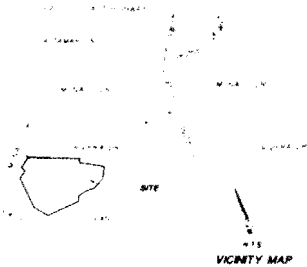
TENTATIVE PARCEL MAP NO. 98-212

IN THE CITY OF LAGUNA BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA
 BEING A DIVISION OF LOT 1 AND A PORTION OF LOT A OF TRACT NO. 4855, AS
 SHOWN ON THE MAP RECORDED IN BOOK 192, PAGES 1 THROUGH 3, INCLUSIVE,
 OF MISCELLANEOUS MAPS, RECORDS OF SAID ORANGE COUNTY.

HUITT-ZOLLARS

NOVEMBER, 1998

JAMES F. GILLEN, L.S. 5557



NOTES

1. THIS PARCEL MAP IS PREPARED BY THE ENGINEER AND SURVEYOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA SUBDIVISION MAP ACT AND THE LOCAL ORDINANCES THEREUNDER.
2. THE ENGINEER AND SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE PROPERTY AND HAS FOUND THAT THE INFORMATION FURNISHED TO HIM IS TRUE AND CORRECT.
3. THE ENGINEER AND SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE PROPERTY AND HAS FOUND THAT THE INFORMATION FURNISHED TO HIM IS TRUE AND CORRECT.
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10. THE ENGINEER AND SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE PROPERTY AND HAS FOUND THAT THE INFORMATION FURNISHED TO HIM IS TRUE AND CORRECT.

LEGEND

STATEMENT OF OWNERSHIP:
 I, JAMES F. GILLEN, ENGINEER AND SURVEYOR, DO HEREBY STATE THAT I AM THE OWNER OF THE PROPERTY (LOT 1) AND I HAVE PERMISSION TO SUBDIVIDE THE PROPERTY AS SHOWN HEREON AND THAT I HAVE CONSENTED TO THE PREPARATION AND SUBMISSION OF THIS MAP.

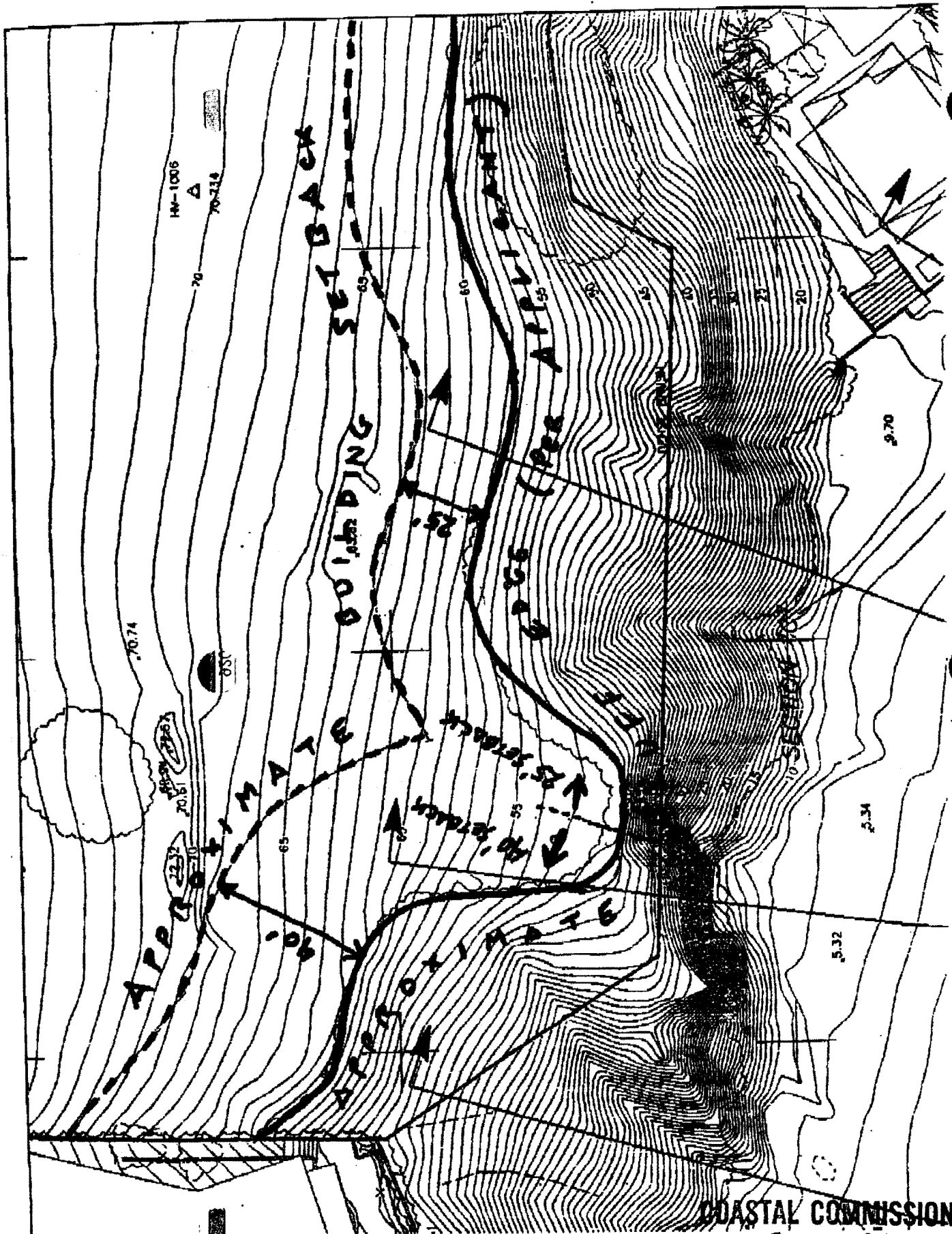
DATE: 11/15/98
 BY: James F. Gillen
 PREPARED BY: HUITT-ZOLLARS

PREPARED BY:
HUITT-ZOLLARS
 1000 N. LAGUNA BEACH BLVD., SUITE 100, LAGUNA BEACH, CA 92653
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PAGE 1 OF 1

EXHIBIT
 5 STARS
 J. JOHNSON



COASTAL COMMISSION
5-99-206

EXHIBIT # 4

PAGE 1 OF 1

CALIFORNIA COASTAL COMMISSION

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



11 May 2000

MEMORANDUM

To: Anne Kramer, Coastal Program Analyst
From: Mark Johnsson, Senior Geologist
Re: 5-99-206 (Smith and Swinden)

This memo is a follow-up to my earlier email memo of 19 April, in which I raised concerns related to bluff stability and retreat rates at the subject site. As indicated in that memo, I had concerns that significant portions of the bluff face might be made up of material with lower strength than that indicated in the Goffman, McCormick and Urban report dated 19 November 1999. I have since spoken to Andrew Stone, principal geologist on the project, and have visited the site. Subsequently, I discussed the matter with Lesley Ewing, Senior Coastal Engineer. Our recommendations concerning geologic/engineering aspects of this project are as follows:

We concur with the findings of the provided geotechnical report that the bluff is grossly stable. Although portions of the bluff undoubtedly have lower compressive strength than the ~15,000 psi reported in the Goffman, McCormick and Urban report, these areas appear to be primarily related to surficial weathering at the bluff face; similar weathering might be expected in the top several feet of bedrock underlying colluvium and artificial fill, as was in fact reported in the report. Although the bluff may tend to fail by block fall as unweathered core stones drop out of weathered matrix, this failure mechanism is unlikely to threaten structures over the next 75 years if there is adequate setback and control of surface run-off and groundwater.

A thick wedge of artificial fill extends across the western half of the undivided parcel (including all of proposed parcel 3 and the western 2/3 of parcel 1); its thickness reaches a maximum in Parcel 3, where it is 8-9 feet in thickness. Further, as much as 15 feet of colluvium underlies part of parcel 3. These materials will tend to erode at a much greater rate than the underlying bedrock. The bluff face on the western portion of the property contains a drainage swale that is experiencing some slumping of fill and/or colluvium. A small retaining wall has been built here, presumably to protect the sewer line at this location. The presence of the fill and colluvium, the concentration of drainage in the swale, and the evidence of instability in the form of surficial slumps lead us to be somewhat concerned that the anticipated low bluff retreat rates for other portion of the property may not apply at this location. Accordingly, we recommend a 40-foot building setback from the identified top of bluff between the western property line and the midpoint of the promontory between proposed parcels 1 and 3. From the midpoint of the promontory between proposed parcels 1 and 3, to the eastern property boundary, we concur in the recommended 25-foot setback from the identified bluff top.

COASTAL COMMISSION

5-99-206

EXHIBIT # 5

PAGE 1 OF 2

The 40-foot setback could be reduced in the future if the applicant provides evidence that the long-term stability of this portion of the property compares with the stability of the eastern portion of the property. Such evidence should consist of the following:

- 1) A quantitative slope stability analysis, using geotechnical parameters (cohesion, unit weight, friction angle) from undisturbed samples obtained from all materials underlying the site, assuming saturated soil conditions, for both static and pseudostatic conditions. The pseudostatic analysis should use a seismic coefficient, k , of 0.2 g. Both analyses should use assumed slip surfaces that test for both surficial and deep-seated failures.
- 2) A better constrained estimate of bluff retreat rate for proposed parcel 3 taken from either survey data or from aerial photographs taken at a scale of 1:6000 or greater. The time interval covered by the analysis should include the winter storms of 1982-1983 and 1997-1998.

These setbacks would limit the area of each parcel that would be available for development, but there would be sufficient area on each parcel to support a single family residence.

Finally, we recommend that a drainage, erosion and run-off control plan be prepared for these parcels and that plans be submitted with any future applications for development of these parcels. In addition to the controls that may be necessary for overall water quality concerns, the plan shall include, at a minimum:

- (1) efforts to control and minimize drainage from upslope, off-site properties
- (2) efforts to control surface drainage, as required by the geotechnical report
- (3) efforts to control and prevent drainage over the bluff face
- (4) if it is necessary to discharge any blufftop surface runoff over the bluff face, the drainage controls for the three parcels shall be integrated, to the extent practicable, to minimize overall impacts to the bluff, bluff face and beach area
- (5) if there is drainage over the bluff face, the efforts to insure that the discharge is in a manner that avoids or minimizes impacts to the beach, access and the nearshore environment.

With these modifications, the proposed subdivision is approvable from a geologic and engineering point of view.

I hope that these comments are useful. If either you or the applicants have any questions, please feel free to contact Lesley Ewing or myself.

Sincerely,

Mark Johnsson
Senior Geologist

COASTAL COMMISSION
5-99-206
EXHIBIT # 5
PAGE 2 OF 2