

CALIFORNIA COASTAL COMMISSION

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Staff Report: 03-15-99
Hearing Date: April 13-16, 1999
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-98-508

APPLICANT: Jamie Klien

AGENT: Joe de Coster

PROJECT LOCATION: 115 Vista Blanca, San Clemente, Orange County

PROJECT DESCRIPTION: Construction of a 25 foot high, 6,600 square foot single-family residence with a 3-car garage and 6 parking spaces on a vacant lot. No grading is proposed.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends the Commission approve the proposed development with special conditions regarding assumption of risk, conformance with geologic recommendations, future development, restriction on future bluff protective devices, landscaping, and drainage and irrigation.

The Commission has historically been concerned about five issues in San Clemente: beach access, blufftop development, coastal canyon development, visitor serving facilities, and beach parking.

Development issues regarding blufftop development include: minimizing water percolation into the bluff, bluff erosion, requiring native, drought-tolerant landscaping, limiting in-ground irrigation, blufftop setbacks, preservation of natural landforms and view protection.

There are no known issues of controversy at this time.

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PROJECT SPECIFICS:

Lot Area:	12,845 sq. ft.
Building Coverage:	3,835 sq. ft.
Pavement Coverage:	3,170 sq. ft.
Landscape Coverage:	1,100 sq. ft.
Parking Spaces:	6
Zoning:	RL
Land Use Designation:	RL
Ht above final grade:	25 feet

LOCAL APPROVALS RECEIVED: Approval in concept from the planning department of the City of San Clemente

SUBSTANTIVE FILE DOCUMENTS: City of San Clemente Certified Land Use Plan, Coastal Development Permits 5-97-371 (Conrad), 5-98-020 (Conrad), 5-98-064 (Barnes), 5-98-178 (McMullen), 5-98-469 (Ferber), 5-94-243 (Gilmour), 5-98-300 (Loughnane), P3967 (Cypress West), 5-85-527, 5-86-751, 5-94-213,

Draft Environmental Impact Report Elmore Ranch, 1978, Final Soil Engineering and Engineering Geologic Grading Report P3967, Coastal Development Permits 5-93-243, A5-DPT-93-275, 6-93-20, 6-98-20A, 5-97-185 (Schaeffer), 5-85-527 (Watt), "Mass Movement and Seacliff Retreat along the Southern California Coast" by Antony R. Orme in Bull. Southern California Acad. Sci. 1991, "Greatly Accelerated Man-Induced Coastal Erosion and New Sources of Beach Sand, San Onofre State Park and Camp Pendleton, Northern San Diego County, California" by Gerald G. Kuhn in Shore and Beach, 1980, "High-Quality, Unbiased Data are Urgently Needed on Rates of Coastal Erosion" by Wendell Gayman.

LIST OF EXHIBITS

1. Vicinity Map
2. Assessor's Parcel Map
3. Site Plan
4. Subdivision Grading Plan
5. Cross Section
6. Survey Map

RECOMMENDATION:

The staff recommends that the Commission adopt the following 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 will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, is located between the sea and the first public road nearest the shoreline and in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. Standard Conditions:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date 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. Compliance. 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. 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.

III. SPECIAL CONDITIONS

1. Conformance with Geotechnical Recommendations

Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, grading, foundation and basement plans. The approved foundation plans shall include plans for the foundation, retaining walls, and footings. These plans shall include the signed statement of the geotechnical consultant certifying that these plans incorporate the recommendations contained in the report by Peter and Associates dated March 12, 1999.

The approved development shall be constructed in compliance with the final 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.

2. 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 hazard from bluff erosion and landslides and the applicant assumes the liability from such hazards; and (b) that the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission and its advisors relative to the Commission's approval of the project for any damage due to natural hazards.

The document shall run with the land binding all successors and assigns, and shall be recorded free and clear of prior liens and encumbrances which the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

3. Future Development

Prior to the issuance of the coastal development permit, the applicant shall record a deed restriction, in a form and content acceptable to the Executive Director, which provides that Coastal Development Permit 5-98-508 is for the approved development only and that any

future improvements or additions on the property, including, but not limited to, installation of hardscape improvements, grading, vegetation removal, landscaping and structural improvements not permitted in this permit, will require a coastal development permit or permit amendment from the Coastal Commission or its successor agency.

The document shall run with the land, binding all successors and assigns, and shall be recorded free of prior lines that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

4. Drainage and Irrigation Plan

Prior to the issuance of a coastal development permit the applicant shall submit, for the review and approval of the Executive Director, drainage and irrigation plans. The approved drainage plans shall show that rainwater runoff from the roof and residence is taken to the street.

No in-ground irrigation systems shall be allowed on the property, either front or rear. Temporary above ground irrigation for the purpose of establishing vegetation is allowed.

The approved development shall be constructed in compliance with the final 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.

5. Landscaping Plan

Prior to issuance of the coastal development permit, the applicant shall submit landscaping and bluff top erosion control plans, subject to the review and approval of the Executive Director, for any landscaped areas on the site. The plans shall incorporate the following criteria:

- (a) The applicant shall submit a list of plants to be placed in the front and rear yards. Planting shall be of native plant species indigenous to the area using accepted planting procedures, consistent with fire safety requirements. Such planting shall be adequate to provide 70 percent coverage within 1 year and shall be repeated, if necessary, to provide such coverage.
- (b) Landscaped areas in the rear yard not occupied by hardscape 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.

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Invasive, non-indigenous plant species which tend to supplant native species shall not be used.

- (c) 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.
- (d) No in-ground irrigation systems shall be installed on the site. Temporary above ground irrigation is allowed to establish plantings.

The approved development shall be constructed in compliance with the final 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.

6. Future Bluff Protective Works

Prior to the issuance of the coastal development permit, the applicant shall record a deed restriction in a form and content acceptable to the Executive Director, which shall provide that no bluff protective devices shall be permitted to protect ancillary improvements and no bluff protective devices shall be permitted for the principal residence unless the alternatives required below are demonstrated to be infeasible.

In the event any bluff protective work is proposed in the future, the applicant acknowledges that as a condition of filing an application for a coastal development permit, the applicant must provide the Commission or its successor agency with sufficient evidence enabling it to consider all alternatives to bluff protective works, including consideration of relocation of the improvements that are threatened or other remedial measures which do not include bluff stabilization devices.

The document shall run with the land binding all successors and assigns, and shall be recorded free and clear of prior liens and encumbrances which the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description

The proposed project consists of the construction of a 25 foot high, 6,600 square foot single-family residence with a three car garage and six parking spaces. No grading is proposed. The project is located on a vacant lot on a coastal bluff. San Clemente State Beach is located to the north and west of the project site (see Exhibit 1). The first public road is Avenida del Presidente, inland of the project site, which provides access to the Cyprus Shores private, gated community. The categorical exclusion order for the City of San Clemente does not include sites on coastal bluffs or coastal canyons. Therefore, development on the project site requires a coastal development permit. In addition, development located between the sea and the first public road cannot be exempt and requires a coastal development permit.

The proposed development is located in the Cyprus Shores private gated community on a coastal bluff in the southern portion of the City of San Clemente. The coastal bluffs in San Clemente are not subject to wave attack but are separated from the beach by the Orange County Transportation Authority railroad tracks and right of way. The railroad tracks have a rip-rap revetment which protects the tracks from erosion and wave overtopping.

Coastal development permit P3967 was the underlying subdivision approval for the subject site. Permit P3967 involved the subdivision of 61 acres into 227 lots and was approved by the regional Commission on September 22, 1978, appealed to the State Commission (A-491-78), and remanded back to the regional Commission where it was approved on February 22, 1979. The issues addressed in the subdivision staff report were preservation of planning options, recreation and visitor serving uses, public access, lower income housing, and new development. A grading plan was approved with the subdivision which permitted some fill to be placed on the bluff at the project site (see Exhibit 4). The grading plan also included blufftop setbacks (see Exhibits 4 and 5).

Prior Commission actions in the vicinity include coastal development permits 5-85-527 (3818 Vista Blanca), 5-86-751 (3812 Vista Blanca), 5-87-758 Administrative Calendar (Glover, 3826 Vista Blanca), 5-88-177 Administrative Calendar & G-5-93-254 (Arnold, 3820 Vista Blanca), 5-89-032 Administrative Calendar (Weeda, 3830 Vista Blanca), 5-94-243 Regular Calendar (Gilmour) and 5-98-300 Regular Calendar (Loughnane).

The special conditions of this staff report are similar to the special conditions required of CDPs 5-94-243 and 5-98-300.

B. Blufftop Stability

New blufftop development poses potential adverse impacts to the geologic stability of coastal bluffs, to the preservation of coastal visual resources, and to the stability of existing residential structures, both the applicant's and adjoining structures. Coastal bluffs in the City of San Clemente are composed of fractured bedding which is subject to block toppling and unconsolidated surface soils which are subject to sloughing, creep, and landsliding. The setback and stringline policies of the Commission were instituted as a means of limiting the encroachment of development seaward to the bluff edges on unstable bluffs and preventing the need for construction of revetments and other engineered structures to protect development on coastal bluffs, as per Section 30253 of the Coastal Act.

1. Coastal Act and LUP Policies

Section 30253 of the Coastal Act states:

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The Orange County Interpretive Guidelines adopted by the Commission contain the stringline policy, which states:

In a developed area where new construction is generally infilling and is otherwise consistent with Coastal Act policies, no part of a proposed new structure, including decks, should be built further onto a beach front than a line drawn between the nearest adjacent corners of the adjacent structures. Enclosed living space in the new unit should not extend farther seaward than a second line drawn between the most seaward portions of the nearest corner of the enclosed living space of the adjacent structure.

The Certified LUP contains policies limiting new development on coastal bluff faces to public staircases and policies establishing stringlines for purposes of limiting the seaward encroachment of development onto eroding coastal bluffs. Although the standard of review for projects in San Clemente is the Coastal Act, the policies of the Certified LUP are used as guidance. These policies include the following:

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Policy VII.13:

Development shall be concentrated on level areas (except on ridgelines and hilltops) and hillside roads shall be designed to follow natural contours. Grading, cutting, or filling that will alter landforms (e.g.; bluffs, cliffs, ravines) shall be discouraged except for compelling reasons of public safety. Any landform alteration proposed for reasons of public safety shall be minimized to the maximum extent feasible. ...

Policy VII.14 states:

Proposed development on blufftop lots shall be set back at least 25 feet from the bluff edge, or set back in accordance with a stringline drawn between the nearest corners of adjacent structures on either side of the development. This minimum setback may be altered to require greater setbacks when required or recommended as a result of a geotechnical review.

Policy VII.16 states:

In a developed area where new construction is generally infill, no part of a proposed new structure, including decks, shall be built further onto a beachfront than a line drawn between the nearest adjacent corners of the adjacent structures. Enclosed living space in the new unit shall not extend further seaward than a second line drawn between the most seaward portions of the nearest corner of the enclosed living space of the adjacent structures.

Policy VII.17 of the LUP also limits the type of development allowed on bluff faces. It states:

New permanent structures shall not be permitted on a bluff face, except for engineered staircases or accessways to provide public beach access where no feasible alternative means of public access exists.

Both the stringline policy and the 25 foot bluff setback policy could apply in this situation because the applicant is proposing infill development between existing single-family residences on a linear stretch of bluff (see Exhibit 3.) Plans submitted by the applicant (Exhibits 3 and 5) show that the applicant conforms with the 25 foot top-of-bluff setback and the structural stringline. Hardscape development in the rear yard will be set back 15 feet. The standard that staff has been using on coastal bluffs for hardscape setbacks is 10 feet.

2. Bluff Stability and Erosion

This section includes a general discussion of the causes of bluff erosion in the southern California region, particularly San Clemente, and specific bluff erosion at the project site.

a. Generalized Findings on Bluff Erosion

In general, bluff erosion is caused by environmental factors and impacts caused by man. Environmental factors include seismicity, wave attack, drying and wetting of soils, wind erosion, salt spray erosion, rodent burrowing, percolation of rain water, poorly structured bedding, and soils conducive to erosion. Factors attributed to man include bluff oversteepening from cutting roads and railroad tracks, irrigation, over-watering, building too close to the bluff edge, improper site drainage, use of impermeable surfaces to increase runoff, use of water-dependent vegetation, pedestrian or vehicular movement across the bluff top and toe, and breaks in water or sewage lines. In addition to runoff percolating at the bluff top site, increased residential development inland also leads to increased water percolation through the bluff.

There are numerous articles about seacliff retreat and bluff erosion in coastal literature. Much of this literature pertains to bluffs subject to wave attack and to large-scale landsliding. Antony R. Orme wrote a paper entitled "Mass Movement and Seacliff Retreat along the Southern California Coast" published in the Bulletin of the Southern Academy of Science in 1991. He states that there are other factors in bluff erosion besides wave attack, including weathering of coastal cliffs by salt spray evaporation. The coastal bluffs at the project location are subject to wind-borne salt spray from the ocean.

In conclusion Orme states:

Seacliff retreat is a natural process which, if unheeded, threatens human life and livelihood, and which can be aggravated by human activity. It will continue to occur and therefore responsible coastal management must require that human activity be set back an appropriate distance from cliff tops and diverted from unstable and potentially unstable terrain.

According to Orme a major source of bluff instability in the Los Angeles area was the construction of the Pacific Coast Highway and the railroad. Like Los Angeles, the coastal bluffs in the City of San Clemente were disrupted by the construction of the Pacific Coast Highway and the railroad. Wherever the railroad tracks removed the toe of a coastal bluff, that coastal bluff became unstable. The bluffs in the Cypress Shores private community are separated from the ocean by the railroad. However, the railroad construction activity happened early in the century and although the coastal bluffs in San Clemente were impacted by the railroad construction, they are still natural coastal bluff landforms up to 100 feet high. These coastal bluffs would be eroding with or without the railroad construction.

The coastal bluffs are natural landforms and have been removed from wave attack since the early 1900's, when the railroad was constructed. The Marblehead focused EIR states:

In the case of the Marblehead site, the geomorphic process responsible for bluff erosion is no longer wave action. El Camino Real has been constructed along the base of the bluff, with the AT&SF railroad and housing also having been built between the road and the shoreline. Instead of erosion by wave action, the bluffs continue to erode partly due to oversteepening that resulted from construction of the railroad and El Camino Real.

The Marblehead bluffs are located in the northern part of San Clemente but the composition of the coastal bluffs in San Clemente is similar. There are railroad tracks located at the base of the coastal bluffs at the project location. The tracks contribute to coastal bluff erosion by not allowing talus and landslide materials to accumulate and by causing vibration in the bluffs due to passing trains.

There are two recent, major coastal bluff stabilization projects in the City of San Clemente (La Ventana and Colony Cove) where residences on coastal bluffs have either been destroyed or endangered by bluff failure [CDPs 5-93-243 (San Clemente), A5-DPT-93-275 (Dana Point)]. Other residences on coastal bluffs in San Clemente have received permits to install caissons or other foundation protection measures (CDPs 5-93-181 (Driftwood Bluffs), 5-93-307 (Ackerly), and 5-93-143 (Mertz & Erwin) because existing decks or residences were threatened by bluff erosion.

Landsliding of coastal bluffs below La Ventana St. in the City of Dana Point resulted in the destruction of five homes. Landsliding of the bluffs below Colony Cove resulted in the undermining of terrace walls and patio structures. On page 9 of the La Ventana geotechnical report drainage is discussed. The primary cause of the La Ventana Landslide was water infiltration into the bluff along a deep seated slope failure line. The report states that water seepage onto the bluff face was longstanding and that landscaping on the rear yards of some bluff top homes may have contributed to the accumulation of water in the slopes.

The Commission has received many application requests to resolve geotechnical problems and protect existing structures on coastal bluffs and coastal canyons in San Clemente (CDPs 5-93-181 and 5-93-143 among others) which were caused by inadequate drainage systems, i.e., broken irrigation lines, overwatering, directing uncontrolled runoff to the bluff slopes, and differential settling due to improperly compacted fill.

An emergency permit was issued in 1990 for massive grading of unstable bluffs at the Marblehead site. Landsliding in 1990 had caused repeated closures of the Pacific Coast Highway at the base of the bluffs. Unlike the La Ventana and Colony Cove sites, there was no development on the Marblehead bluffs. The Marblehead Bluffs erosion problem was created in part by the construction of the railroad and the Pacific Coast Highway which resulted in oversteepening of the bluffs. The Marblehead geological report by Zeiser Kling Consultants, Inc., discusses the process of bluff retreat:

The oversteepened bluffs fail due to erosion, such as wave action along the base of the bluff, and due to other environmental factors such as water saturation during periods of abundant rainfall. Fallen debris accumulates at the foot of the slopes where it forms an unstable talus pile. Secondary failures occur as the talus erodes. As more failures occur, the bluff retreats landward. In its mature state, the landform no longer has the appearance of a bluff. The talus pile grows into a large "apron" that buries the bluffs, but continues to fail intermittently as it seeks its angle of repose. The landform may become temporarily stable when the talus apron is large enough to cover the bluff face, protecting the otherwise steep slopes from exposure and possibly buttressing the base of the slopes.

The bluffs at the project site on Vista Blanca do not have adequate space at the toe of the slope to allow for talus deposition because of the close proximity of the railroad tracks, which must be periodically cleared of debris to ensure the safe passage of trains. This process has been going on since the construction of the railroad in the early part of the century, long before houses were contemplated at this site.

The Marblehead and other geotechnical reports state that the process of coastal bluff erosion can be slowed by landscaping, setting buildings back from the blufftop and constructing impact barriers at the base of the bluff, or by grading and terracing the slope.

The Colony Cove, La Ventana, and Marblehead bluff stabilization projects are located several miles from the project site. However, there are bluff stability problems along the entire stretch of San Clemente coastal bluffs as evidenced by applications for foundation support systems for residences on coastal bluffs and by foundation support systems built previous to the Coastal Act. Much of the development on coastal bluffs prior to the Coastal Act was constructed close to the bluff top edge and later required support systems for failing patios, decks and other improvements.

In addition to documentation of the instability of coastal bluffs in San Clemente, Gerald G. Kuhn published an article entitled "Greatly Accelerated Man-Induced Coastal Erosion and New Sources of Beach Sand, San Onofre State Park and Camp Pendleton, Northern San Diego County, California" in which it is noted that 80% of the cliffs between the San Onofre Nuclear Power Plant and Target Canyon have experienced landslides. Camp Pendleton is located approximately one-half mile south of the project site.

b. Site Specific Geotechnical Data

Staff conducted a site visit to examine the coastal bluffs fronting the residential lots off of Vista Blanca. The bluffs at this location showed many signs of erosion. There were large talus debris cones at the base of the bluffs in the vicinity of the proposed project. Other areas of the bluffs exhibit signs of block falls, a large block slide, and soil slip

areas. In general, these signs of instability were more pronounced on lots with existing residences.

From San Clemente State Beach to the San Diego border the coastal bluffs vary in height and stability. At San Clemente State Beach the bluffs are 80-100 feet high and very unstable. The bluffs decrease in height towards Cyprus Shores, to approximately 20 feet high, and then begin to increase in height again towards the project site. The bluffs in the older portion of Cyprus Shores have been totally incorporated into the residential building and landscaping plans. However, residences on the higher bluffs adjacent to San Clemente State Beach and the project site are built on eroding bluffs and in one case a perimeter wall is being undermined. These bluffs contain numerous block falls, small landslides and soil failures.

Cypress Cove was subdivided pursuant to Coastal Development Permit No. A-491-78. Access to the shoreline through the parcel is not possible because the subject site is separated from the public beach seaward of the development by bluffs and the Orange County Transportation Authority (OCTA) railroad tracks. As a condition of permit no. A-491-78 an offer of dedication for a 6-acre open space park immediately adjacent to San Clemente State Park was required.

There are several coastal development permits issued for residences on coastal bluffs in the immediate vicinity. Coastal development permit 5-86-751 (Johnson) at 3822 Vista Blanca was approved as a waiver. The plans submitted to the Executive Director show that all development was set back 25 feet from the top of slope. The waiver states that the proposed development is set back 25 feet from the bluff edge. The residence at 3818 Vista Blanca was issued an administrative permit (with no special conditions) for development of a single-family residence. The plans submitted and approved by staff for 5-85-527 (Johnson) show that the residence is set back 45 feet from the bluff top. No improvements seaward of this 45 foot setback were permitted.

The residence at 3820 Vista Blanca was approved in 1988 (5-88-177) with special conditions requiring revised plans showing that the swimming pool conforms with the 25 foot bluff top setback. In 1993, the owner of 3820 Vista Blanca applied for an emergency permit to place a caisson wall inland of the bluff top to prevent bluff erosion which was placing the pool at risk. The emergency permit G5-93-254 was approved. Coastal development permits 5-94-243 (Gilmour) and 5-98-300 (Loughnane) were approved by the Commission on the regular calendar. CDP 5-94-243 was approved with the following special conditions: assumption of risk, future bluff top protective works, landscaping plan, future development, irrigation and geological recommendations.

The applicant has submitted a geotechnical report prepared by Peter and Associates dated March 12, 1999. The site was rough graded in 1980 according to recommendations contained in a geotechnical report prepared by Pacific Soils Engineering, Inc. in 1980. The 1999 Peter and Associates report is an update on the

site conditions, including a site reconnaissance, review of previous reports, and preparation of a geotechnical report.

The previous geotechnical consultants (Pacific Soils Engineering, Inc. November 4, 1980 Geotechnical Report) delineated a building setback line for future residences on the blufftop lots in this subdivision. The setback line is indicated on the plans as a "restricted use area" (see Exhibit 3 and 4). This exhibit shows that the seaward line of the proposed residence does not encroach into the restricted use area.

Exhibit 5 is a map of the site topography, concentrating on the coastal bluff. Exhibits 5 and 6 are cross-sections of the site showing the restricted use area and the bluff setback line. The restricted use area is that area seaward of the geologic setback line. Exhibit 4 shows that during the original grading scheme some fill was placed in what was once a drainage pathway down the bluff. The fact that the bluff top includes this drainage feature, as opposed to a straight bluff drop, gives the site an irregular configuration (see Exhibit 5, section B-B). The proposed improvements beyond the building setback line are shown on Exhibit 3. The applicant is proposing a 15 foot setback for hardscape improvements (walkways, patios, etc.) on the bluff top. The Commission has routinely required a 10 foot setback for hardscape development. The standard setback for the seaward extent of the primary residence is 25 feet in both the certified LUP and the Interpretive Guidelines.

In 1978 Stickel & Associates prepared a geologic report for the Elmore Ranch subdivision, of which this lot is a part. The report included a discussion of bluff stability.

A minimum setback from the top of the bluff edge calculated by extending a plane from the base of bedrock at the toe of the bluff (not the edge of the talus or colluvium) with a 2:1 slope should be maintained for any structures for human occupancy and for appurtenant structures which are of economic importance.

The initial bluff setback line in relation to the property boundary is shown on Exhibits 4 & 5. The setback line in relation to the proposed residence and improvements is shown on Exhibit 3.

The 1980 subdivision final soils engineering and grading report discusses development in relation to the setback line. It states:

Other appurtenant structures within the setback area should be located and adequately designed to reduce the effects of surcharging the bluff faces. Drainage should be maintained such that all surface waters are directed to the street areas.

The 1999 geotechnical report included an assessment as to the adequacy of the proposed building setback line. The consultants conducted a new slope stability analysis to verify the adequacy of the previously recommended geologic setback line. The

consultants conclude that the analysis shows that the setback line as proposed is adequate. The geotechnical report includes several recommendations, including:

1. construction of the proposed residence is feasible provided the geotechnical report recommendations are followed;
2. living structures should not be located within the setback area;
3. recommendations for slabs and foundations, and ;
4. landscaping and site drainage.

The project is located adjacent to San Clemente State Beach, a highly scenic popular beach area. The conceptual landscape plans submitted by the applicant show that the residential structure is located at least 65 feet from the identified "edge of bluff", that no hardscape is located within 15 feet from the edge of bluff and that no development is located within the restricted use area.

3. Conclusions and Determination of Consistency

The coastal bluffs at this location are eroding. Site photographs show that an existing blufftop glass topped wall in the vicinity of the project is currently being undermined by bluff erosion as well as a fence footing at the bluff edge. The bluff face supports very little vegetation, which means that more surface area is open to erosion from the wind, salt spray, exposure to the sun, and wetting and drying. The absence of vegetation means that there are no root systems adding cohesion to the soils. In addition, the AT&SF railroad tracks are located at the base of the bluffs, indicating that there is little room for the coastal bluffs to establish talus cones, which is the natural way for the bluff to stabilize itself.

The proposed development is consistent with the recommended 25 foot blufftop setback and the 10 foot hardscape setback. However, as has been noted in this staff report bluff failures have been attributed to over-watering, broken irrigation lines, broken water lines, and inadequate drainage systems. These types of failures in some instances have created the need for blufftop protective devices, such as caisson and grade beam systems to protect existing structures.

To meet the requirements of the Coastal Act, bluff and cliff developments must be sited and designed to assure stability and structural integrity for their expected economic lifespans while minimizing alteration of natural landforms. Bluff and cliff developments (including related storm runoff, foot traffic, site preparation, construction activity, irrigation, waste water disposal and other activities and facilities accompanying such development) must not be allowed to create or contribute significantly to problems of erosion or geologic instability on the site or on surrounding geologically hazardous

areas which would then require stabilization measures such as caissons, pilings or bluff re-structuring.

There has been one instance (3820 Vista Blanca) already where buried caissons have been permitted to protect the swimming pool of a residence in the vicinity of the project site. The rationale for this permit was to protect the main structure and associated structures, not rear yard improvements such as patios and walls. In fact, pictures of the site show that low bluff top perimeter walls which have not been permitted pursuant to a coastal development permit but which exist in this area are currently being undermined by bluff erosion.

The geologic reports for blufftop development recommend setbacks for fixed residential structures and recommendations for other blufftop improvements. As was stated in the section on generalized bluff erosion, there is ample evidence in the City of San Clemente that the 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, necessitating protective devices.

The geologic reports generally include recommendations for landscaping but unlike other engineering specifications, these recommendations are not reviewed and implemented by the consulting geologist/engineer. For instance, Peter and Associates recommends:

To minimize differential earth movement (such as heaving and shrinkage due to the change in moisture content of subgrade soils) which may cause distress to a structural object such as a house wall or an exterior slab, moisture content of the soils surrounding the structure should be kept as relatively constant as possible. Unlined flower beds, planters, and lawn should not be constructed against the perimeter of a structure. If such landscaping (against the perimeter of the structure) is planned, it should be properly drained and provided with an underground moisture barrier in order to prevent water from seeping into foundation areas or beneath slabs.

Irrigation of yard landscaping should be kept to a minimum required to support plant life.

Water should not be allowed to pond in pad areas or overtop and flow down bluff. An earthen berm should be built along the top of bluff.

In general, the site should be graded to ensure surface water flows away from all improvement structures, away from the top of bluff, and into a drainage system for outletting into the street in front.

It is often the case that engineering recommendations are conflicting. For instance, pad areas and graded slopes are generally required to be compacted to 90%. The consulting engineers will then include recommendations concerning keeping drainage off the slope and landscaping bare areas to prevent erosion. However, planting on soil which has first been completely disrupted and then compacted is very difficult and often a prescription for failure.

Development on blufftop lots in San Clemente are required to submit landscape plans, consisting primarily of native plants, for the review and approval of the Executive Director, in order to be found in conformance with Section 30253 of the Coastal Act. In this instance the applicant has not submitted a drainage, irrigation and landscape plan.

a. Special Conditions and Coastal Act Consistency

The Commission requires applicants on blufftop lots to comply with certain specific special conditions to bring the project into compliance with the resource protection policies of the Coastal Act. In this case these special conditions include: conformance with geotechnical recommendations, drainage and irrigation, landscaping, assumption of risk, future bluff protective measures, and future development.

Special condition 1 requires the applicant to submit foundation plans, reviewed, signed and stamped by a geotechnical consultant. The geotechnical report includes specific recommendations for foundations, footings, etc. which will ensure the stability of the proposed residential structure. Only as conditioned does the Commission find that the proposed development conforms with section 30253 of the Coastal Act.

Special Condition 2 is an assumption of risk condition. Although adherence to the required bluff top setback will minimize the risk of damage from erosion, the risk is not eliminated entirely. Therefore, the standard waiver of liability condition has been attached through Special Condition No. 2. By this means, the applicant is notified that the residence is being built in an area that is potentially subject to 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. Finally, recordation of the condition ensures that future owners of the property will be informed of the risks and the Commission's immunity for liability.

Special Condition 6 of the permit requires the applicant to record a deed restriction against the property placing the applicant and their successors in interest on notice that no bluff protective devices shall be permitted unless alternatives (described in the condition) are demonstrated to be infeasible. The development could not be approved if it included provision for a bluff protective device. Instead, the Commission would require the applicant to set the development back landward. The condition states that in the event any bluff protective work is proposed in the future, the applicant acknowledges that as a condition of filing an application for a coastal development permit, the applicant must provide the Commission or its successor agency with

sufficient evidence enabling it to consider all alternatives to bluff protective works, including consideration of relocation of portions of the residence that are threatened, structural underpinning, or other remedial measures identified to stabilize the residence that do not include bluff or shoreline stabilization devices.

Whereas special condition 6 applies to bluff protective measures, special condition 3 is a future development deed restriction which states that any future improvements or additions on the property, including hardscape improvements, grading, landscaping, vegetation removal and structural improvements, require a coastal development permit from the Commission or its successor agency. This condition ensures that development on coastal bluffs which may affect the stability of the bluffs and residential structures or may require future bluff protective structures, require a coastal development permit.

Special condition 4 requires the applicant to submit a drainage and irrigation plan for the review and approval of the Executive Director. In keeping with the geotechnical recommendations, this condition requires that all drainage be taken to the street and that irrigation be minimized. In recent actions on unstable bluffs (Ferber, 5-98-469) 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.

Special Condition 5 requires the applicant to submit a landscaping plan consisting primarily of native, drought-tolerant plants and no in-ground irrigation systems. The conceptual landscape plan submitted with the application does not include details on site drainage or a proposed plant list. 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: require watering originally (1-3 years) but not after they become established, 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. Bluff-top plants shall consist entirely of native, drought-tolerant plants.

Section 30253 of the Coastal Act states that new development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard, and 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 (emphasis added).

Only as conditioned for conformance with geotechnical recommendations, assumption of risk, future blufftop protective works, drainage and irrigation, landscaping and a future improvements condition does the Commission find the proposed development in conformance with section 30253 of the Coastal Act.

C. Scenic Resources

Section 30251 of the Coastal Act pertains to visual resources. It states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic area 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.

The proposed project is located on a blufftop lot in the Cypress Shores private gated community adjacent to the popular San Clemente State Beach. The certified LUP states that San Clemente State Beach is "one of the most heavily utilized facilities in the State Parks system, generating two million visitors annually. The facilities at San Clemente State Beach include 210 parking spaces, 157 camping sites, 72 hookups for campers, bathrooms and showers. In addition, the LUP notes that a 7.5 acre lot to the south which was given to the State Parks as a condition of a subdivision permit is rugged canyon terrain and will be kept in its natural state.

The project is located adjacent to San Clemente State Beach, a highly scenic popular beach area. The conceptual landscape plans submitted by the applicant show that the residential structure is located at least 65 feet from the identified "edge of bluff", that any hardscape is located at least 25 feet from the edge of bluff and that no development is located within the restricted use area. The applicant is complying with the 25 foot blufftop setback for enclosed living structures and a 15 foot setback from the top of bluff for hardscape improvements, i.e., patios, etc.

In order to ensure that the visual appearance of the bluff is protected, the applicant is being conditioned to comply with a landscape condition, future development deed restriction and a future bluff protective works special condition. The future development deed restriction ensures that improvements are not made at the blufftop which could affect the visual appearance of the coastal bluff or affect the stability of the bluff. The future bluff protective works special condition ensures that an alternatives analysis has to be provided with a permit application for bluff protective measures. The landscape condition requires that the applicant install native, drought-tolerant plants along the

bluff-top and rear yard and that only temporary irrigation to establish the plants is permitted. These native plants will be compatible with the native plants already in existence on the bluff face and toe.

Therefore, the Commission finds that as conditioned for the landscaping condition, future development deed restriction and the future bluff protective works deed restriction, the project is consistent with the visual resource protection policies of Section 30251 of the Coastal Act.

D. Access and Recreation

Section 30212(a)(2) of the Coastal Act states:

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

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby, or,
- (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Section 30604(C) of the Coastal Act requires that permit applications between the nearest public road and the shoreline of any body of water within the coastal zone shall include a public access and recreation finding. The proposed development is located between the sea and the first public road. Access to the Pacific Ocean and sandy beach is immediately adjacent to the proposed development via San Clemente State Beach. The proposed single-family residence is infill development in a Commission-approved subdivision. The subdivision is a private gated-community and there is no public access to the coastal bluffs at this site. Situated at the toe of the coastal bluff is the railroad right-of-way. The project site does not provide access to the ocean.

A public access dedication can be required pursuant to section 30212 only if it can be shown that the development either individually or cumulatively directly impacts physical public access, i.e., impacts historic public use, or impacts or precludes use of Public Trust Lands. In this situation, the development is located between the sea and the first public road, however, it does not impact access either directly or indirectly to the ocean. The project site will remain a single-family residence use and will not result in an intensification of use.

The development will not create adverse impacts, either individually or cumulatively on public access and will not block public access from the first public road to the shore. Therefore, the Commission finds that adequate access exists nearby and the proposed development is consistent with Section 30212(a)(2) of the Coastal Act.

E. Local Coastal Program

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

The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998 the Commission certified with suggested modifications the IP portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan regarding public access. Therefore, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program for San Clemente that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

F. Consistency with the California Environmental Quality Act (CEQA).

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.

The proposed project has been conditioned in order to be found consistent with the geologic hazards and visual resource protection policies of the Coastal Act. Mitigation measures; special conditions requiring, conformance with geotechnical recommendations, assumption of risk, future bluff protective works deed restriction, drainage and irrigation, landscaping and future development deed restriction, will minimize all adverse effects. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified effects, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

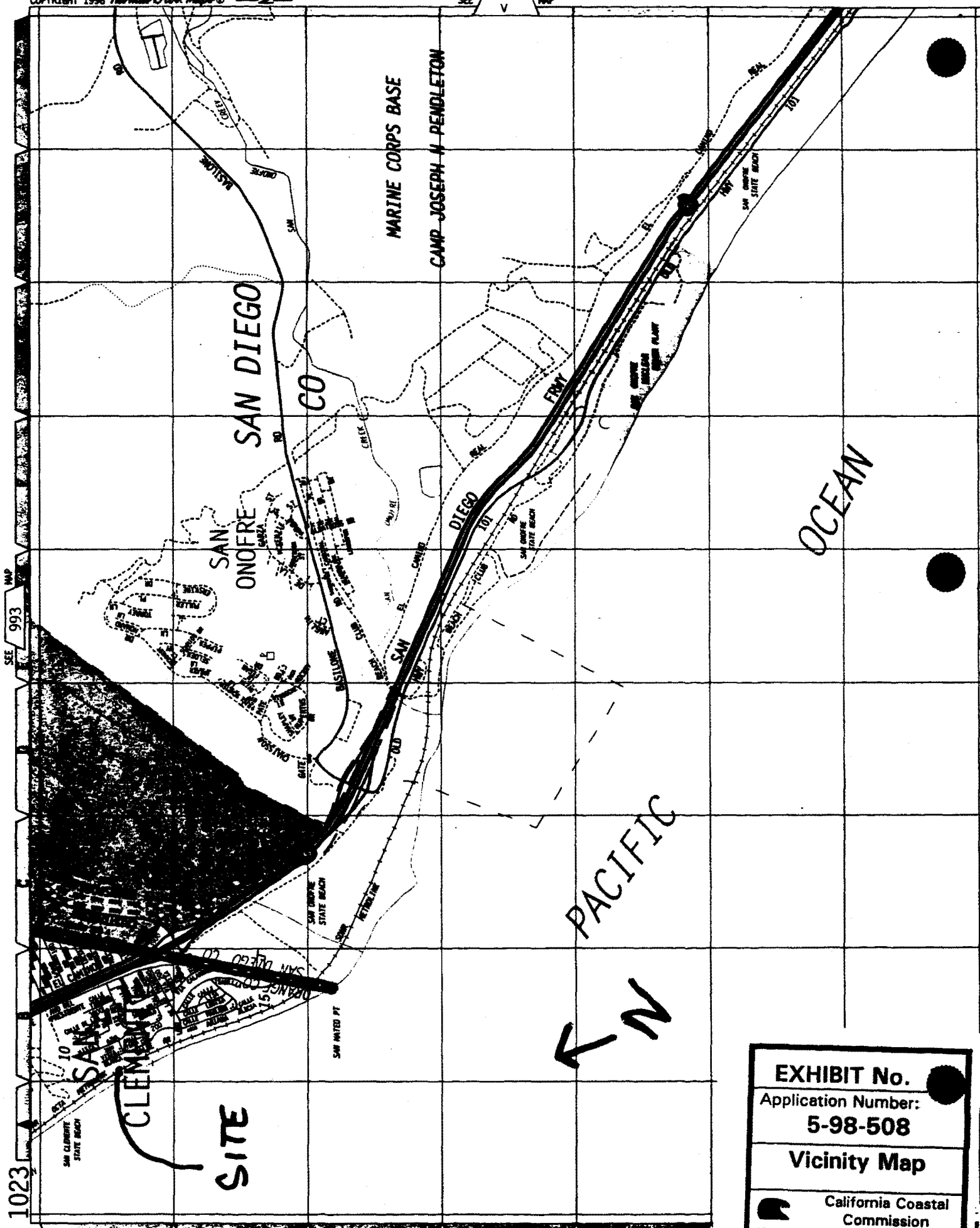
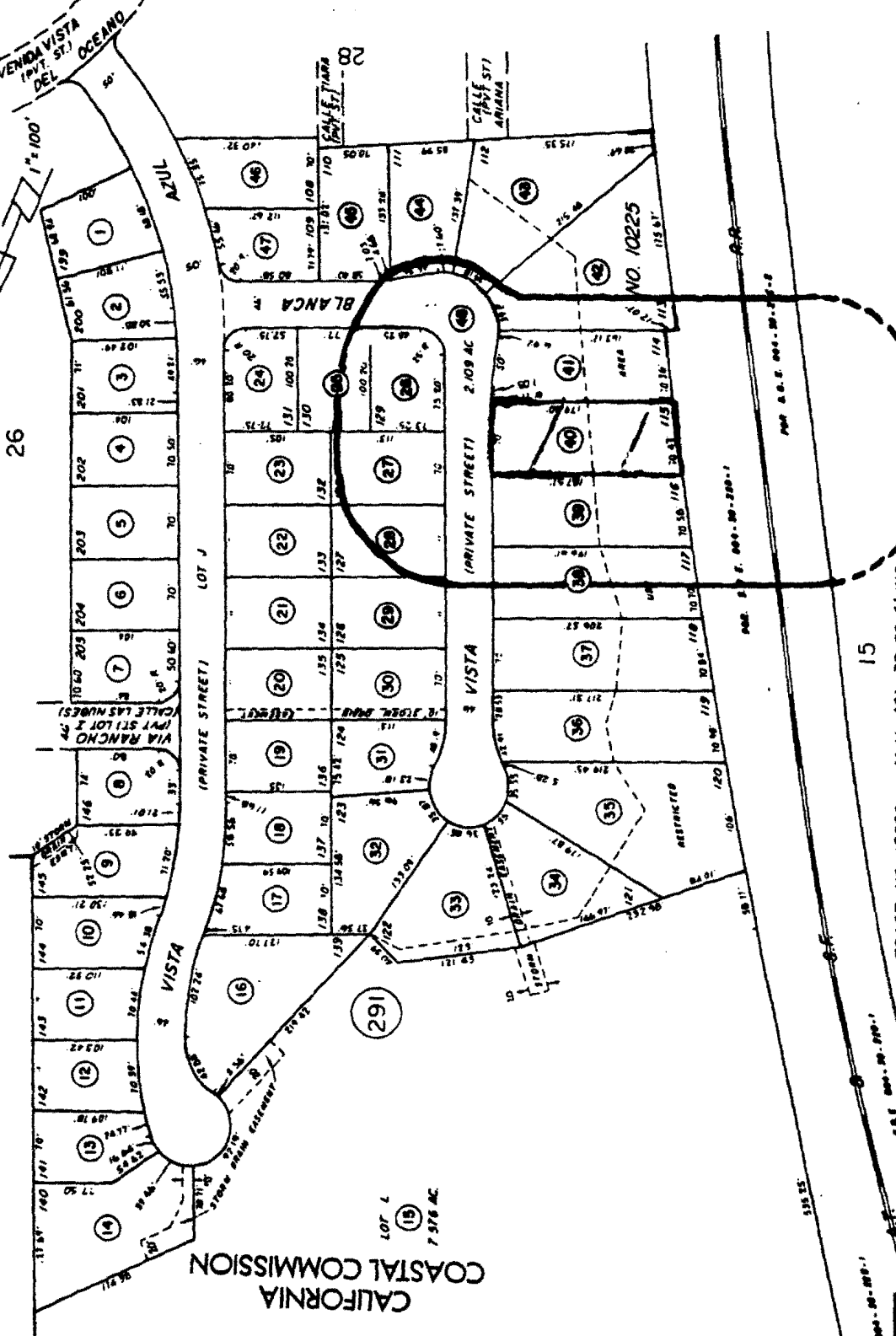


EXHIBIT No.
Application Number: 5-98-508
Vicinity Map
California Coastal Commission




ASSESSOR'S MAP
BOOK 60 PAGE 29
COUNTY OF ORANGE

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

TRACT NO. 10225 M.M. 461-30 TO 41 INC.

MARCH 1980

RECEIVED
South Coast Region
DEC 18 1998
CALIFORNIA
COASTAL COMMISSION

EXHIBIT No. 2
Application Number: 5-98-508
Assessor's Map
 California Coastal Commission

2 ↑

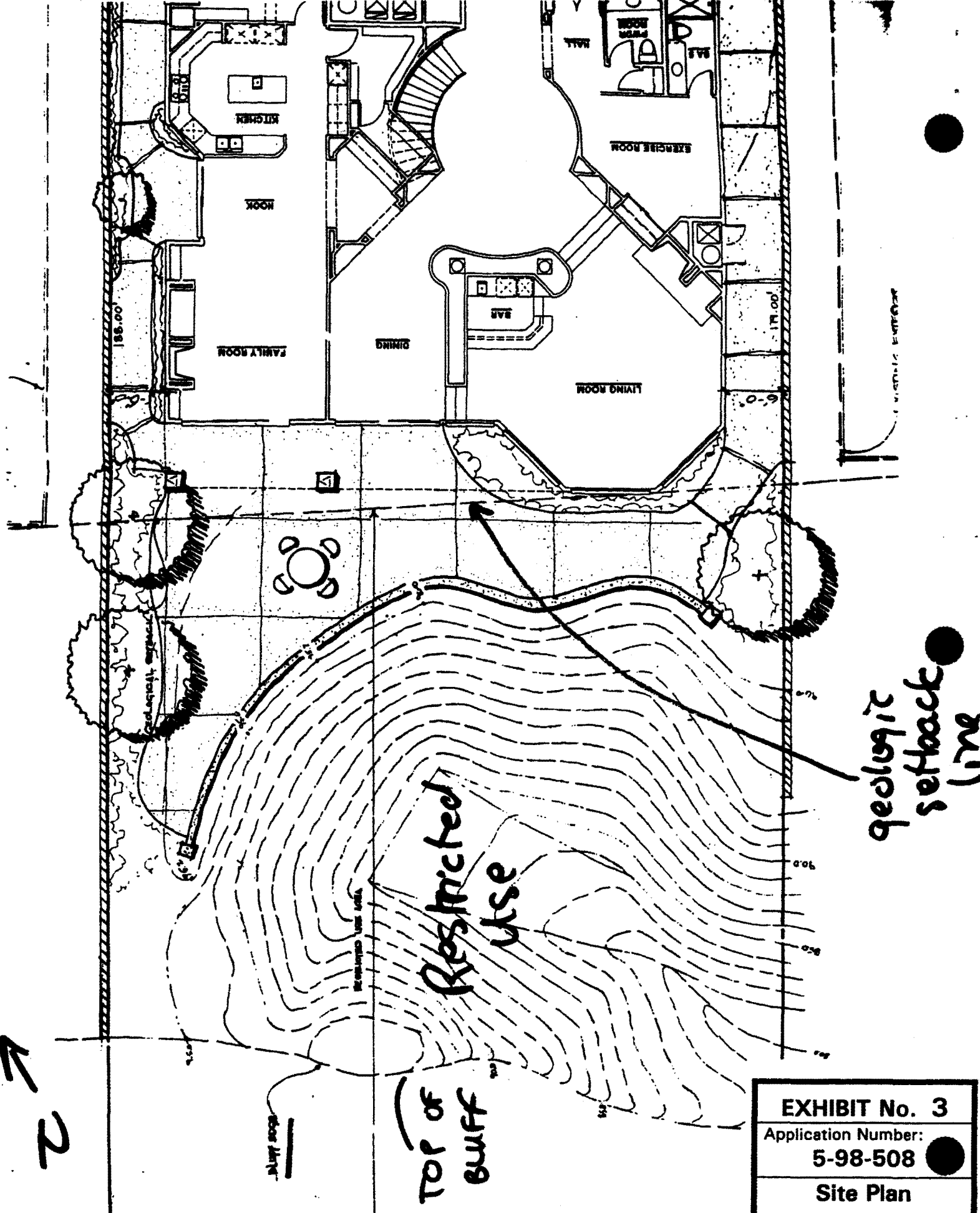


EXHIBIT No. 3
Application Number: 5-98-508
Site Plan
California Coastal Commission

PREVIOUS GEOTECHNICAL MAP

BASE = PACIFIC SOLLS - 11-04-58

3.5

TP-5

SITE

approx.
2:1 fill section

115

116

Geotechnical setback

approx.
2:1 fill section

117

118

119

TP-8

setback without fill section

120

QSW

SW

RESTRICTED USE

EXHIBIT No. 4

Application Number:

5-98-508

Orig. Grading

California Coastal
Commission



base: from Pacific Soils, 11-04-80

**California Coastal
Commission**

Setback line

ACCEPTABLE SETBACK LINE

Te captures electrons over
defect sites

1511

WISLA WILANCA

TOPOGRAPHIC SURVEY MAP

FIGURE 3

**California Coastal
Commission**

base: Topographic Survey.

