

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA

SOUTH CALIFORNIA ST., SUITE 200

VENTURA, CA 93001

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Staff: J. Johnson
Staff Report: 6/22/00
Hearing Date: 7/13/00
Commission Action:

**RECORD PACKET COPY****STAFF REPORT: REGULAR CALENDAR****APPLICATION NO.:** 4-00-081**APPLICANT:** Lizabeth Stevens**PROJECT LOCATION:** 26110 Pacific Coast Highway, City of Malibu; Los Angeles County.

PROJECT DESCRIPTION: Replace existing collapsed scour blanket along north slope of property and replace two sets of stairs to beach. The project also includes an offer to dedicate a lateral public access easement over the southern beachfront portion of the lot as measured from the drip line of the existing deck to the mean high tide.

Lot area: 6,100 sq. ft.
Blanket coverage: 1,200 sq. ft.
Building coverage: 1,930 sq. ft.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with six (6) special conditions addressing the applicant's offer to dedicate lateral access, sign restriction, limited term for the shoreline protective structure, assumption of risk, waiver of liability and indemnity, and shoreline protection, plans conforming to engineer's recommendations, and construction responsibilities and debris removal. The applicant is requesting approval to replace an existing collapsed scour blanket along an embankment along the north property boundary and replace two sets of stairs to beach. The scour blanket is located on a slope at the back of the beach landward of a two story residential duplex beneath two garages. The duplex and garages extend across the sandy beach supported on pilings. The scour blanket is located about 60 feet landward of the seaward edge of the duplex building. The applicant also proposes to replace two sets of damaged stairs to the beach and voluntarily offers to dedicate a lateral public access easement over the southern portion of the lot. The applicant has demonstrated the need for the replacement shoreline protective device to protect the existing septic system, timber pilings supporting the garage and a vertical timber pole wall that retains the driveway. The proposed project as conditioned is consistent with the policies of the Coastal Act.

LOCAL APPROVALS RECEIVED: Approval in Concept, City of Malibu Planning Department, dated 11/22/99, Fire Department Review Referral Sheet, City of Malibu, dated 11/24/99, Biology Review Referral Sheet, City of Malibu, dated 1/7/00.

SUBSTANTIVE FILE DOCUMENTS: Coastal Engineering Report by David Weiss Structural Engineer & Associates dated November 19, 1999; Geologic Site Inspection by Donald Kowalewsky, dated November 17, 1997; State Lands Commission letter dated January 26, 2000 from Robert Lynch, Chief, Division of Land Management; Coastal Permit Number 4-99-268, Geffen; Coastal Permit Number 4-00-017, Greene, Certified Malibu/Santa Monica Mountains Area Land Use Plan, Los Angeles County, Army Corps of Engineers, Los Angeles District, Reconnaissance Study of Malibu Coast, 1994, Letter dated February 25, 1991 to Lesley Ewing, Coastal Commission staff from Dr. Douglas Inman, Sea Level Variations for the United States 1855 – 1986, Lyles, Hickman, and Debaugh, Rockville, MD National Ocean Service, Confronting Climate Change in California, Field et. al. Union of Concerned Scientists and the Ecological Society of America.

I. STAFF RECOMMENDATION:

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-00-081 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

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

I. RESOLUTION TO APPROVE THE PERMIT:

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

II. Standard Conditions.

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.
4. 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.
5. 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. Offer to Dedicate Lateral Public Access

In order to implement the applicant's proposal of an offer to dedicate an easement for lateral public access and passive recreational use along the shoreline as part of this project, the applicant agrees to complete the following prior to issuance of the permit: the landowner shall execute and record a document, in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to a public agency or private association approved by the Executive Director an easement for lateral public access and passive recreational use along the shoreline. The document shall provide that the offer of dedication shall not be used or construed to allow anyone, prior to acceptance of the offer, to interfere with any rights of public access acquired through use which may exist on the property. Such easement shall be located along the entire width of the property from the ambulatory mean high tide line landward to the dripline of the existing deck, as identified on the site plan prepared by David Weiss, dated 6/10/99 (Exhibit 6).

The document shall be recorded free of prior liens which the Executive Director determines may affect the interest being conveyed, and free of any other encumbrances which may affect said interest. The offer shall run with the land in favor of the People of the State of California, binding all successors and assignees, and shall

be irrevocable for a period of 21 years, such period running from the date of recording. The recording document shall include legal descriptions of both the applicant's entire parcel and the easement area. 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.

2. Sign Restriction

No signs shall be posted on the property subject to this permit which (a) explicitly or implicitly indicate that the portion of the beach on the subject site (Assessor's Parcel Number 4459-021-005), located seaward of the duplex and decks identified in application number 4-00-081 is private or (b) contain similar messages that attempt to prohibit public use of this portion of the beach. In no instance shall signs be posted which read "*Private Beach*" or "*Private Property*." In order to effectuate the above prohibitions, the permittee/landowner(s) is required to submit the content of any proposed signs to the Executive Director for review and approval prior to posting.

3. Limited Term for Shoreline Protective Structure: Deed Restriction

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant as landowner shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide that:

- A. The applicant acknowledges that the purpose of the replacement shoreline protective device authorized by this permit is to protect the onsite septic system, vertical timber pole wall that retains the driveway, and timber poles driven into the slope supporting the garage structure on site and that no shoreline protective device is required to protect the existing residential duplex structure. If the proposed septic system or garage is replaced or abandoned for any reason (including the installation of a new sewer system along Pacific Coast Highway) then a new coastal development permit for the shoreline protective device authorized by Coastal Development Permit 4-00-081 shall be required. If a new coastal development permit for the shoreline protective device is not obtained in the event of replacement or abandonment of the septic system or garage, then the shoreline protective device authorized by this permit shall be removed.
- B. The document 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 Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

4. Assumption of Risk, Waiver of Liability and Indemnity, and Shoreline Protection

- A. By acceptance of this permit, the applicant acknowledges and agrees to the following:
1. The applicant acknowledges and agrees that the site may be subject to hazards from severe ground shaking, liquefaction, tsunami, storm waves, erosion, flooding, and wildfire.
 2. The applicant acknowledges and agrees 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.
 3. The applicant unconditionally waives any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards.
 4. The applicant agrees 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.
 5. No future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protective device approved pursuant to Coastal Development Permit 4-00-081, as shown on Exhibits 3 and 4, shall be undertaken if such activity extends the seaward footprint of the subject shoreline protective device. By acceptance of this permit, the applicant hereby waives, on behalf of itself and all successors and assigns, any rights to such activity 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 incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicant's entire parcel and an exhibit showing the location of the shoreline protective device approved by this permit. 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. Plans Conforming to Engineers' Recommendations

All recommendations contained in the report titled; Coastal Engineering Report, prepared by David C. Weiss, Structural Engineer & Associates, Inc. shall be

incorporated into all final design and construction plans including recommendations concerning project design base and top, reinforcement bars, and rock velocity reducers, that must be reviewed and approved by the consultant prior to commencement of development. Prior to issuance of the coastal development permit, the applicant shall submit evidence to the Executive Director of the consultant's review and approval of all final design and construction plans.

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

6. Construction Responsibilities and Debris Removal

The applicants shall, by accepting this permit, agree that: a) no stockpiling of dirt shall occur on the beach; b) all disturbed areas shall be properly covered, sand-bagged, and ditched to prevent runoff and siltation; c) measures to control erosion shall be implemented at the end of each day's work; d) no machinery shall be allowed in the intertidal zone at any time; and e) all debris that results from the construction activities shall be promptly removed from the beach and scour blanket area.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Background

The project site is located at 26110 Pacific Coast Highway, Malibu on a 6,100 lot along Corral Beach seaward of Pacific Coast Highway and a private common driveway serving six residential structures. The subject site includes a 2,100 sq. ft. residential duplex structure with two-two car garages totaling 880 sq. ft. constructed in 1976. The duplex and the garage are supported on wood piles located over the sandy beach (Exhibits 1 - 3). The applicant proposes to demolish and re-construct a collapsed concrete scour blanket along the north slope or the embankment of the subject property between the sandy beach and the filled area where the applicant's driveway shared in common with other residences and Pacific Coast Highway are located (Exhibits 3 - 5). The surface area of the scour blanket along the slope is approximately 1,200 sq. ft. The applicant's scour blanket is located further landward than the shoreline protective devices located on the adjoining properties to the west and east. The replacement scour blanket will include rocks embedded into the concrete to reduce wave velocity while resting on a grade beam encased in concrete at the base with a curb wall at the top below the garage floor. The applicant also proposes to replace two sets of stairs to the beach damaged by the 1998 El Nino storms and water discharging from the storm drain outlet located along the western boundary of the property. The applicant has

included in the project description an offer to dedicate a lateral public access easement over the southern beachfront portion of the lot as measured from the drip line of the existing deck to the mean high tide line (Exhibit 6). No development is proposed seaward of the existing scour blanket on the beach except for one of the two replacement stairways on the west side of the duplex structure.

B. Public Access and Seaward Encroachment

Coastal Act Section 30210 states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section 30211 states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30212(a) provides that in new shoreline development projects, access to the shoreline and along the coast shall be provided except in specified circumstances, 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 access 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.

Coastal Act Section 30220 states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Coastal Act Section 30221 states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Finally, Coastal Act Section 30251 states:

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

Coastal Act Sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Likewise, Section 30212 of the Coastal Act requires that adequate public access to the sea be provided to allow use of dry sand and rocky coastal beaches. Section 30211 provides that development not interfere with the public's right of access to the sea including the use of dry sand and rocky coastal beaches. Section 30220 of the Coastal Act requires coastal areas suited for coastal recreational activities, which cannot be provided at inland water areas, be protected. Section 30221 of the Coastal Act requires that oceanfront land suitable for recreational use shall be protected for recreational use.

1. Public Access Considerations for Beachfront Projects

All beachfront projects requiring a coastal development permit must be reviewed for compliance with the public access provisions of Chapter 3 of the Coastal Act. In past permit actions, the Commission has required public access to and along the shoreline in new development projects and has required design changes in other projects to reduce interference with access to and along the shoreline. The major access issue in such permits is the occupation of sand area by a structure in contradiction of Coastal Act policies 30210, 30211, and 30212.

Past Commission review of shoreline residential projects in Malibu has shown that individual and cumulative adverse effects to public access from such projects can include encroachment on lands subject to the public trust (thus physically excluding the public); interference with the natural shoreline processes necessary to maintain publicly-owned tidelands and other public beach areas; overcrowding or congestion of such tideland or beach areas; and visual or psychological interference with the public's access to and the ability to use public tideland areas. In the case of the proposed project, the applicant has submitted a letter from the California State Lands Commission (CSLC) dated January 26, 2000, that indicates that the CSLC presently asserts no claims that the project intrudes onto sovereign lands or that it would lie in an area that is subject to any future assertion of state ownership or public rights, should

circumstances change, or should additional information come to their attention. (Exhibit 7).

Further, in review of past permit actions, the Commission has found that shoreline protective devices, such as bulkheads or scour blankets, result in adverse effects to shoreline processes and beach profile due to increased scour and erosional end effects. Interference by the proposed replacement scour blanket has a number of effects on the dynamic shoreline system and the public's beach ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile which results from a reduced beach berm width, alter the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area in which the public can pass on their own property. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the bar. The lack of an effective bar can allow such high wave energy on the shoreline that beach materials may be lost far offshore where it is no longer available to nourish the beach. The effect of this on the public is again a loss of area between the mean high water line and the actual water. Third, shoreline protective devices such as scour blankets cumulatively affect public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually to protect each residence along a shoreline and cumulatively protecting a group of residences they reach a public beach. Fourth, if not sited landward in a location that ensures that the scour blanket is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy.

As proposed, the replacement scour blanket is located at the most landward portion of the beach on the slope or embankment leading to the floor of the applicant's garage, the access driveway to the garage and Pacific Coast Highway. The applicant proposes to demolish and re-construct a collapsed concrete scour blanket along the north slope of the subject property. The slope ranges in elevation from about five (5) feet to about 23 feet above Mean Sea Level. The surface area of the scour blanket along the slope is approximately 1,200 sq. ft.; its width is about 50 feet across a 24 foot slope measured from the bottom to the top. The applicant's scour blanket is located further landward than the shoreline protective devices located on the adjoining properties to the west and east. The blanket will be connected by "feathering" the scour blanket into the existing concrete filled bags on the eastern adjoining property. On the western property boundary, it will end beneath the proposed replacement stairway over the slope and a drainage outlet. The blanket is not proposed to be connected to the concrete block wall located about 13 feet further to the west on this adjoining property. The replacement scour blanket will include rocks embedded into the concrete to reduce wave velocity while resting on a grade beam encased in concrete with a curb wall at the top just beneath the applicant's garage. The applicant also proposes to replace two sets of stairs to the beach damaged by the 1998 El Nino storms and water discharging from

the storm drain along the western boundary of the property (Exhibits 3 - 5). No development is proposed seaward of the existing scour blanket on the beach except for one of the two replacement stairways on the west side of the duplex structure. The other replacement stairway leads seaward from the driveway over the scour blanket and drain pipe outlet to the sandy beach. It is important to note that the proposed replacement scour blanket is located beyond the landward most portion of the beach on the slope, therefore, it is as far landward as feasible.

All projects requiring a coastal development permit must be reviewed for compliance with the public access and recreation provisions of Chapter 3 of the Coastal Act. Based on the access, recreation and development sections of the Coastal Act, the Commission has required lateral public access along the beach in order mitigate adverse effects to public access from increased beach erosion. In this case, the Commission notes that the applicant has included in the project description an offer to dedicate a lateral public access easement over the southern beachfront portion of the lot as measured from the drip line of the existing deck to the mean high tide line. The Commission further notes that the lateral public access easement, that the applicant has offered to dedicate as part of this project, will be consistent with other lateral public access easements recorded along Corral Beach and in other beach areas of Malibu.

In order to conclude with absolute certainty what adverse effects would result from the proposed project in relation to shoreline processes and the adequacy of the proposed lateral public access easement, a historical shoreline analysis based on site specific studies would be necessary. Although this level of analysis has not been submitted by the applicant, the Commission notes that because the applicant has voluntarily proposed as part of the project an offer to dedicate a lateral public access easement along the entire southern portion of the lot, as measured from the drip line of the existing deck, it has not been necessary for Commission staff to engage in an extensive analysis as to whether the imposition of an offer to dedicate would be required absent the applicant's proposal. As such, **Special Condition Number One (1)** has been required in order to ensure that the applicant's offer to dedicate a lateral public access easement is transmitted prior to the issuance of the coastal development permit. Further, due to the design and location of the replacement project, it will not preclude public access to any presently existing vertical or lateral public access easements or rights or adversely affect public coastal views due to the project's location landward of the residential duplex structure.

2. Seaward Encroachment of Development

As a means of controlling seaward encroachment of residential structures on a beach to ensure maximum public access, protect public views, and minimize wave hazards as required by Coastal Act Sections 30210, 30211, 30251, and 30253, the Commission has, in past permit actions, developed the "stringline" policy. As applied to beachfront development, the stringline limits the seaward extension of a structure to a line drawn

between the nearest corners of adjacent structures and limits decks to a similar line drawn between the nearest corners of the adjacent decks.

The Commission has applied this policy to numerous past permits involving infill on sandy beaches and has found it to be an effective policy tool in preventing further encroachments onto sandy beaches. In addition, the Commission has found that restricting new development to building and deck stringlines is an effective means of controlling seaward encroachment to ensure maximum public access as required by Sections 30210 and 30211 and to protect public views and the scenic quality of the shoreline as required by Section 30251 of the Coastal Act.

In this case, the proposed project does not invoke the restrictions of the stringline policy because the project will only involve the replacement of existing structures, a concrete scour blanket and two stairways. Further, both the replacement scour blanket and the stairways will be located landward of the existing residential structure. In addition, the replacement scour blanket will be located no further seaward than the existing blanket and will continue to be located further landward of the adjoining shoreline protective devices on either side of the subject site. Lastly, the proposed location of the replacement scour blanket on the existing slope is located entirely beneath the existing garage structure and is as far landward as feasible. The scour blanket is located landward of the sandy beach on the slope supporting a portion of the garage, driveway and Pacific Coast Highway. In addition, the two replacement stairways are located landward of the seaward edge of the duplex structure. Thus, the proposed project has no potential to exceed the applicable stringline setback.

Further, as noted above, beachgoers who access the beach from either Dan Blocker Beach to the east, or Escondido Beach to the west, often walk along the shore to from one beach to another and back again. Given the ambulatory nature of the mean high tide line, and thus the boundary between public and private lands, there may be ongoing conflicts and confusion between the beach users and private property owners regarding which portions of the subject beach are private and which are public. In addition, the placement of signs on residential beachfront homes which state "*PRIVATE BEACH*" or "*PRIVATE PROPERTY*" or contain similar such messages prohibiting public use of the beach have routinely caused members of the public to believe that they do not have the right to use the shoreline. In effect, these signs have served to contradict the public's rights to use the shoreline pursuant to the California Constitution and California common law. In order to ensure that the general public is not precluded from using the shoreline, the Commission finds it necessary to impose **Special Condition Number Two (2)** which would prohibit the landowner from placing any signs which explicitly or implicitly indicate that the beach is private or like messages that attempt to prohibit public use of the beach. In addition, it is necessary that any signs posted on the applicant's property or any adjacent properties that pertain to use of this applicant's property be subject to the review and approval of the Executive Director prior to posting. The California Coastal Commission notes that the prohibition on signage on adjacent properties as spelled out in **Special Condition Number Two (2)** is only

intended to prohibit signage relating to the portion of the beach on Assessor's Parcel Number 4459-021-005 seaward of the existing deck of the residential duplex identified in this application.

For all of these reasons, the Commission finds that the proposed project will have no individual or cumulative adverse effects on public access. Therefore, the Commission finds that the project, as conditioned, is consistent with Coastal Act Sections 30210, 30211, 30212, 30221, 30222, 30251, and 30253.

C. Geologic Stability

As described in the discussion below, there is evidence that the proposed development along this section of Corral Beach will require a shoreline protective device and that such development has the potential to adversely effect natural shoreline processes. Therefore, it is necessary to review the proposed project for its consistency with Sections 30235, 30250(a), and 30253 of the Coastal Act.

Section 30235 of the Coastal Act states:

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

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

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.

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.

To assist in the determination of whether a project is consistent with Sections 30235, 30250(a), and 30253 of the Coastal Act, the Commission has, in past Malibu coastal development permit actions, looked to the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) for guidance. The certified LUP has been found to be consistent with the Coastal Act and provides specific standards for development along the Malibu coast. For example, Policies 166 and 167 provide, in concert with Section 30235 of the Coastal Act, that revetments, seawalls, cliff retaining walls, and other shoreline protective devices be permitted only when required to serve coastal-dependent uses, to protect existing structures, or new structures which constitute infill development and only when such structures are designed and engineered to eliminate or mitigate the adverse effects on shoreline sand supply. In addition, Policy 153 indicates that development of sites that are exposed to potentially heavy tidal and wave action shall require that development be set back a minimum of ten feet landward from the mean high tide line.

The subject property is currently developed with a residential duplex, two two-car garages, two stairways to the beach, a septic system and a concrete scour blanket protecting the embankment or slope supporting the garages, septic system, driveway and Pacific Coast Highway. The project involves the replacement of the existing damaged concrete scour blanket and two stairways to the beach.

The project does not fall into two of the three categories in which a shoreline protective device must be permitted by the Commission under Section 30235. The proposed replacement scour blanket does not protect a public beach nor would it serve a coastal-dependent use. Residential structures, driveways, sewage and disposal systems are not coastal dependent developments or uses pursuant to Section 30101 of the Coastal Act. However, the proposed replacement of the existing scour blanket does protect an existing residential related structure, the garage and septic system in danger from erosion, therefore a shoreline protective device may be permitted. Therefore, the Commission finds that the proposed project meets the first test of Section 30235. The second test of Section 30235 will be discussed below.

Regarding Section 30250(a), no new development is proposed in this project. The replacement of the existing scour blanket and two stairways are not considered new development. Therefore, the Commission finds that Section 30250 of the Coastal Act is not applicable in this case.

Regarding Section 30253, the proposed development is located within an area of high geologic and flood hazard due to wave erosion, storm waves, flooding, and liquefaction. This section of the Coastal Act mandates that development provide for geologic stability and integrity and minimize risks to life and property in areas of high geologic, flood and fire hazard. The location of the proposed replacement scour blanket is located within

the ocean wave scour area, as determined by the applicant's engineer. These issues are further discussed below.

1. Site Shoreline Characteristics

The City of Malibu includes a 27 mile long narrow strip of coast that is backed by the steep Santa Monica Mountains. Unlike most of the California coast, the shoreline in Malibu runs from east to west and forms south-facing beaches. Corral Beach is located approximately two and one half miles west of Malibu Canyon Road and two and one half miles east of Kanan Dume Road. Corral Beach is developed with eight single and multifamily residences and vacant parcels owned by the State of California and Los Angeles County. The majority of the residences are constructed on piles with retaining or bulkhead walls to stabilize the driveway and road fill and protect septic systems located beneath the residences or within the driveways. Along the access driveway in the vicinity of the project site, the slope descends about eighteen (18) feet across the existing scour blanket to the sandy beach.

Corral Beach is located within the Dume Littoral Subcell, which geographically extends from approximately Point Dume to Redondo Beach. The Dume Subcell is part of the larger Santa Monica Littoral Cell. The fluvial sediment from Malibu Creek and Topanga Canyon Creek is the major contributing sediment source in this Subcell. Given that Corral Beach is upcoast from Malibu Creek and Topanga Canyon Creek, sediment to this beach is predominately derived from the upcoast Zuma Littoral Subcell, in which approximately 90% of the sediment continue downcoast bypassing the Dume Canyon Submarine Canyon. In contrast to the Dume Littoral Subcell, where the major sediment source is the large streams referenced above, 60% of the sediment from Zuma Cell's net total sediment is derived from beach/bluff erosion and only 40% is derived from the local streams.¹

The main sources of sediment for bluff backed beaches are the bluffs themselves, as well as the material that has eroded from inland sources and is carried to the beach by small coastal streams. While beaches seaward of coastal bluffs follow similar seasonal and semi-annual changes as other sandy beaches, they differ from a wide beach in that a narrow bluff backed beach does not have enough material to maintain a dry sandy beach during periods of high wave energy. Thus, unlike a wide sandy beach, a narrow, bluff backed beach may be scoured down to bedrock during the winter months. In the case of Corral Beach, the Los Angeles County maintained beach covers about 0.7 miles of a narrow to rocky shoreline backed by Pacific Coast Highway and a small grouping of pile-supported residences which occupy northern end of this beach. The Highway and residences have altered the natural process of shoreline nourishment where beaches such as Corral would expose the back of the bluff to frequent wave attack as the beach erodes. In a natural setting, this wave attack leads to eventual erosion and retreat of the lower portions of the bluff. The dynamic of bluff erosion and

¹ Army Corps of Engineers, Los Angeles District, Reconnaissance Study of the Malibu Coast. 1994.

retreat results in landward movement of the beach's location and, in turn, eroded bluff material provides beach nourishment material to establish a new beach area. In the case of Corral Beach, the back of the beach has been fixed in part by Pacific Coast Highway and in part by shoreline protective devices that have been constructed on the beach to protect residential development.

a. Corral Beach is an Oscillating Beach

Having defined Corral Beach as a narrow, bluff-backed beach, the next step is to determine the overall erosion pattern of the beach. Determining the overall beach erosion pattern is one of the key factors in determining the impact of the scour blanket on the shoreline. In general, beaches fit into one of three categories: 1) eroding; 2) equilibrium; or 3) accreting. The persistent analytical problem in dealing with shore processes in California is distinguishing long-term trends in shoreline change from the normal, seasonal variation.

Two studies regarding long-term trends in shoreline processes were reviewed. First, a U. S. Army Corps of Engineers 1994 Reconnaissance Report regarding the Malibu/Los Angeles County coastline concludes that Corral Beach is a narrow beach backed by a high bluff and frontage road. The Army Corps report estimated that annual average shoreline retreat of about one (1) foot occurred between 1971 and 1989.²

The applicant provided a report that discussed the proposed project relative to wave uprush and shoreline processes. The Coastal Engineering Report by David Weiss Structural Engineer & Associates, dated November 19, 1999, addresses the proposed project. The report identified wave uprush calculations, design waves, analyzed possible storm wave damage to the proposed structure, and provided recommendations for protection of the applicant's structures along Corral Beach. David Weiss and Associates provides an opinion that this beach is an oscillating beach and over the last 35 years it is at least in equilibrium. The consultant's report does note the results of the Moffatt and Nichol Engineers 1992 report that Corral Beach was an advancing beach.

The Coastal Engineering Report identifies the Mean High Tide Line location as surveyed December 10, 1998 and four other surveyed MHTL's from 1928 to 1969 on the subject site. The location of the 1998 MHTL is about 137 feet seaward from the landward property boundary which is also the right of way of Pacific Coast Highway. The seaward most portion of the proposed replacement scour blanket is located about 30 feet seaward from this landward property line and the Pacific Coast Highway right of way. The base of the scour blanket is located about 60 feet landward of the seaward edge of the duplex structure. Therefore, the proposed project is located about 107 feet landward of the most recent surveyed Mean High Tide Line.

² This is based on estimated average vertical and horizontal scour prepared with the assistance of the numerical computer program model "SBEACH".

Staff reviewed the proposed project against the above cited shoreline data. The data presented by the applicant indicates that this section of Corral Beach is at least in equilibrium and is an oscillating beach based upon limited available information. Studies performed by the U. S. Army Corp of Engineers indicate that Corral Beach is an eroding beach. Therefore, given the limited data relative to the erosion rates on this beach, the Commission finds that Corral Beach is an oscillating beach.

2. Location of Proposed Shoreline Protective Device in Relation to Mean High Tide Line and Wave Action

The Commission notes that many studies performed on equilibrium, oscillating and eroding beaches have concluded that loss of beach occurs on these types of beaches where a shoreline protective device exists. In order to determine the effects of the proposed bulkhead on the shoreline, the location of the protective device in relationship to the expected wave runup, as calculated by the location of the Mean High Tide Line (MHTL), must be analyzed.

The profile data, cited in detail below, shows that the position of the proposed replacement scour blanket does intrude on the historical areas of wave run-up and beach sediment transport. However, the data also shows that the scour blanket is not proposed to be located near or seaward of the documented positions of the MHTL.

a. Mean High Tide Line

The data submitted by the applicant shows that the existing and proposed replacement scour blanket are not located near or seaward of the documented positions of the MHTL. The MHTL is an ambulatory line that can vary greatly from summer to winter. In the Coastal Engineering Report prepared by David Weiss and Associates, surveyed MHTL positions were reviewed from 1928 to 1998 (Exhibit 6). The most landward surveyed MHTL, 1967, is located about 123 feet seaward of the applicant's northern property line which is also the southern right of way of Pacific Coast Highway. The seaward most extension of the replacement scour blanket will be located thirty (30) feet seaward of the northern property line. Based on the applicant's submitted information, the Commission notes that the proposed development, including the scour blanket and the two stairways, will be located landward of all of the known surveyed MHTL's including the most landward MHTL surveyed in 1967. As a result, the proposed replacement of the scour blanket and the two stairways should not extend onto public tidelands under normal conditions. Therefore, the proposed project, based upon the evidence available to date, appears to be some distance landward of the mean high tide line.

b. Wave Uprush

In order to determine the impacts of the proposed scour blanket on the shoreline, the location of the proposed protective device in relation to the expected wave runup must be analyzed. With respect to inundation of the beach beneath the subject residential duplex and garages the replacement scour blanket will be subject to wave uprush according to the data provided by David Weiss and Associates. What remains unclear is the frequency at which the wave uprush will occur. The Coastal Engineering Report dated November 19, 1999 by David Weiss indicates that the maximum wave uprush at the site will be about 7.5 feet seaward of the northern property boundary which is the Pacific Coast Highway right of way line. The proposed replacement scour blanket will be located between six (6) feet and 29 feet seaward of the northern property boundary.

The applicants engineer, David Weiss, states in the Coastal Engineering Report that the purpose of the proposed concrete scour blanket is to threefold: 1) to protect the onsite sewage disposal system; 2) to protect the vertical timber pole wall that retains the driveway; and 3) to protect the timber building piles driven into the slope above the beach elevation. The Commission notes that although the septic system is physically located outside the wave uprush limit within the driveway, a retaining wall protects the driveway and supports the garage. A vertical timber pole retaining wall protects the driveway and the timber piles supports the duplex and the garage structures, all of which are located within the wave uprush limit area. Further, the Coastal Engineering Report identifies how the existing scour blanket was damaged and why the blanket is needed to protect the slope (Exhibit 5). The Report states:

During the severe ocean storms of January and February 1998, the existing gunite scour blanket was undermined by ocean wave action. The backfill behind the wall was washed out, eroding the toe of the slope under the blanket. The more landward timber piles of the building and a vertical timber pile retaining wall are embedded in this slope. The timber piles that were driven into the hillside were not driven as deep as those on the beach. As a result, any undercutting of the slope reduces the embedment depth of the hillside piles.

Should the slope be eroded, the landward timber piles supporting the garage structure and the vertical timber pile retaining wall could be undermined reducing the stability of the garage. Further, should the slope be eroded beyond the garage, the septic system located in the driveway in front of the garage could also be adversely affected. As a result, the Commission notes that the proposed scour blanket is necessary to protect the supporting pile foundation of the garage, the residential duplex's septic system and ultimately Pacific Coast Highway.

Based on the above discussion, the Commission finds that the proposed replacement scour blanket is required to protect components of residential development. The Commission further notes that the scour blanket, located as far landward as feasible, will be subject to wave action during storm and high tide events.

3. Effects of the Shoreline Protective Device on the Beach

It is important to accurately calculate the potential for wave runup and wave energy affecting the scour blanket in the future. Dr. Inman, renowned authority on Southern California beaches concludes that:

The likely detrimental effect of the seawall on the beach can usually be determined in advance by competent analysis.

Dr. Inman further explains the importance of the design of a seawall or shoreline protective device design and location as it relates to predicting the degree of erosion that will be caused by the seawall. He states:

While natural sand beaches respond to wave forces by changing their configuration into a form that dissipates the energy of the waves forming them, seawalls are rigid and fixed, and at best can only be designed for a single wave condition. Thus, seawalls introduce a disequilibrium that usually results in the reflection of wave energy and the increased erosion seaward of the wall. The degree of erosion caused by the seawall is mostly a function of its reflectivity, which depends upon its design and location.³

In past permit actions, the Commission has found that one of the most critical factors controlling the impact of a shoreline protective device on the beach is its position on the beach profile relative to the surf zone. All other things being equal, the further seaward the seawall is located, the more often and more vigorously waves interact with it. If a shoreline protective device is in fact necessary, the best location for it is at the back of the beach where it provides protection against the largest storms. In contrast, a shoreline protective device constructed too close to the MHTL may constantly create problems related to frontal and end scour, as well as upcoast sand impoundment.

Scour is the removal of beach material from the base of the cliff or the beach in front of or along the side of a shoreline protective device. The scouring of beaches as a result of shoreline protective devices is a frequently observed occurrence. When waves impact a hard surface such as a coastal bluff or shoreline protective device, some of the energy from the wave will be absorbed, but much of it will be reflected back seaward. This reflected wave energy in conjunction with incoming wave energy, will disturb the material at the base of the shoreline protective device and cause erosion to occur in front and downcoast of the hard structure. This phenomenon has been recognized for many years and the literature on the subject acknowledges that shoreline protective devices affect the supply of beach sand.

The Coastal Engineering Report by David Weiss and Associates, the applicant's engineering consultant, indicates that the replacement scour blanket will be located

³ Letter dated 25 February 1991 to Lesley Ewing, Coastal Commission staff from Dr. Douglas Inman.

within the maximum seaward wave uprush limit and will, therefore, periodically be subject to wave action. This Report also states that:

It is my opinion that the proposed structure will have no adverse effects on adjacent properties. The proposed scour blanket is a replacement of and in the same location as the existing scour blanket. The proposed scour blanket is well landward of the protective structures on the adjacent lots.

The Coastal Engineering Report included no substantive information or evidence with an appropriate analysis leading to the conclusion that the scour blanket will have no adverse effects on adjacent properties. The Commission notes that many studies performed on oscillating and eroding beaches have concluded that loss of beach occurs on both types of beaches where a shoreline protective device exists, contrary to the applicant engineer's opinion. Therefore, the Commission notes that the proposed replacement scour blanket, over time, will result in potential adverse effects to the beach sand supply resulting in increased seasonal erosion of the beach and longer recovery periods.

The impacts of potential beach scour is important relative to beach use for two reasons. The first reason involves public access. The subject property is located within about 500 feet to the west of an existing vertical public accessway that has been maintained and operated by Los Angeles County. If the beach scours at the base of the scour blanket, even minimal scouring in front of the 50 foot long blanket will translate into a loss of beach sand available (i. e. erosion) at a more accelerated rate than would otherwise occur under a normal winter season if the beach were unaltered. The second impact relates to the potential turbulent ocean condition. Scour on the beach seaward of the scour blanket will result in greater interaction with the scour blanket, and thus, make the ocean along Corral Beach more turbulent than it would along an unarmored beach area. Therefore, the Commission finds that the proposed scour blanket will cause greater erosion than under natural conditions and less rapid beach recovery through accretion.

As such, the Commission has ordinarily required that all development on a beach, including shoreline protection devices, be located as landward as possible in order to reduce adverse impacts from scour and erosion. In the case of this project, the Commission notes that the applicant has located the proposed scour blanket as far landward as feasible. The proposed scour blanket will be aligned further landward than the adjoining shoreline protective devices on the adjoining properties to the west and east. Alternative shoreline protective designs are discussed further below. In addition, in past permit actions, the Commission has also required that all development on a beach, including shoreline protection devices, provide for public lateral access along the beach in order to reduce any adverse impacts to public access. As such, in order to mitigate any adverse impacts to public access, the applicant has proposed to offer a dedication for a lateral public access easement along the beach. **Special Condition Number One (1)** has been required in order to ensure that the applicant's proposal of

an offer to dedicate a new lateral public access easement is carried out. Therefore, as conditioned, the project will minimize the adverse impacts resulting from construction of the replacement scour blanket and is consistent with the applicable Coastal Act Sections and with past Commission action.

As discussed above, the Commission notes that the replacement scour blanket will be located as far landward as possible. However, the Commission further notes that the purpose of the shoreline protective device authorized by this permit is to protect the septic system and garages on site and that no shoreline protective device is required to protect the residential duplex authorized by this permit. If the existing septic system serving this residential duplex were replaced or abandoned or the garages were to be removed and reconstructed, however, then the scour blanket approved through this permit to protect the septic system and garages may no longer be necessary and the adverse impacts of the shoreline protective device on public access could be eliminated through its removal or by locating the shoreline protective device further landward. Additionally, any future improvements to the proposed replacement scour blanket that may result in the seaward extension of the shoreline protection device would result in increased adverse effects to shoreline sand supply and public access.

Therefore, to ensure that the proposed project does not result in new future adverse effects to shoreline sand supply and public access and that future impacts are reduced or eliminated, **Special Condition Number Three (3)** requires the applicant to record a deed restriction which provides that a new coastal development permit for the shoreline protective device authorized this permit shall be required if the proposed septic system and or garage is replaced or abandoned for any reason (including the installation of a new sewer system along Malibu Road) and that if a new coastal development permit for the shoreline protective device is not obtained in the event of replacement or abandonment of the septic system and garages, then the shoreline protective device authorized by this permit shall be removed. **Special Condition Number Four (4)** also prohibits any future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protective device approved pursuant to this permit, if such activity extends the seaward footprint of the subject shoreline protective device.

4. Sea Level Rise

Sea level has been rising slightly for many years. In the Santa Monica Bay area, the historic rate of sea level rise has been 1.8 mm/yr. or about 7 inches per century⁴. Sea level rise is expected to increase by 8 to 12 inches in the 21st century.⁵ There is a growing body of evidence that there has been a slight increase in global temperature and that an acceleration in the rate of sea level can be expected to accompany this

⁴ Lyles, S.D., L.E. Hickman and H.A. Debaugh (1988) Sea Level Variations for the United States 1855 – 1986. Rockville, MD: National Ocean Service.

⁵ Field et. al., Union of Concerned Scientists and the Ecological Society of America (November 1999) Confronting Climate Change in California, www.ucsusa.org.

increase in temperature. Mean water level affects shoreline erosion several ways and an increase in the average sea level will exacerbate all these conditions.

On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. On a relatively flat beach, with a slope of 40:1, every inch of sea level rise will result in a 40-inch landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a single family residence, pilings, or seawalls, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than are inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea level will be increased wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. So, combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

A second concern with global warming and sea level rise is that the climatic changes could cause changes to the storm patterns and wave climate for the entire coast. As water elevations change, the transformation of waves from deep water will be altered and points of energy convergence and divergence could shift. The new locations of energy convergence would become the new erosion "hot spots" while the divergence points may experience accretion or stability. It is highly likely that portions of the coast will experience more frequent storms and the historic "100-year storm" may occur every 10 to 25 years. For most of California the 1982/83 El Niño event has been considered the "100-year storm." Certain areas may be exposed to storms comparable to the 1982/83 El Niño storms every few decades. In an attempt to ensure stability under such conditions, the Commission has required that all new shoreline structures be designed to withstand either a 100-year storm event, or a storm event comparable to the 1982/83 El Niño. Also, since it is possible that storm conditions may worsen in the future, the Commission has required that structures be inspected and maintained on a regular basis. The coast can be altered significantly during a major storm and coastal structures need to be inspected on a regular basis to make sure they continue to function as designed. If storm conditions worsen in future years, the structures may require changes or modifications to remain effective. In some rare situations, storm conditions may change so dramatically that existing protective structures may no longer be able to provide any significant protection, even with routine maintenance.

Therefore, if new development along the shoreline is to be found consistent with the Coastal Act, the most landward location must be explored to minimize wave attack with higher wave forces as the level of the sea rises over time. Shoreline protective devices must also be located as far landward as feasible to protect public access along the beach as discussed further below. In the case of this project, the proposed development is located as landward as feasible.

5. Alternative Designs

It has been found that the further landward a shoreline protective device is located, the less beach scour will result. The applicant's Coastal Engineering Report address four alternatives designs concluding that the proposed replacement of the scour blanket is the preferred alternative. The Report states that:

Alternatives such as no bulkhead wall or beach nourishment are not viable, since something must be done to protect the system and there is no way of nourishing just one lot. A third alternative might be a rock revetment; however, that would extend further out onto the beach than the proposed scour blanket. The fourth alternative is a vertical wall at the line of the front of the garage (i.e., the top of the proposed scour wall) is physically and economically unfeasible for the property owner. First of all, it would have to be supported on deepened piles. Secondly, it would not protect the timber piles on the slope. Finally, there is a CMP culvert that drains part of Pacific Coast Highway that out falls onto the surface of the existing scour blanket. A similar blanket would be needed for that structure anyway.

The applicant's consultant, David Weiss and Associates, concluded that project alternatives identified above are determined to be infeasible and that the proposed project to replace the existing concrete scour blanket is the preferred alternative. Therefore, the Commission finds that constructing the replacement concrete scour blanket is the preferred and feasible alternative that minimizes adverse effects on coastal resources. Therefore, the proposed project, as conditioned, is consistent with Sections 30235, 30250, and 30253 of the Coastal Act.

C. Hazards and Geologic Stability

The proposed development would be located in the Santa Monica Mountains, an area that is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Even beachfront properties have been subject to wildfires. Finally, beachfront sites are subject to flooding and erosion from storm waves.

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

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

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

The applicant has submitted a geological letter report, prepared by Donald Kowalewsky, Environmental and Engineering Geology, dated November 14, 1997, evaluating the geologic stability of the site. The letter report identifies potential hazards related to severe ground shaking, liquefaction, tsunami, and flooding on the subject site.

The applicant's Coastal Engineering Report, prepared by David Weiss, dated November 19, 1999 identifies storm wave as a hazard to development on the site due to severe ocean storms of 1998 that undermined the existing gunite scour blanket. This Coastal Engineering Report makes recommendations related to the foundation of the scour blanket, the height of the blanket, and the need for reinforcing bars and rock velocity reducers.

To ensure that the recommendations of the coastal engineering consultant has been incorporated into all proposed development, **Special Condition Number Five (5)** requires the applicant to submit project plans certified by the consulting engineering consultant as conforming to all recommendations to ensure structural and site stability. The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission. Any substantial changes to the proposed development approved by the Commission which may be recommended by the consultant shall require an amendment to the permit or a new coastal permit.

As discussed above, the Commission notes that the applicant's engineering consultant has indicated that the proposed development will serve to ensure relative geologic and structural stability on the subject site. However, the Commission also notes that the "Coastal Engineering Report" by David C. Weiss, Structural Engineer & Associates, Inc., dated November 19, 1999, also states:

The owner should realize that there will always be certain risks associated with living on the beach. The results and recommendations as set forth in this report meet current minimum County of Los Angeles Building Standards. Because of the unpredictability of the ocean environment, their results are meant to minimize storm wave damage and not to eliminate it. Tsunami or hurricane generated waves were not analyzed in this report because of the extreme low probability of these events happening to this part of the California Coast. However, the possibility of these major events producing damage to the subject property does exist, and hence no warranties are provided in the event that those events occur.

Thus, as stated above by the applicant's coastal engineering consultant, the proposed development is located on a beachfront lot in the City of Malibu and will be subject to some inherent potential hazards. The Commission notes that the Malibu coast has historically been subject to substantial damage as the result of storm and flood occurrences. The subject site is clearly susceptible to flooding and/or wave damage from storm waves, severe ground shaking, liquefaction, tsunamis, and flooding.

Past occurrences have caused property damage resulting in public costs through emergency responses and low interest, publicly subsidized reconstruction loans. In the winter of 1977 to 1978, storm-triggered mudslides and landslides caused extensive damage along the Malibu coast. According to the National Research Council, damage to Malibu beaches, seawalls, and other structures during that season caused damages of as much as almost five million dollars to private property alone. In addition, the El Nino storms recorded between 1982 and 1983 caused high tides of over seven feet, which combined with storm waves of up to 15 feet. The storms occurring between 1982 and 1983 caused over 12.8 million dollars in damage to structures in Los Angeles County, many of which were located in Malibu. The severity of the 1982 to 1983 El Nino storm events are often used to illustrate the extreme storm event potential of the California, and in particular, Malibu coast. The severe El Nino winter storms in 1998 also resulted in widespread damage to residences, public facilities, and infrastructure along the Malibu Coast, causing millions of dollars in damage in the Malibu area alone.

Thus, ample evidence exists that all beachfront development in the Malibu area is subject to an unusually high degree of risk due to storm waves and surges, high surf conditions, erosion, and flooding. The proposed development will continue to be subject to the high degree of risk posed by the hazards of oceanfront development in the future. The Coastal Act recognizes that development, even as designed and constructed to incorporate all recommendations of the consulting coastal engineer, may still involve the taking of some risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use the subject property.

In addition, the Malibu coast has been subject to substantial damage as a result of wildfires. Therefore, it is necessary to also review the proposed project and project site against the area's known fire hazard. The Malibu area has burned in wildfires numerous times in the past, most recently in the 1993 wildfire. These wildfires have burned structures even on beachfront lots such as the subject site.

The Commission finds that due to the possibility of severe ground shaking, liquefaction, tsunamis, storm waves, erosion, flooding, and wildfire, the applicant shall assume these risks as conditions of approval. Because this risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. The applicant's assumption of risk, as required by **Special**

Condition Number Four (4) when executed and recorded on the property deed, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and which may adversely affect the stability or safety of the proposed development.

In addition, the Commission notes that the proposed development includes the removal of the existing concrete scour blanket and the construction of a new scour blanket and the reconstruction of two stairways. The Commission further notes that construction activity on a sandy beach, such as the proposed project, will result in the potential generation of debris and or presence of equipment and materials that could be subject to tidal action. The presence of construction equipment, building materials, and excavated materials on the subject site could pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately or unsafely exposed on the project site. In addition, such discharge to the marine environment would result in adverse effects to offshore habitat from increased turbidity caused by erosion and siltation of coastal waters. Further, any excavated materials that are placed in stockpiles are subject to increased erosion. The Commission also notes that additional landform alteration would result if the excavated material were to be retained on site.

To ensure that landform alteration and adverse effects to the marine environment are minimized, **Special Condition Number Six (6)** requires the applicant to ensure that: no stockpiling of dirt shall occur on the beach; all disturbed areas shall be properly covered, sand-bagged, and ditched to prevent runoff and siltation; measures to control erosion shall be implemented at the end of each day's work; no machinery shall be allowed in the intertidal zone at any time; and all debris that results from the construction activities shall be promptly removed from the beach and scour blanket area.

Therefore, the Commission finds, for the reasons set forth above, that the proposed development, as conditioned, is consistent with Section 30253 of the Coastal Act.

D. Local Coastal Program

Section 30604 of the Coastal Act states that:

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

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will not be in conformity with the provisions of Chapter 3. The proposed development will create adverse impacts and is found to be inconsistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed development will prejudice the City of Malibu's ability to prepare a Local Coastal Program for Malibu which is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604(a).

E. CEQA

The Coastal Commission's permit process has been designated as the functional equivalent of the California Environmental Quality Act (CEQA). Section 13096(a) of the Commission's administrative 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 effects which the activity may have on the environment.

The Commission finds that, the proposed project will have significant adverse effects on the environment and that there are feasible alternatives which would substantially lessen any significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the Commission finds that the proposed project is inconsistent with the requirements of CEQA and the policies of the Coastal Act.

EXHIBIT NO. 1

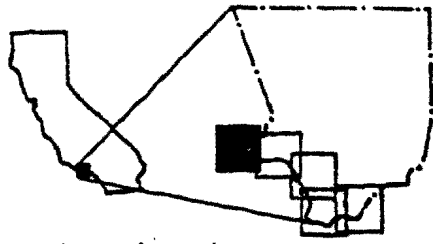
APPLICATION NO. 4-00-081

Project

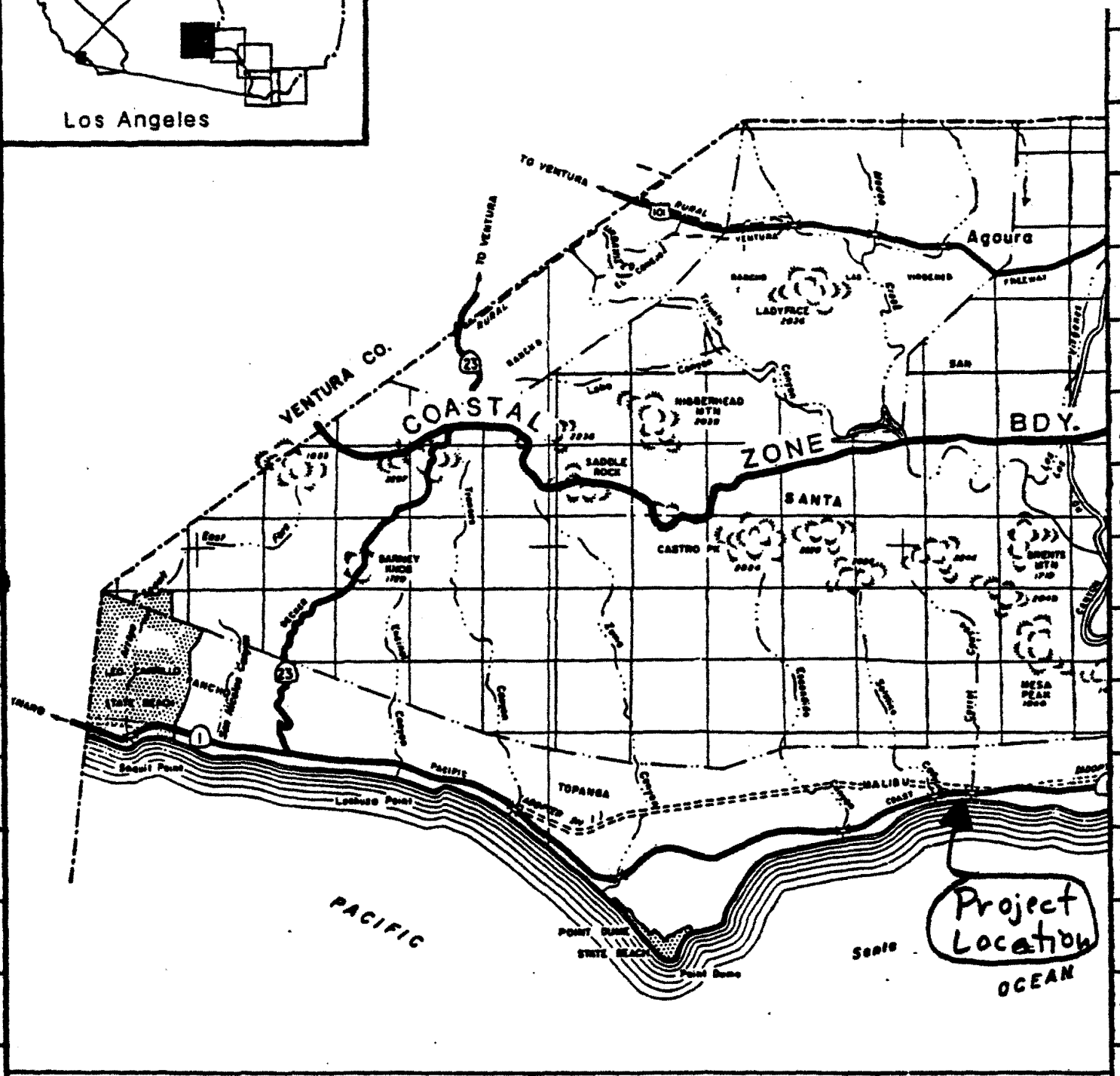
Location

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Los Angeles



California Coastal Commission

LOCATION MAP



County of Los Angeles

Sheet 1 of 5

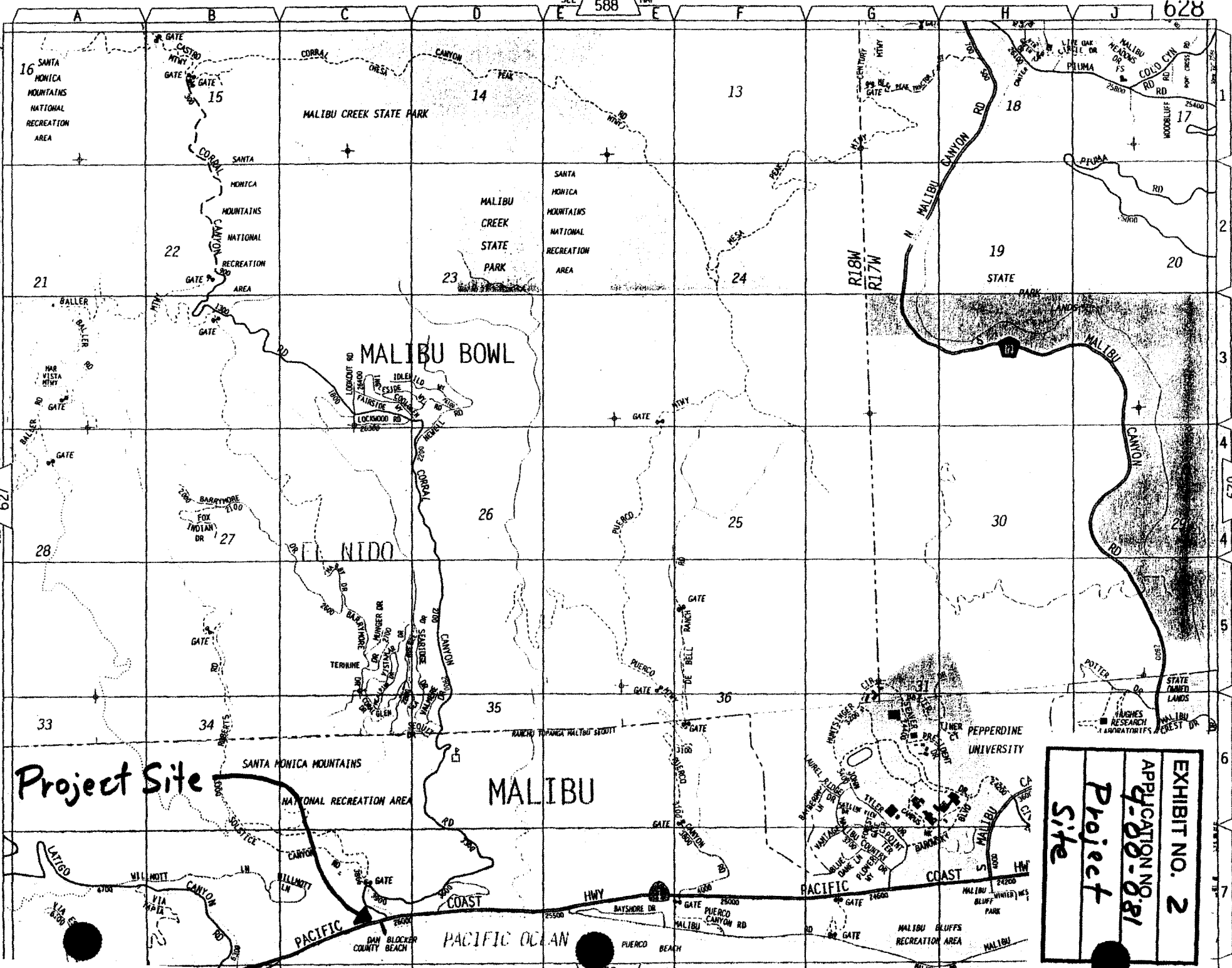
SEE 588 MAP

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SEE 668 MAP

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SEE 627 MAP



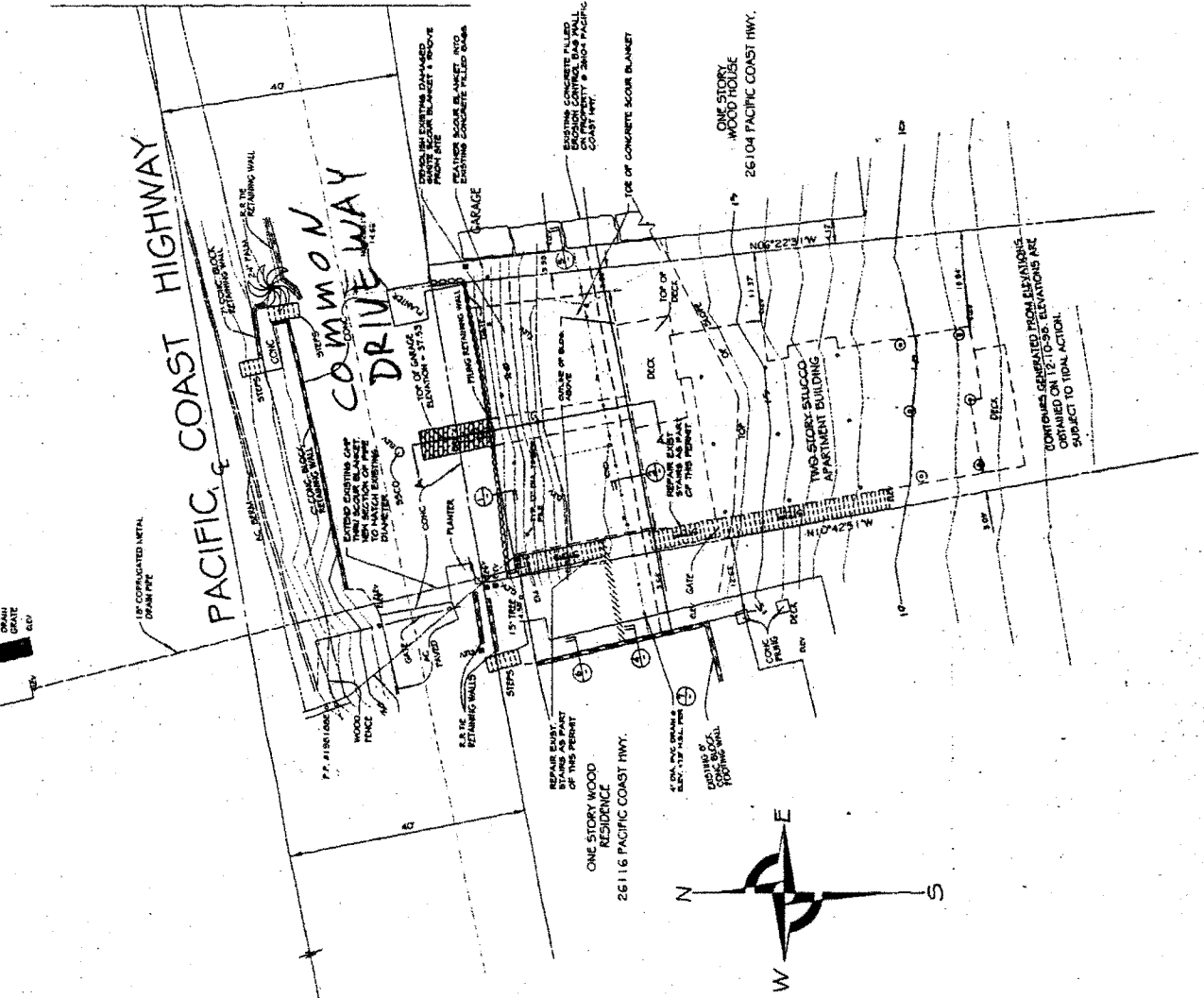
Project Site

MALIBU

PEPPERDINE UNIVERSITY

COAST

PACIFIC OCEAN



CONCRETE CUT-OFF WALL PLAN

SCALE: 1" = 10'

CONTAINS GENERATED FROM ELEVATIONS ARE OBTAINED ON 12-10-98 ELEVATIONS ARE SUBJECT TO FINAL ACTION.

EXHIBIT NO. 3

APPLICATION NO. 4-00-081

Site Plan

RECEIVED
NOT 23 1999
PLANNING DEPT.
NOV 22 1999

GENERAL NOTES:
1. VISUAL EXAMINATION FOR STRUCTURAL SOUNDNESS OF IN-PLACE CONCRETE SHALL BE MADE BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES.

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CONCRETE SPECIFICATIONS MARINE ENVIRONMENT

GENERAL:
1. ALL CONCRETE SHALL BE MADE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES.

ITEM	DESCRIPTION	QUANTITY
1	CONCRETE	1000
2	REINFORCEMENT	500
3	FORMWORK	200
4	ADDITIONAL MATERIALS	100

GENERAL NOTES:
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ITEM	DESCRIPTION	QUANTITY
1	CONCRETE	1000
2	REINFORCEMENT	500
3	FORMWORK	200
4	ADDITIONAL MATERIALS	100

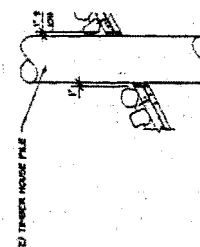
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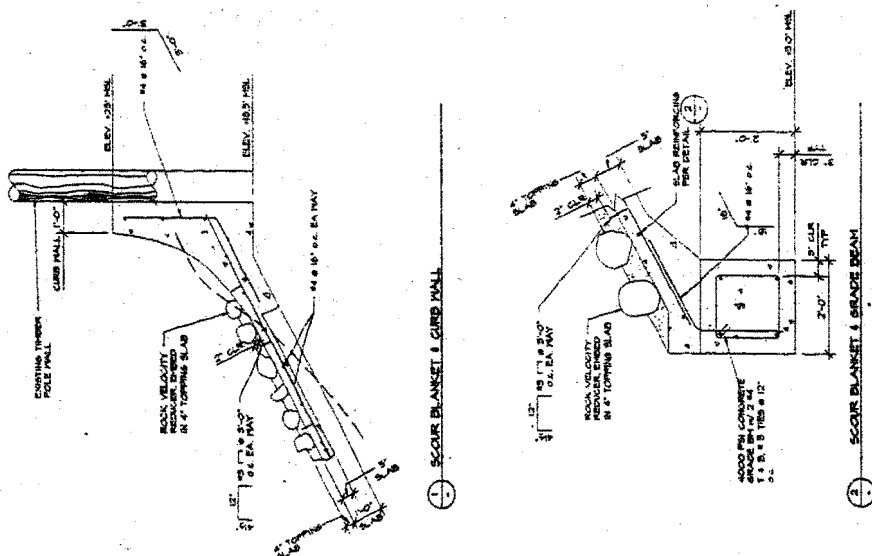
EXHIBIT NO. 4

APPLICATION NO. 4-00-081

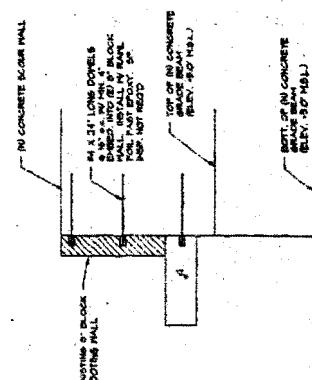
Scour Blanket Sections



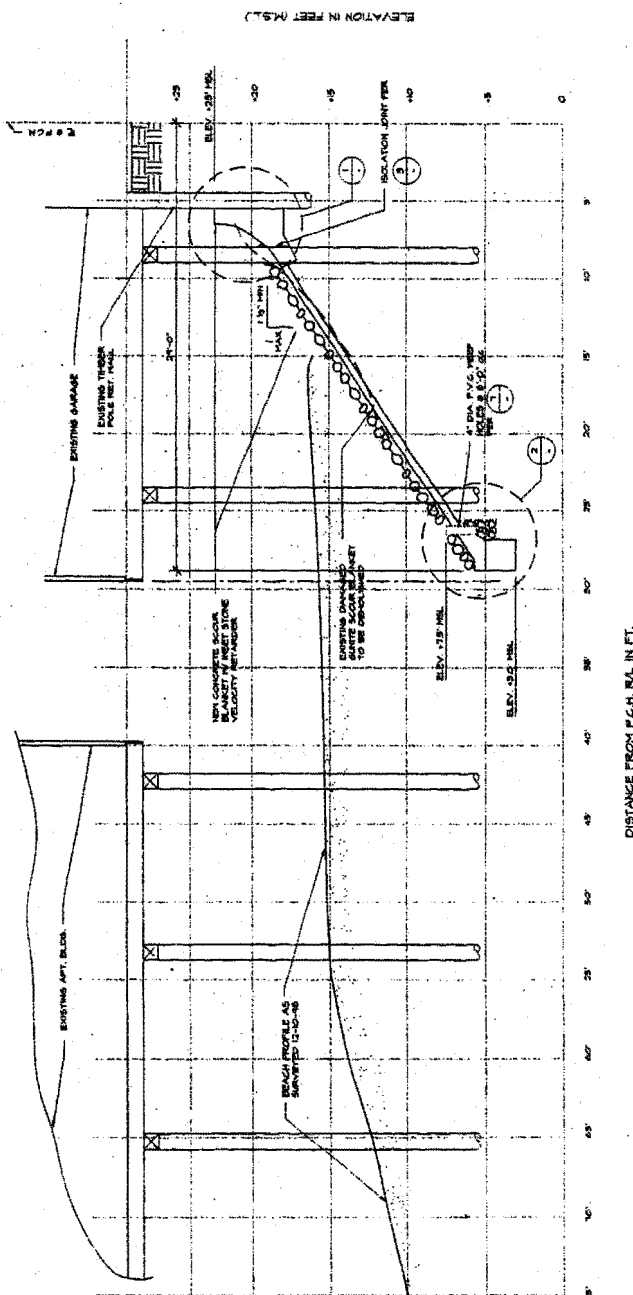
ISOLATION - CONT - BLANK



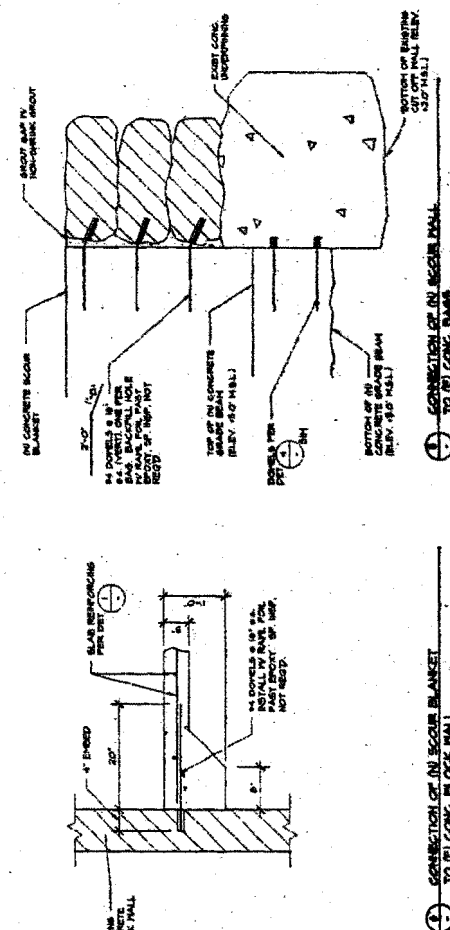
VERTICAL DRAIN IN SCOUR BLANKET



4 - CONNECTION OF (N) SECOND WALL
TO (E) BLOCK WALL



A-A - SECTION THRU SCOUR BLANKET



① CONNECTION OF IN SCOUR BLANKET
TO (E) CONC. BLOCK WALL

① CONNECTION OF (A) SECOND FLOOR
TO (B) CONC. BASE

175406

N↑

EXHIBIT NO. 5
APPLICATION NO. 4-00-081
Damaged Stairs
& Scour Blanket

PCH
STORM
DRAIN



26110 PCH - Damaged stairs and Scour Blanket

PACIFIC COAST HIGHWAY

PACIFIC COAST HIGHWAY

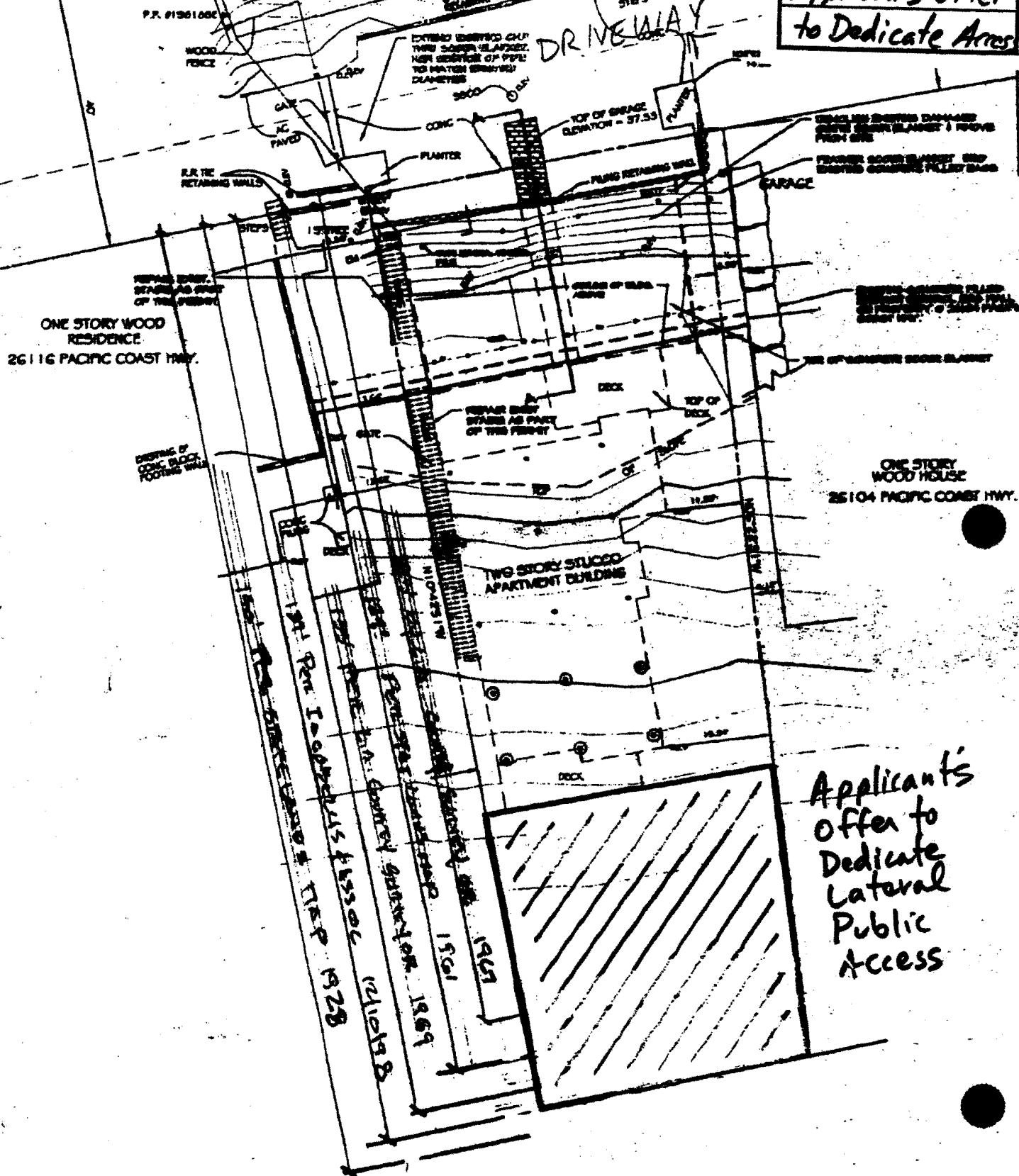
PACIFIC COAST HIGHWAY

EXHIBIT

EXHIBIT NO. 6

APPLICATION NO. 4-00-081

Applicants Offer to Dedicate Arms



Applicants
offer to
Dedicate
Lateral
Public
Access

SITE PLAN

SCALE 1" = 20'

CALIFORNIA STATE LANDS COMMISSION

100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



PAUL D. THAYER, Executive Officer

California Relay Service From TDD Phone 1-800-735-2922

from Voice Phone 1-800-735-2929

Contact Phone: (916) 574-1892

Contact FAX: (916) 574-1925

January 26, 2000

File Ref: SI

RECEIVED
APR 10 2000CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

EXHIBIT NO. 7

APPLICATION NO.

4-00-081

State Lands

Comm Letter

Page 1 of 2

Lizabeth Stevens
2330 Century Hill
Los Angeles CA 90067

Dear Ms. Stevens:

SUBJECT: Coastal Development Project Review for Demolition and Rebuilding
of Collapsed Gunite Scour-Blanket, Cutoff Wall, and Stairs at
26112 Pacific Coast Highway, Malibu

This is in response to your request for a determination by the California State Lands Commission (CSLC) whether it asserts a sovereign title interest in the property that the subject project will occupy and whether it asserts that the project will intrude into an area that is subject to the public easement in navigable waters.

The facts pertaining to your project, as we understand them, are these:

You propose to demolish and rebuild a collapsed gunite scour-blanket, cutoff wall and two sets of stairs on the north side the property at 26112 Pacific Coast Highway in the Corral Beach area of Malibu. The structures were damaged during the winter storms of 1998. Based on the March 5, 1999 plans prepared by David C. Weiss, all of the work will be well underneath the residence. Your property is one of seven developed properties on this stretch of beach, with one residential property and several hundred feet of undeveloped beach located to the west.

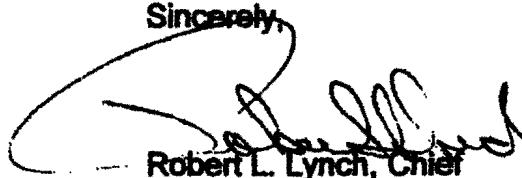
We do not at this time have sufficient information to determine whether this project will intrude upon state sovereign lands. Development of information sufficient to make such a determination would be expensive and time-consuming. We do not think such an expenditure of time, effort and money is warranted in this situation, given the limited resources of this agency and the circumstances set forth above. This conclusion is based on the location of the property, the character and history of the adjacent development, and the minimal potential benefit to the public, even if such an inquiry were to reveal the basis for the assertion of public claims and those claims were to be pursued to an ultimate resolution in the state's favor through litigation or otherwise.

January 26, 2000

Accordingly, the CSLC presently asserts no claims that the project intrudes onto sovereign lands or that it would lie in an area that is subject to the public easement in navigable waters. This conclusion is without prejudice to any future assertion of state ownership or public rights, should circumstances change, or should additional information come to our attention.

If you have any questions, please contact Jane E. Smith, Public Land Management Specialist, at (916) 574-1892.

Sincerely,



Robert L. Lynch, Chief
Division of Land Management

cc: Craig Ewing, City of Malibu

EXHIBIT NO. 7
APPLICATION NO. 4-00-081
State Lands
Comm Letter

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