

**CALIFORNIA COASTAL COMMISSION**

NORTH COAST AREA

555 FREMONT, SUITE 2000

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**F7a**

Staff:	Jack Liebster
Staff Report:	Oct. 16, 1998
Hearing on Rev. Findings:	Nov. 6, 1998
Commission Action on Findings:	

**STAFF REPORT: REVISED FINDINGS**

APPEAL NO.:	<b>A-1-SMC-98-049</b>
APPLICANT:	<b>ELIZABETH NEEL &amp; RICHARD CHARNOCK</b>
LOCAL GOVERNMENT:	San Mateo County
DECISION:	Approval with Conditions
PROJECT LOCATION:	Corner of Juliana Avenue and The Strand, Moss Beach, San Mateo County, APN 037-086-260.
PROJECT DESCRIPTION:	Drilling of up to three test wells to find a location with suitable water and completion of a production well at that location.
APPELLANT:	<b>Sara Hindman</b>
COMMISSION ACTIONS:	July 8, 1998: Found the Appeal Raised a Substantial Issue and Approved the Application with conditions.
COMMISSIONERS ON THE PREVAILING SIDE (same for both substantial issue and de novo):.	Commissioners Allen, Armanasco, Dettloff, Flemming, Kehoe, Nava, Potter, Rose, Staffel, Tuttle, and Vice Chairman Wan
SUBSTANTIVE FILE DOCUMENTS:	San Mateo County Local Coastal Program; San Mateo County Coastal Development Permit File No. CDP-97-0016. Permit No. 1-95-054 (Feiner, Mendocino County)

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STAFF NOTES

1. Procedure.

At the Commission meeting of July 8, 1998, the Commission found substantial issue on the appeal filed for the subject development, finding that the project as approved by the County raised a substantial issue with regard to the project's conformance with the public access policies of the County of San Mateo's certified LCP and the Coastal Act. On the same date, the Commission considered the project de novo and approved the project with conditions.

Prior to the hearing, the staff issued a report recommending that the Commission, after public hearing, determine that no substantial issue existed with respect to the grounds on which the appeal has been filed. However, the staff changed its recommendation at the hearing after further considering the significance of public access issues in the area, and the Commission found that a substantial issue was raised by the project as approved by the County. As the Commission's actions on the project differed from the written staff recommendation, staff has prepared the following set of revised findings for the Commission's consideration as the needed findings to support its action. These findings reflect the action taken by the Commission at the meeting of July 8, 1998 on both the substantial issue and de novo portions of the hearing.

The purpose of the hearing is to consider whether the revised findings accurately reflect the Commission's previous actions rather than to reconsider whether the appeal raised a substantial issue or to reconsider the merits of the project or the appropriateness of the adopted conditions. Public testimony will be limited accordingly.

I. STAFF RECOMMENDATION ON REVISED FINDINGS:

The staff recommends that the Commission adopt the following revised findings in support of the Commission's actions on July 8, 1998, finding that a substantial issue exists as to the conformity of the project with the policies of the certified Local Coastal Program and the public access policies of the Coastal Act, and approving the project with conditions.

(NOTE: Only those Commissioners on the prevailing side of the Commission's action on the permit at the July 8, 1998 hearing are eligible to vote on the following motion. See the list on Page One.)

A. MOTION:

I move that the Commission adopt the revised findings for A-1-SMC-98-049.

B. STAFF RECOMMENDATION OF APPROVAL

Staff recommends a YES vote on the motion. This will result in adoption of the revised findings. The motion requires a majority vote of the members from the prevailing side present at the Commission's meeting, with at least 3 of the prevailing members present and voting. If the motion fails, the findings are postponed to a later meeting.

C. RESOLUTION TO ADOPT REVISED FINDINGS:

The Commission hereby adopts the findings set forth below for A-1-SMC-98-49 on the ground that the findings support the Commission's decision made on July 8, 1998 and accurately reflect the reasons for it.

PART ONE - SUBSTANTIAL ISSUE

For reference, the Commission's adopted resolution precedes the proposed revised findings.

I. ADOPTED RESOLUTION

The Commission determines that a substantial issue exists as to conformity with the policies of the certified Local Coastal Program and the Coastal Act with respect to the grounds on which an appeal has been filed pursuant to Section 30603 of the Coastal Act.

II. FINDINGS AND DECLARATIONS FOR SUBSTANTIAL ISSUE

The Commission hereby finds and declares:

A. Project Setting, Description, and History

As approved by the County, the project would allow the drilling of up to three test wells to determine which location, if any, could produce water in the amounts, and of a quality, sufficient to meet the standards of the County Environmental Health Department for residential use. If such water is found, the County's approval includes authorization to complete a single domestic well in the selected location.

The project site is located on a coastal bluff covered with native and non-native vegetation, above the Fitzgerald Marine Reserve and about 200 feet west of Cabrillo Highway. Views of the site from the highway are mostly obscured by a grove of tall Monterey pines near the Highway. The

parcel was originally comprised of several lots of the Moss Beach Heights Subdivision recorded in 1908 and was altered to its current configuration via a 1991 lot line adjustment.

On July 3 and August 7, 1997, the Zoning Hearing Officer held hearings on the project and subsequently approved a coastal development permit (CDP). On appeal from that action, the San Mateo County Planning Commission held hearings on the project on November 12, 1997 and January 14, 1998 and approved the CDP with conditions. The conditions (as numbered by the County) required in part that:

- #1: Grading and vegetation removal be minimized, disturbed vegetation be replaced and that wells that are not per standard be removed entirely;
- #3: The well shall not be located closer than 50 feet from the ocean bluff edges;
- #4: In the event that a public water supply becomes available, the applicant shall switch to this alternative;
- #5: This Coastal Development Permit is valid, ultimately, for only one domestic well, although up to three test well sites may be drilled and tested. Any future development shall be subject to the County's Coastal Development requirements; and
- #7: Prior to the building permit, the applicant obtain a well permit from Environmental Health and meet all requirement of that department.

This approval was appealed to the San Mateo County's Board of Supervisors by the current appellant for essentially the same reasons given in the appeal to the Coastal Commission. On May 12, 1998, the Board of Supervisors denied the appeal, thus upholding the Planning Commission's approval of the project.

The County then issued a Notice of Final Action on the Coastal Development Permit, which was received by Commission staff on May 22, 1998. The project was then appealed to the Coastal Commission by Sara Hindman in a timely manner on May 28, 1998, within the 10-working day appeal period.

B. Substantial Issue Determination

As approved by the County, the project would have allowed the drilling of up to three test wells, and if water was found, the completion of a single domestic well. The three specific sites for drilling the test well are located near the southern end of the parcel, as shown in the site plan,

attached as Exhibit 4. The appeal by Sara Hindman raised two categories of issues: those related to "cumulative impacts" associated with the potential future development of a house on the subject parcel and six other vacant parcels in the vicinity in the same ownership, and those related to the well-drilling itself (see Exhibit 6). Specifically, these issues included the scope of the project, public access and prescriptive rights, habitat and marine resources, geologic and erosion hazards, waste and wastewater disposal, "risk of failure," and reliability of the water supply.

The Commission finds that the potential effects of the project on public access raise a substantial issue with respect to the grounds on which the appeal has been filed. Specifically, the project site abuts the publicly owned shoreline property called "The Strand," which is slated to be part of the California Coastal Trail. In addition, the San Mateo County LCP's Table 10.1 indicates that the site may be subject to prescriptive rights. Section 30211 of the Coastal Act precludes development which may interfere with such rights. Finally, the site's location is adjacent to the Fitzgerald Marine Reserve, a major access facility. Locating a permanent well in the locations permitted by the project as approved could affect the future siting of the house it is intended to serve, and thus, in turn create impacts on access and any potential prescriptive rights across the site. Based upon this information, the Commission determines that the project as approved by the County raises a substantial issue of conformance to the certified LCP and the public access policies of the Coastal Act.

## **PART TWO - DE NOVO ACTION ON APPEAL**

For reference, the adopted resolution and conditions precede the proposed revised findings.

### **I. ADOPTED RESOLUTION OF APPROVAL**

The Commission hereby grants, subject to the conditions below, a permit for the proposed development on the grounds that the development, as conditioned, is in conformance with the certified San Mateo County LCP, is located between the sea and first public road nearest the shoreline and is 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: See attached.**

### **III. SPECIAL CONDITIONS:**

#### **Special Condition No. 1**

This Coastal Development Permit is valid for the drilling of up to three test wells in the locations shown in the site plan submitted with the application, which is included as Exhibit 4 of the Coastal Commission staff recommendation of the appeal dated June 19, 1998. Any future development, including conversion to a production well or installation of ancillary well facilities shall be subject to the County's Coastal Development permit requirements.

Special Condition No. 2

Grading and vegetation removal shall be minimal for purposes of accessing the parcel and drilling the test well. All disturbed vegetation shall be replaced upon completion of all well drilling and construction activities. Wells that are not deemed adequate per Environmental Health standards shall not be capped but removed entirely per that Division's standards.

IV. FINDINGS AND DECLARATIONS.

The Commission hereby finds and declares:

A. Project Setting, Description and History.

Finding A of PART ONE is incorporated here by reference.

B. Access and Prescriptive Rights

The site is on an open coastal bluff adjacent to an existing public trail called "The Strand," which runs along the blufftop. A 1997 superior Court of San Mateo County decision describes the Strand as "a publicly dedicated and owned right of way, [which] is, and [has] historically been, used by members of the public for coastal access and other purposes." Christopher Tyler and Amy Tezza v. Dell P. Williams No. 387846 (Sup. Ct. San Mateo County) (1997) at page 5...." The Strand is an important part of the California Coastal Trail, and particularly provides access to the Fitzgerald Marine Reserve.

Projects located within the coastal development permit jurisdiction of a local government are subject to the coastal access policies of both the Coastal Act and the LCP. Coastal Act Sections 30210 and 30212 require the provision of maximum public access opportunities, with limited exceptions. Coastal Act Section 30211 states, in applicable part:

"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."

Regarding "Site Specific Recommendations for Shoreline Destinations in the Fitzgerald Marine Reserve," the County's LCP states:

*Develop access along the bluffs and to the beaches of the Fitzgerald Marine Reserve in stages as public funding is available to adequately improve and manage the access and protect the resources. The access should be oriented toward education and nature viewing and interpretation, particularly in the northern and central sections." (LCP, Table 10.6p. 10.31)*

The LCP further recommends the development of

*...an interpretive trail along the bluff parallel to Vallemar Street... sign and improve access to the bluff from the end of Juliana Avenue and Wienke Way. This will be the major public access to the bluff. The other trails along Vallemar Street should remain open, however. (LCP, Table 10.6, p. 10.32)*

LCP Tables 10.1 and 10.2 identify the project area as significant for access and provide strong evidence that prescriptive rights are very likely to exist on this property. Table 10.1 is a general assessment of access trails and shoreline destinations, and lists three existing trails on private property in the vicinity of the project site. Table 10.2 is a preliminary analysis of the likelihood of prescriptive rights on these trails. It indicates the existence of each of these trails on aerial photographs taken in 1958, 1965 and 1970. The LCP Background Document (p. 10.14) further describes the significance of this table:

*Aerials from 1956, 1965 and 1970 were examined to determine whether current trails have existed over the 20-year period. If the trail was maintained through use and existed throughout this period, it is assumed that there is a likelihood that prescriptive rights may exist.*

In its application of these public access policies, the Commission is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to offset a project's adverse impact on existing or potential public access.

The Commission finds that while it is unaware of any subsequent prescriptive rights investigations, the data in the LCP is sufficient to indicate that potential existence of prescriptive rights to and along The Strand/Coastal Trail and on the property must be addressed. Locating a permanent well in the locations permitted by the project as approved could affect the future siting

of the house it is intended to serve, and thus, in turn, create impacts on access and any potential prescriptive rights across the site. However, temporary test wells intended to determine potential water yield, if any, on the parcel would not commit the parcel to any particular configuration of potential development. If and when a Coastal Development Permit for a house is applied for, the entire project, permanent well and house together, could be evaluated for consistency with the LCP. Therefore, the Commission attaches Special Condition No. 1 to clarify that this permit is for temporary test wells only, and to require that any future development, including the establishment of a permanent well or ancillary facilities separately be subject to the County's coastal development permit requirements. The test drilling allowed by this permit will allow the applicants to meet their objective of determining if an on-site well can provide a potable and adequate water supply.

With the limitation on the extent and scope of the development provided by Special Condition No. 1, the Commission finds that test wells located at any of three drill sites would not interfere with any prescriptive rights which may exist. None of the drill sites would be located on The Strand, which is the identified location of the Coastal Trail or on any of the worn pathways shown on the above-mentioned aeriels. Therefore, the development will not interfere with those rights and would not interfere with access along The Strand. In addition, Juliana Avenue, located some 30 feet south of the potential well sites, provides additional vertical access to The Strand/Coastal Trail (see exhibit 4). As conditioned, therefore, the proposed development is consistent with the public access policies of the certified LCP and the Coastal Act..

C. Habitat, Marine and Natural Features Impacts:

The LCP contains 54 policies relating to sensitive habitats. Sensitive habitats are defined in LUP Policy 7.1 as follows:

*\*7.1 Definition of Sensitive Habitats*

*Define sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and off-shore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.*



*Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species.*

Policy \*7.3 specifically prohibits significant adverse impact on sensitive habitat areas, and requires all uses to be compatible with biologic productivity of such habitats:

\*7.3 Protection of Sensitive Habitats

*a. Prohibit any land use or development which would have significant adverse impact on sensitive habitat areas.*

*b. Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of the habitats.*

The LCP also contains policies for the protection of natural features, including naturally occurring or introduced vegetation that grows in the Coastal Zone. Policy 8.10 states:

8.10 Vegetative Cover

*(with the exception of crops grown for commercial purposes)*

*Replace vegetation removed during construction with plant materials (trees, shrubs, ground cover) which are compatible with surrounding vegetation and is suitable to the climate, soil, and ecological characteristics of the area.*

A botanical assessment was completed for the parcel on May 27, 1997, and is part of the local record of action. The assessment indicates that while the area may have native plants, no rare or endangered plant species were found. Nothing appears in the record to show that the parcel contains "sensitive habitats" as defined by the LCP.

Whether or not a development site contains environmentally sensitive habitat, LCP Policy 8.10 requires that vegetation removed during construction be replaced with appropriate vegetation. Consistent with this policy, the Commission attaches Special Condition No. 2 which requires restoration of vegetation after completion of drilling.

Public testimony also addressed the question of waste and wastewater disposal. In the original appeal (p. 7), the appellant stated:

*Regarding the potential well itself, the issue of the impact on the actual drilling site was not discussed by the County officials. What happens to the waste generated by actual test*

*drilling? How will this waste matter be disposed? There is no indication of how the spoils from a test drilling will be handled. Dumping the waste down Juliana Avenue or over the cliff will contaminate the Marine Reserve, a sensitive habitat under the protection of LCP Section 7.3...*

Policy 7.3 does require the protection of the Marine Reserve sensitive habitat from disposal of waste. The County independently requires a well permit from the Building Department. Such permits require removal and appropriate disposal of spoils from well drilling (and would not permit dumping the spoil onto Juliana Avenue or over the cliff). Therefore, the Commission finds that the proposed project is consistent with the certified LCP with respect to water and wastewater disposal.

In their appeal, the appellants contended:

*There has been no discussion on the effects of the inherent risk of failure associated with this project. There is significant risk of contamination and pollution to the surrounding public sewer and water lines in case of failure. A catastrophe, whether manmade, the result of equipment failure, geology, or severe weather conditions will cause a tremendously harmful impact upon the surrounding areas....*

*The significant cumulative and individual impacts of groundwater resource depletion within this area could be severe. What is to be done in regards to possible saltwater intrusion, and saltwater contamination, as the result of drilling so close to the ocean? This important issue must be resolved so that no large aquifers are contaminated as a result of this drilling project. And what about the opposite effect, i.e., what happens if this project causes freshwater to run into the ocean and damages the ecosystem in the Fitzgerald Marine Reserve... (Exhibit 6, p. 8, )*

With regard to the contentions concerning risk of failure, groundwater resource depletion, saltwater intrusion and contamination, and "what happens if this project causes freshwater to run into the ocean," the appellants provide no evidence that any of these results might occur, nor do they cite policies of the LCP that would be contravened.

In contrast, the Negative Declaration that is part of the County's record of decision states:

- g. The project is not expected to have any adverse impacts on the existing groundwater resources in the area. Citizens' Utilities Company of California (CUCC) is the primary water provider to the Moss Beach/Montara area, drawing its water supply from several wells. The CUCC has stated that "smaller dispersed wells should have a minimal impact on base flow on CUCC's existing facilities." In addition, the 1989*

*Kleinfelder Final EIR concludes that "sufficient water supply and recharge are available in most of the area to allow the use of domestic wells, where suitably located and appropriately constructed," and, additionally, "while some interference effects would be expected for domestic wells located in close proximity to CUCC production wells, these effects are not considered to be of a magnitude sufficient to render useless potential well sites to individual users." In general, both Kleinfelder and CUCC concluded that domestic wells should have a minimal impact on the base flow of the groundwater sources.*

Based on these facts, the Commission finds that the project would have no demonstrated impacts on groundwater or on groundwater flows that could impact the sensitive habitat of the the Fitzgerald Marine Reserve. As conditioned, therefore, the proposed development is consistent with the habitat and visual policies of the certified LCP.

D. Geologic and Erosion Hazards:

LCP Policy 9.8 addresses bluff and cliff top development setbacks:

9.8 Regulation of Development on Coastal Bluff Tops

- a. *Permit bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic lifespan of the development (at least 50 years), and if the development (including storm runoff, foot traffic, grading, irrigation and septic tanks) will neither create nor contribute significantly erosion problems or geologic instability of the site or surrounding area.*

The County's Negative Declaration on the project notes that the project is located:

*...just east of coastal cliffs that are identified by the County's Geotechnical Hazards Synthesis Maps as "Low Stability." [This] category stipulates that no structures should be located within a 45 degree (1:1) setback zone,... or within 50 feet of the blufftop, whichever is greater. The proposed well location... would comply with these requirements.*

The local record also includes a November 15, 1990 report by JCP Consultants/Engineers regarding "Engineering Geologic Reconnaissance Services for Proposed Development of Seven Homes on Vallemar Street and Juliana Avenue, Moss Beach, California." This report states (p. 9):

*The San Mateo County Local Coastal Program, Section 9.8, limits the area of development to within 50 feet of the bluff top or to the setback limit of a line described on the bluff top by the intersection of a plane inclined at a 20 degree angle from horizontal passing through the toe of the bluff, whichever is greater. This line is shown on Figure 2.*

This Figure 2 (attached as Exhibit 7) was included in the staff report to the Planning Commission, and was part of the basis for the County's decision on the project. The submitted site plan shows the nearest proposed well site more than 60 feet from the bluff edge. To assure that development of even temporary test wells will be consistent with LCP policy 9.8, the Commission attaches Special Condition No.1 requiring that the approved test wells be located only in the locations proposed by the applicants, as shown in Exhibit 4.

The Commission therefore finds that the proposed development as conditioned is consistent with the policies of the certified LCP concerning geologic hazards associated with bluff top development.

F. Water Supply and Reliability

Under the LCP as recently amended, Section 6328.14 requires as a precondition for residential development the proof of sufficient water of an acceptable quality and quantity to support such development:

*SECTION 6328.14 CONDITIONS. Approval of a Coastal Development Permit shall be conditioned as necessary to ensure conformance with and implementation of the Local Coastal Program. The approving authority may require modification and resubmittal of project plans, drawings and specifications to ensure conformance with the Local Coastal Program. When modification and resubmittal of plans is required, action shall be deferred for a sufficient period of time to the project.*

*For all proposed development requiring a domestic well water source and not subject to the provisions of Section 6328.7(e), require as a condition of approval demonstrated proof of the existing availability of an adequate and potable water source for the proposed development, and that use of the water source will not impair surface streamflow, the water supply of other property owners, agricultural production or sensitive habitats.*

In their appeal, the appellants contended:

*...It is common knowledge that wells dug in the San Mateo County coastside area provide poor quality water and usually fail in a short period of time. The property owner must*

*then apply to the local water district for an emergency hook-up. Citizens Utilities is already struggling to meet local needs and does not have extra water. Every time a water district has to tap into its emergency reserves for private property, less water is available for commercial coastal visitor-serving facilities. (Exhibit 6, p. 8)*

However, if a suitable source of water is found by the test drilling, that source will have to be confirmed as adequate in any subsequent permit for a residence. It is at that time that most of the questions raised by the appellant will properly be addressed. Among the considerations will be the long-term dependability of the well, both in terms of its safe yield of groundwater, risk of contamination, and risk of destruction by erosion or geologic instability.

The Commission finds that installation of a test well at this time, before an application for development of a residence is considered for the site, is consistent with the intent of Section 6328.14 that applicants for development requiring a domestic well water source prove the availability of an adequate and potable water source before undertaking such a development.

Therefore, the Commission finds that the project as conditioned is in conformance with the certified LCP policies regarding water supply and reliability.

F. Legality of Lots

The Commission also notes that there is an underlying issue with regard to the legality of the lot in question, and the other nearby lots owned by one of the applicants, Mr. Charnock. These lots were allegedly created by a "lot line adjustment" in 1991, but may actually require a merger and resubdivision subject to Coastal Development Permit Approval. The Commission finds that the Commission's approval of the project should not in any way be interpreted as indicating that the underlying lot configuration is legal or proper. The Commission is putting any subsequent purchasers of these lots on notice to that effect.

G. California Environmental Quality Act.

Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, modified by any conditions of any approval, 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 to be found consistent with the resource protection policies of the Coastal Act. The attached mitigation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.

Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

#### EXHIBITS

1. Regional Location Map
2. Site Location Map
3. Street Location Map
4. Site Plan
5. County Notice of Final Local Action
6. Appeal
7. Erosion Setback Line
8. "Historic Bluff Erosion"

A B C D E F G H I J K L M N O

PACIFIC OCEAN

PACIFIC

PROJECT SITE

EXHIBIT NO. 1  
APPLICATION NO. A-1-SMC-98-049  
NEEL & CHARNOCK  
Regional Location  
Map

California Coastal Commission

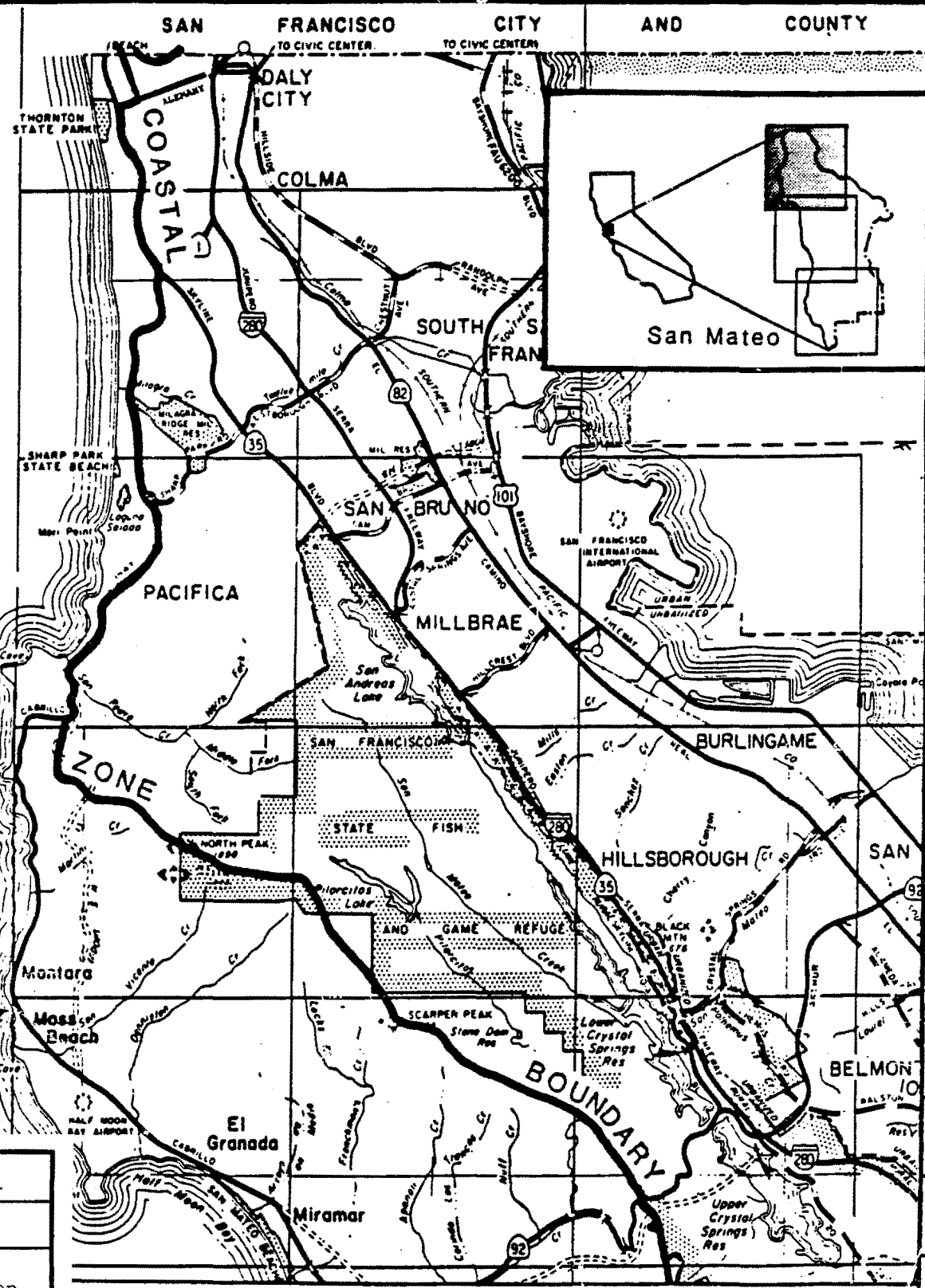
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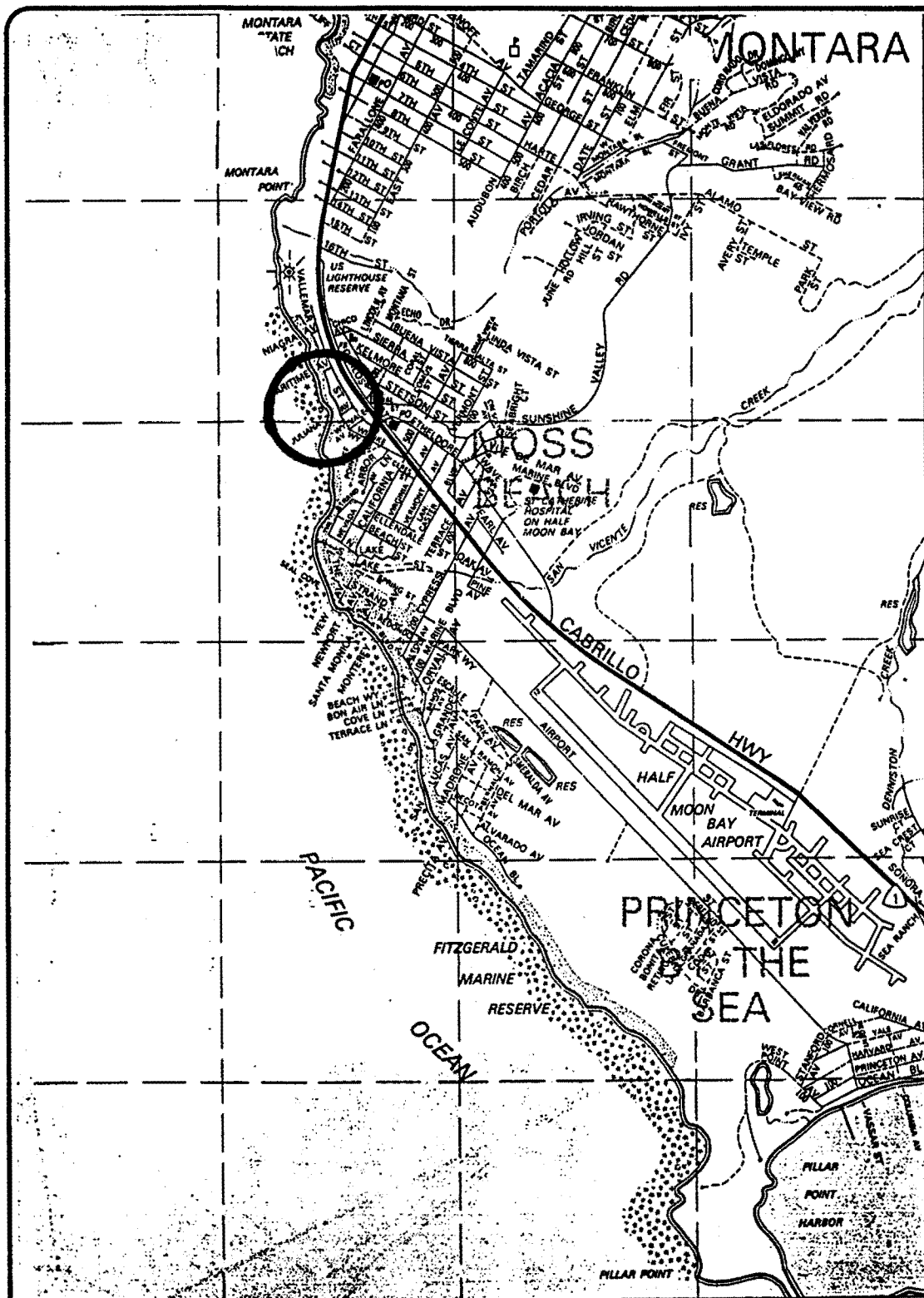
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County of San Mateo

Sheet 1 of 3





LOCATION MAP

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San Mateo County Board of Supervisors Meeting

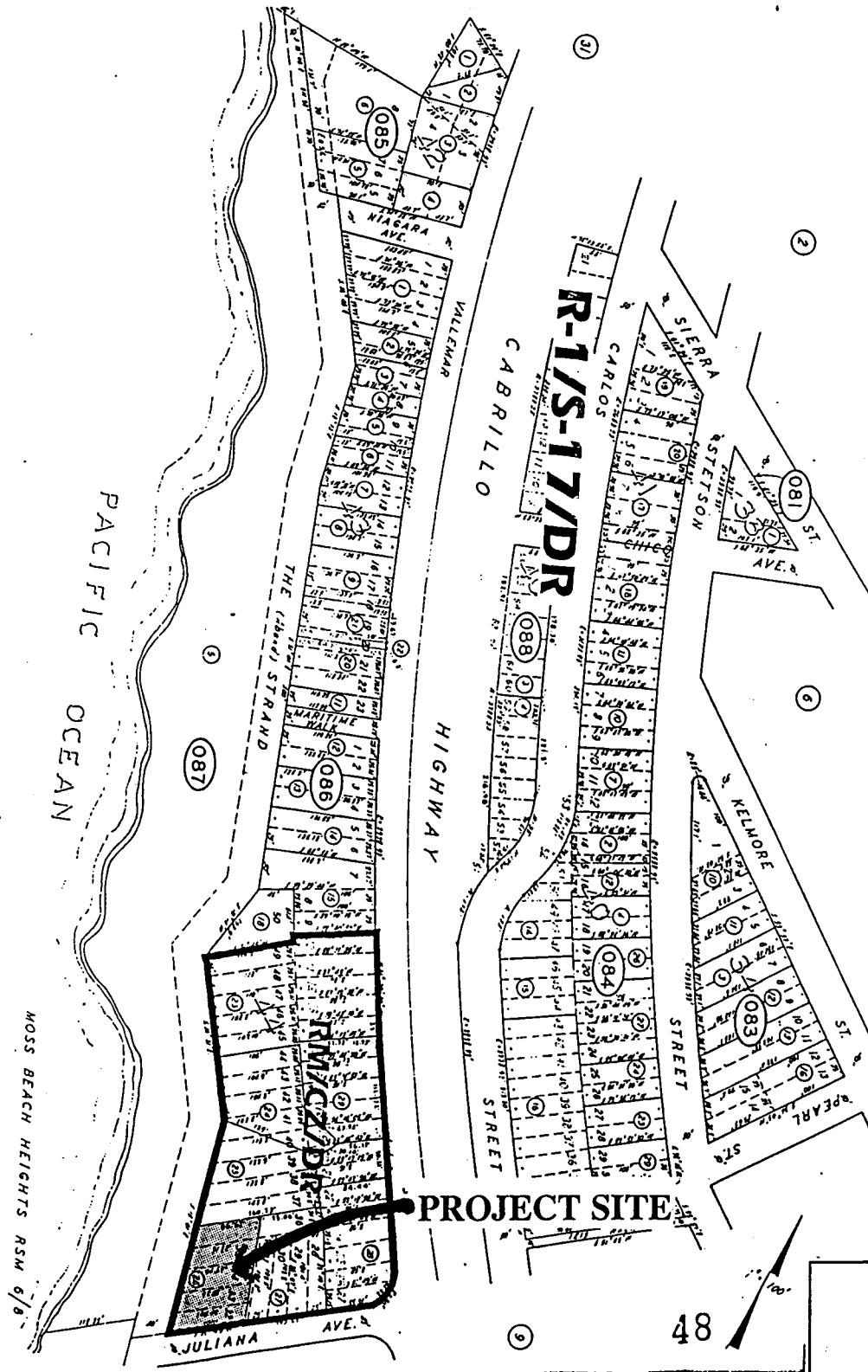
EXHIBIT NO. 2

APPLICATION NO.  
A-1-SMC-98-049

NEEL & CHARNOCK  
Site Location Map

California Coastal Commission



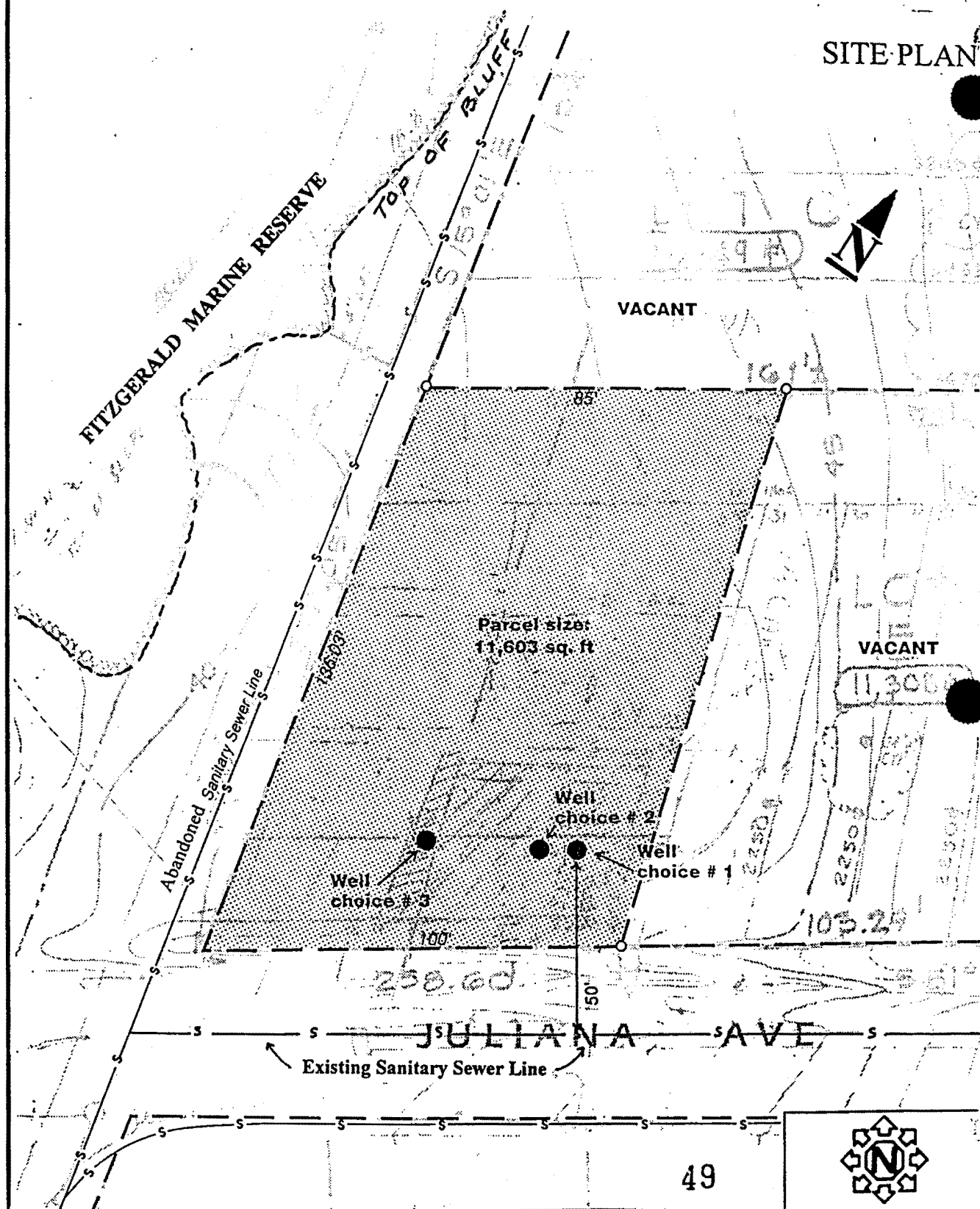


San Mateo County Board of Supervisors Meeting

EXHIBIT NO. 3

APPLICATION NO.  
A-1-SMC-98-049NEEL & CHARNOCK  
Street Location Map

# SITE PLAN



San Mateo County Board of Supervisors Meeting

EXHIBIT NO. 4

APPLICATION NO.  
A-1-SMC-98-049

NEEL & CHARNOCK  
Site Plan

California Coastal Commission



Planning and Building Division

# County of San Mateo

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Please reply to:

**Dave Holbrook**  
**(650) 363-1837**

CALIFORNIA  
COASTAL COMMISSION

May 15, 1998

Sara Hindman  
P.O. Box 46  
Moss Beach, CA 94038

EXHIBIT NO.	5
APPLICATION NO.	A-1-SMC-98-049
NEEL & CHARNOCK	
Notice of Final	
Local Action (3 pages)	
California Coastal Commission	

Subject:      Applicant:      Elizabeth Neel (prospective buyer)  
                 Appellant:      Sara Hindman and neighbors  
                 Location:      Corner of Juliana Avenue and The Strand, Moss Beach  
                 APN:              037-086-260

Dear Ms. Hindman:

On May 12, 1998, the San Mateo County Board of Supervisors considered your appeal of the Planning Commission's decision to approve a Coastal Development Permit and a Resource Management Permit to allow drilling of a domestic well on a parcel in Moss Beach. This project is appealable to the California Coastal Commission.

Based on the information provided by staff, the Board of Supervisors accepted the staff recommendation to deny the appeal and uphold the Planning Commission's decision to approve permits for a domestic well as follows:

## FINDINGS

### Regarding the Negative Declaration, Find:

1. That the revised Negative Declaration is complete, correct and adequate and prepared in accordance with the California Environmental Quality Act and applicable State and County Guidelines.
2. That, on the basis of the Initial Study and comments received thereto, there is no evidence that the project will have a significant effect on the environment.
3. That the Negative Declaration reflects the independent judgment of San Mateo County.

Sara Hindman

Subject: Location: Corner of Juliana Avenue and The Strand, Moss Beach

APN: 037-086-260

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Regarding the Coastal Development Permit, Find:

4. That the project, as described in the application and accompanying materials required by Section 6328.7, and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements and standards of the San Mateo County Local Coastal Program.
5. That the project conforms to the specific findings required by policies of the San Mateo County LCP regarding the placement of structures in the urban unincorporated area.

Regarding the Resource Management Permit, Find:

6. That the proposal is consistent with the provisions and requirements of the Development Review Criteria as stipulated in Zoning Regulations Chapter 20A, Section 6324 et seq.

CONDITIONS

Planning Division

1. Grading and vegetation removal shall be minimal for purposes of accessing the parcel and drilling up to three test wells. All disturbed vegetation shall be replaced upon completion of all well drilling and construction activities. Wells that are not deemed adequate per Environmental Health standards shall not be capped but removed entirely per that Division's standards.
2. If the well pump is to be energized, all utility lines connecting to it shall be undergrounded.
3. The well shall not be located closer than 50 feet from the ocean bluff edge.
4. In the event that a public water supply becomes available, the applicant shall switch to this alternative.
5. This Coastal Development Permit is valid, ultimately, for only one domestic well, although up to three test well sites may be drilled and tested; any future development shall be subject to the County's Coastal Development requirements.
6. The Coastal Development Permit shall be valid for one year from the date of its approval. Any extensions of this permit shall require submittal of an extension request and payment of any applicable extension fee.

Sara Hindman

Subject: Location: Corner of Juliana Avenue and The Strand, Moss Beach

APN: 037-086-260

May 15, 1998

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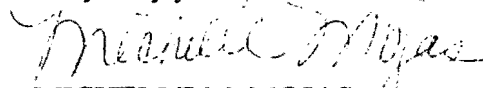
Environmental Health Division

7. Prior to the building permit application stage, the applicant shall obtain a well permit from Environmental Health and meet all requirements of that department.

In addition, the Board also directed that any development permit applications submitted for a residence on this subject parcel or any of the six other parcels (currently owned by Dick Charnock) shall not be exempt from CEQA but shall require an Initial Study that shall take into consideration the cumulative impact of future development on all 7 parcels.

Thank you for your courtesy and cooperation.

Very truly yours,



MICHELLE M. MOJAS

Planning Commission Secretary

cc:

David J. Byers, Esq.

Dick Charnock

Elizabeth Neel

Jeff Kraft

Lennie Roberts

Point Montara Fire

Montara Sanitary District

MCCC, Laura Stein

Paul Perkovic

Lou Slocum

Gail Erwin

Les Fields

Gary Wood

William Kraus

Chris Thollauc

Jack Liebster, North Coast Coastal Commission

Mr. and Mrs. George Wikle

Ms. Susan Overstreet

Mr. and Mrs. Gray

Mr. Joseph Rosario

Lizanne Reynoldsm Adams & Broadwell, et al.

Tim Duff

Planning Director, City of Half Moon Bay

Craig Sihner

## CALIFORNIA COASTAL COMMISSION

NORTH COAST AREA

45 FREMONT, SUITE 2000

SAN FRANCISCO, CA 94105-2219

(415) 904-5260

APPEAL FROM COASTAL PERMIT  
DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name, mailing address and telephone number of appellant(s):

Sara Hindman & others listed in letter  
PO Box 46  
Moss Beach CA 94038 (650) 728-5021  
 Zip Area Code Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port government:

San Mateo County

2. Brief description of development being appealed:

Wells being dug preceding development  
on 2.47 acre parcel in Moss Beach - area bordered  
by Juliana Ave and Vallemar St

3. Development's location (street address, assessor's parcel no., cross street, etc.):

#CDP 97-0016 RMD 97-0013  
APN 037-086-260

4. Description of decision being appealed:

a. ☒ Approval; no special conditions:

b. Approval with special conditions:

c. Denial:

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

## TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-1-SMC-98-049DATE FILED: 5/28/98DISTRICT: North Coast

H5: 4/88

EXHIBIT NO. 6

APPLICATION NO.  
A-1-SMC-98-049

NEEL &amp; CHARNOCK

Appeal of  
Sara Hindman

California Coastal Commission

RECEIVED

MAY 28 1998

CALIFORNIA  
COASTAL COMMISSION

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

please see attached letter & information

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Tom Dindman on  
Signature of Appellant(s) or  
Authorized Agent

Date 5/28/98

NOTE: If signed by agent, appellant(s) must also sign below.

Section VI. Agent Authorization

I/We hereby authorize \_\_\_\_\_ to act as my/our representative and to bind me/us in all matters concerning this appeal.

\_\_\_\_\_  
Signature of Appellant(s)

Date \_\_\_\_\_

May 28, 1998

P.O. Box 46  
Moss Beach, CA 94038

California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105

Dear Coastal Commission Members,

We are appealing the May 15, 1998 decision of the San Mateo County Board of Supervisors. This decision permits up to three test wells to be drilled on property located on the Vallemar Bluffs in Moss Beach, CA. It is our opinion that this project does not conform to the policies and requirements of the San Mateo County Local Coastal Program and the California Coastal Act. The permit to drill the well is the first step in the planned development of seven lots on this 2.47 acre parcel and must be evaluated as such.

#### **BASIS FOR APPEAL**

Allowing this well to be drilled without following the laws of the state of California will set a dangerous precedent for development in sensitive areas that are supposed to be protected by the strictest governmental regulations. The property is situated on the northern portion of the Fitzgerald Marine Reserve, and is designated in a sensitive habitat area by the Local Coastal Program. There is concern that development in this area would damage the Fitzgerald Marine Reserve. Some of the policies of the California Coastal Act include the protection and expansion of public coastal access; protection, enhancement and restoration of environmentally sensitive habitats; protection of the scenic beauty of coastal landscapes and seascapes; and environmental quality protections.

The County has taken the position that drilling for water is more important than determining the effects this action might have on this blufftop area. We understand that the County wants to determine if water is available before it considers the cumulative effects of project actions. However, it is our position that this thinking goes directly against governmental policies designed to provide long-term protection and measure the cumulative effects of development on coastal areas. With so much at risk on this undeveloped coastal property, one would think that the County would be willing to assess the various impacts that would occur before the damage is done.



We feel that the geological hazards, environmental problems, waste water problems, and negative factors inherent in the drilling process warrant further consideration and serious study before any permits could be issued.

The property in this appeal is completely undeveloped at this time, and as far as we know, has never had structures upon it. The physical environment consists of several species of plants and large trees. Without a complete biological report/review of this fragile and sensitive area, how can it be determined just how much this of acreage could withstand development?

We are also very concerned that development of this area will negatively impact the use and enjoyment of this area, blocking ocean and scenic views, restricting shoreline access and hampering coastal public right of ways in direct violation of LCP policies.

Dismayed that many issues were not adequately addressed and evaluated at various hearings held by San Mateo County officials, we are especially distressed that the County continues to ignore our concerns regarding the cumulative and detrimental effects this drilling project will have upon the coastal environment and the trails traversing the area. The County's actions contradict LCP plans because issues and policies regarding erosion, coastal trails, public access rights, and sensitive habitats were ignored.

The coastline of California is a precious and unique resource. State legislators have recently renewed their commitment to the coastal regions. They recognize the higher duty of protection the coastal region requires, and San Mateo County must make the same commitment to protect coastal areas with the same heightened level of obligation and duty.

We are concerned that any form of drilling and future development of this area will cause serious damage to the fragile ecosystem. It is vital that these concerns be addressed and rectified satisfactorily. Many of us have lived here for ten years and have seen firsthand the erosion of the cliffs and bluffs. USGS estimates an average of more than one foot per year erosion in this area. (please see attached table.) However, coastal erosion is episodic, and many feet of bluff can disappear in a single storm.

## **PRESCRIPTIVE RIGHTS AND INTERFERENCE WITH PUBLIC ACCESS**

### **PUBLIC ACCESS AND EASEMENTS**

The County of San Mateo clearly violated LCP plans and policies with this permit approval.

Development of this property with seven houses will interfere with public access, public easements and coastal trails that have been used for decades in this area. Any development of this property will severely impact one-third of the public coastal access in the Moss Beach area. The Strand (a bluff-edge paper street and established trail) runs through this property and the prescriptive rights issues and various easement issues concerning this acreage must be resolved before any type of permit may be approved. Additional grants and setbacks to preserve the Strand will be necessary as the erosion continues. The County has been unwilling to recognize these issues/rights, claiming there is no evidence of there being any basis for adjudicating prescriptive easement rights, contrary to the tables in the LCP. The County's assertion is inconsistent with Tables 10.1 and 10.2 from the LCP. These charts provide clear evidence that prescriptive rights are very likely to exist on this property. (Please see attached Table 10.2 regarding the analysis of potential prescriptive rights in this area. Also please review attached Table 10.1 regarding Assessment of Access Trails and Shoreline Destinations.)

In an April 24, 1997 letter, Mr. Charnock acknowledged public access rights along the bluff tops. San Mateo County has taken action in the past to defend easements in this immediate area. (Letter to Constance Bosza, Feb. 1, 1995)

There is no evidence in County documentation that it considered the shoreline destination recommendations for this area. The LCP, regarding Site Specific Recommendations for Shoreline Destinations in the Fitzgerald Marine Reserve, states: "Develop access along the bluffs and to the beaches of the Fitzgerald Marine Reserve in stages as public funding is available to adequately improve and manage the access and protect the resources. The access should be oriented toward education and nature viewing and interpretation, particularly in the northern and central sections." (LCP, Table 10.6, p. 10.31) The LCP further recommends the development of "an interpretive trail along the bluff parallel to Vallemar Street." It states "sign and improve access to the bluff from the end of Juliana Avenue and Wienke Way. This will be the major public access to the bluff. The other trails along Vallemar Street should remain open, however." (LCP, Table 10.6, p. 10.32)

Section 6913.5 Ocean Shoreline Criteria states: "The following criteria shall apply along the entire ocean shoreline of the RM/CZ District: (b): for land divisions and planned unit developments, a public access easement, extending inland no more than 100 feet from the mean high tide line, shall be dedicated along the ocean shoreline before private development is to be permitted."

### THE COASTAL TRAIL

Among the various prescriptive rights/public access issues that must be resolved prior to possible development is the Coastal Trail (also known as the Coastside Trail, appearing in the California State Master Plan and the San Mateo County General Plan) directly impacts this property and must be addressed. The San Mateo County Trails Plan, approved by the Board of Supervisors in March 1990, lists the Coastal Trail on its Priority List. (San Mateo County Trails Plan, Parks and Recreation Element of San Mateo County General Plan, introduction p. ii, p. 4). This trail corridor is situated along the coastal bluffs and affects this property.

### THE STRAND

The Strand, a blufftop access trail, runs through this property and must be protected. There is no evidence that the County has made any attempt to protect the Strand from the effects of well drilling or subsequent development. A 1997 Superior Court of San Mateo County decision states: "the Strand is a publicly dedicated and owned right of way, and is, and historically been, used by members of the public for coastal access and other purposes." Christopher Tyler and Amy Tezza v. Dell P. Williams No. 387846 (Sup. Ct. San Mateo County) (1997) at page 5.

It goes on to say "with respect to the Strand, ...no use of real property owned or dedicated to a public entity shall ever ripen into any right, title or interest against the owner, regardless of how long or under what circumstances. Civil Code § 1007." (ibid. at page 13).

The Coastal Commission noted in January 1997, that the Strand is currently used by the public as an access trail and is publicly owned. "...the County acquired the Strand in 1967 for public use and for the purpose of establishing a marine reserve (now the Fitzgerald Marine Reserve)." (California Coastal Commission Appeal # A-1-SMC-96-82).

Section 10.27 of the LCP discusses Development Standards for Protecting Adjacent Land Uses in regards to access trails. LCP § 10.27(a) "Provide separation between shoreline access and adjacent residential uses to protect the privacy and security of houses and the public nature and uses of the shoreline. Specifically, keep the edge of lateral shoreline access trails 25 feet and vertical shoreline access trails ten feet from any occupied residential structure." (LCP, 10.9.) The San Mateo County Zoning Regulations also support public access easements for the purpose of coastal access. We are justly concerned that development will simply devour the public access along the bluffs. It is up to San Mateo County to protect the Strand and it has not occurred in this case. Coastal access is just too important to be ignored, especially in areas adjacent to the Fitzgerald Marine Reserve, an area of special biological concern.

We have provided information obtained in the LCP that supports prescriptive rights easements on this property, however the County continues to ignore this important issue. These coastal trails and the Strand are used constantly by the public and must be protected and preserved. The public rights must be clearly established before any type of well drilling or other development can occur. What happens if this well is dug on top of the public easements?

The San Mateo General Plan Map 8.5M lists this area as Open Space. The Local Coastal Program (LCP) Section 1.3(b) recognizes that "in order to make a logical urban/rural boundary some land has been included within the urban boundary which should be restricted to open space use and not developed at relatively high densities." This is not the responsible way to develop property, especially coastal property, which requires greater protection, and needs to be reconsidered.

## OTHER ENVIRONMENTAL CONCERNS AND CRITICAL ISSUES

### MARINE SANCTUARY VULNERABILITY

This property is located at the northern end of the Fitzgerald Marine Reserve and is also part of the Monterey Bay National Marine Sanctuary. The Fitzgerald Marine Reserve is a Sensitive Habitat area and subject to protection under LCP Section 7.3. Again, there is no evidence that the county took these factors into consideration. Drilling and development may significantly alter runoff and erosion patterns, altering the local coastal ecology, particularly in the sensitive intertidal zone through alterations to the chemical composition of the coastal water. This proximity to the coast makes the Sanctuary vulnerable to pollution problems in the eleven watersheds which drain into it.

### HABITAT DEGRADATION

"Key problems identified in the Sanctuary and its watersheds include sedimentation, toxic pollutants, sediments... high fecal coliform levels, fish population declines, low flows in rivers and streams, wetlands alteration, and habitat degradation." [[http://205.155.38.2/water\\_quality/water-pro.html](http://205.155.38.2/water_quality/water-pro.html)].

Habitat degradation impacting the local fauna and flora is a critical issue which must also be considered in this case. When looking at habitat loss, it is both insufficient and misleading to simply consider the impact of developing each lot in isolation from the impact incurred by developing the entire project. In addition, man-made structures not only act as prohibitive barriers to migration, isolating small subpopulations from one another, but also significantly

alter local microclimates which help define the suitability of local habitats by changing sunlight, moisture, and wind distribution patterns.

The botanical survey did not find endangered plants, however, native plants were found. In fact, the botanist's report states in two separate places that the prospective home owner would plant native plants on this lot. Apparently, this was mentioned to allay concerns over environmental impact to native plants. If these statements are included to minimize impact on the native plant population, one must also take into account loss of overall area, increased population fragmentation, and microclimate changes due to building structures on the habitat.

#### FAUNA POPULATION IMPACT

There is yet to be an exhaustive fauna survey and environmental impact analysis, not only of existing animal populations on the bluff tops, but also in the intertidal area which would be affected by alterations in runoff and erosion patterns. The Kleinfelder Water Well EIR reports that the communities of Montara and Moss Beach are located along the coastal portion of the Pacific flyway, the migratory route used by North American waterfowl and shorebird populations. Large numbers of land birds use this flyway as well. As migratory birds pass through the study area, shorebirds and waterbirds find suitable resting and feeding habitats along the coastal strand and offshore waters. (Kleinfelder DEIR, pages 90-91.) Herons, Pelicans, various Raptors, and endangered Snowy Plovers are just a few of the shorebirds who frequent this area.

#### GEOLOGICAL CONCERNS

Kleinfelder has already identified several serious and potential problems/impacts regarding this entire project. The bluffs and soil are an area of low stability (the fact that the cliffs north and south of this location are high stability is irrelevant as these locations are not where the development is planned.)

Kleinfelder states that soil in Moss Beach/Montara area contains large sand, low organic content, low to moderate moisture holding capacity — in most cases, extremely erodible. (page 86.) In fact, the JCP geology report notes a small landslide immediately west of Lot D. There is also concern over erosion impacting lots B and A. (JCP Report 1990, p.3, p.11) The fifty year erosion setback requirement must also be addressed. It is highly likely that this setback requirement would be directly in conflict with this home site and the drilling location. LCP Section § 9.8 Regulation of Development on Coastal Bluff Tops states: "(a) Permit bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic lifespan of the development (at least 50 years)

and if the development (including storm runoff, foot traffic, grading, irrigation, and septic tanks) will neither create nor contribute significantly to erosion problems or geologic instability of the site or surrounding area." There is no evidence that the county has followed this requirement.

The Environmental Evaluation Checklist is confusing and contradictory because both "no" and "significant unless mitigated" are checked under the heading of Land Suitability and Geology, (j) which asks "affect a natural drainage channel or streambed, or watercourse?"

We are extremely worried about the effects of the drilling procedures on the fragile bluffs. The erosion caused by the recent winter storms only adds to our distress. In a article in the February, 1998, issue of Coast Views, Linda Lee Yule wrote ... "Property owner Dick Charnock, of Half Moon Bay's Real Estate Funding Service, is concerned about cliff retreat on the Vallemar Bluffs. He notes that the run-off from recent heavy rains has created erosion more severe than usual." (Page 29). With the erosion caused by this past winter's severe storms, the development of seven houses, wells, fences, etc., causes increased runoff which could accelerate even greater coastal erosion.

Several wells have recently been drilled in the Moss Beach/Montara area. We have been able to see firsthand just how much the surrounding areas are disturbed by the drilling process. Special precautions and procedures must be taken to protect this unique area and the native plants located here. This coastal plain is unique and must be protected from invasive drilling procedures; a sensitive area requires special precautions and protection to maintain the native species. Strict clean-up and restoration efforts should be required to maintain this sensitive area and restore it if drilling is permitted.

As stated above, the property in question consists of fragile soil with rapid erosion, thus requiring stronger protective measures against damage.

Regarding the potential well itself, the issue of the impact on the actual drilling site was not discussed by County officials. What happens to the waste generated by actual test drilling? How will this waste matter be disposed? There is no indication of how the spoils from a test drilling will be handled. Dumping the waste down Juliana Avenue or over the cliff will contaminate the Marine Reserve, a sensitive habitat under the protection of LCP Section 7.3.

#### EQUIPMENT

None of the accouterments surrounding a well were addressed. No mention or discussion is

made of the storage tanks, reservoir, piping, and other equipment necessary for domestic wells.

#### RISK OF FAILURE

There has been no discussion on the effects of the inherent risk of failure associated with this project. There is significant risk of contamination and pollution to the surrounding public sewer and water lines in case of failure. A catastrophe, whether manmade, the result of equipment failure, geology, or severe weather conditions will cause a tremendously harmful impact upon the surrounding areas.

The cumulative effects from this well drilling project are negligible according to the county. However, when one considers the impact on the surrounding area, as we have explained above, it is clear that a significant impact will effect this acreage. Drilling seven random wells (and up to twenty-one drilling attempts) will simply turn this property in a hodge-podge of Swiss cheese. It is common knowledge that wells dug in the San Mateo County coastside area provide poor quality water and usually fail in a short period of time. The property owner must then apply to the local water district for an emergency hook-up. Citizens Utilities is already struggling to meet local needs and does not have extra water. Every time a water district has to tap into its emergency reserves for private property, less water is available for commercial coastal visitor-serving facilities.

The significant cumulative and individual impacts of groundwater resource depletion within this area could be severe. What is to be done in regards to possible saltwater intrusion, and saltwater contamination, as the result of drilling so close to the ocean? This important issue must be resolved so that no large aquifers are contaminated as a result of this drilling project. And what about the opposite affect, i.e., what happens if this project causes freshwater to run into the ocean and damages the ecosystem in the Fitzgerald Marine Reserve.

We are very concerned that the county failed to address the significant impact (both individually and cumulatively) of wastewater generation and disposal created by the drilling of the domestic water well. It is important to address the issues of wastewater generation concerns at this time, especially when considering the fragile geological conditions in which this property sits and the severe negative effects that will result from this drilling project.

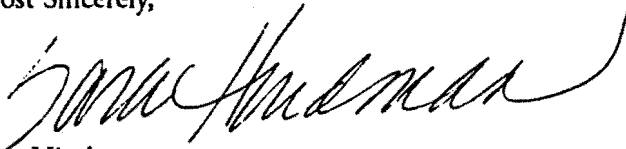
#### CONCLUSION

There are just too many questions and issues that need definitive answers before any type of development can go forward. It is imperative that the issues surrounding LCP and Coastal Act requirements, prescriptive and public access rights, geological and ecological concerns on this

fragile sensitive habitat, water wells, scenic corridors and other critical considerations that were outlined above be addressed and fully resolved before any development can be contemplated. We respectfully urge the Coastal Commission to find that our appeal raises several substantive issues, and that this project must be addressed in its entirety before this enabling well can proceed.

Thank you very much for the opportunity to express our comments regarding possible development on the 2.47 acre parcel in Moss Beach, CA. We very much appreciate your careful consideration of our concerns.

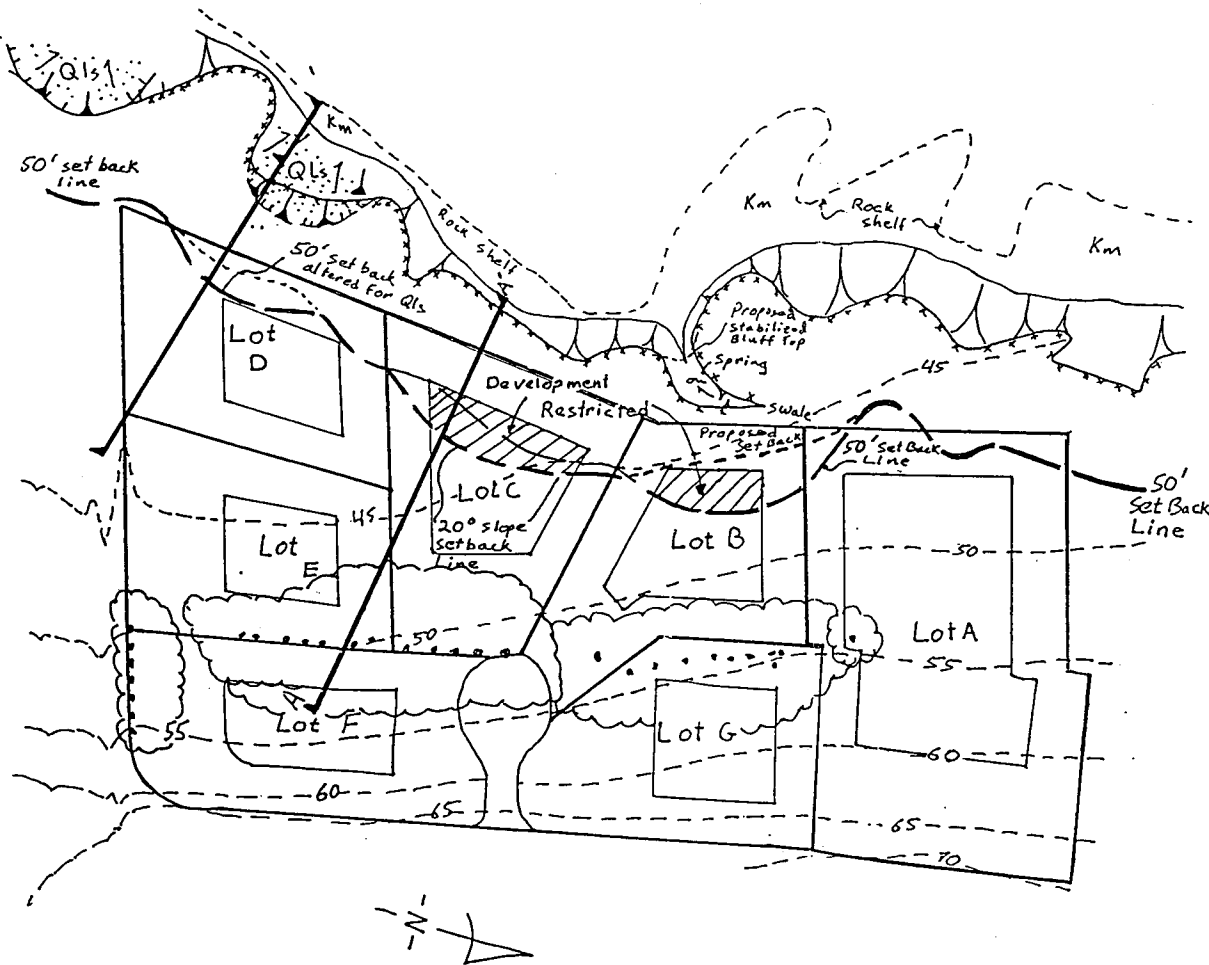
Most Sincerely,

A handwritten signature in cursive script, appearing to read "Sara Hindman".











Sara Hindman

on behalf of Louis Slocum, Bill Kraus, Gary Wood, Judy Wood, Ronald Lanz, Cynthia Lanz, Diana Histan, Michael Histan, Allen Gale, Linda Gale, Les Fields, Gail Erwin, Paul Smith, and Friends of the Field

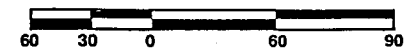




# **EXPLANATION**

-  Fill - Man emplaced soil and materials
-  Landslide - Arrows show direction of movement
-  Fill Slope
-  Cut Slope
-  Bluff Top
-  Topographic Line
-  Drainage Channel
-  Property Line
-  Fence Line
-  Tree

Note: This Map is a schematic illustration of observed geologic features and should not be used for any other purpose.



Approximate Scale (feet)

Base supplied by J.R. Bennie & R.L. Beigle

EXHIBIT NO.	7
APPLICATION NO.	A-1-SMC-98-049
NEEL & CHARNOCK	Erosion Setback Line

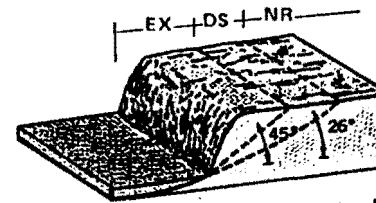
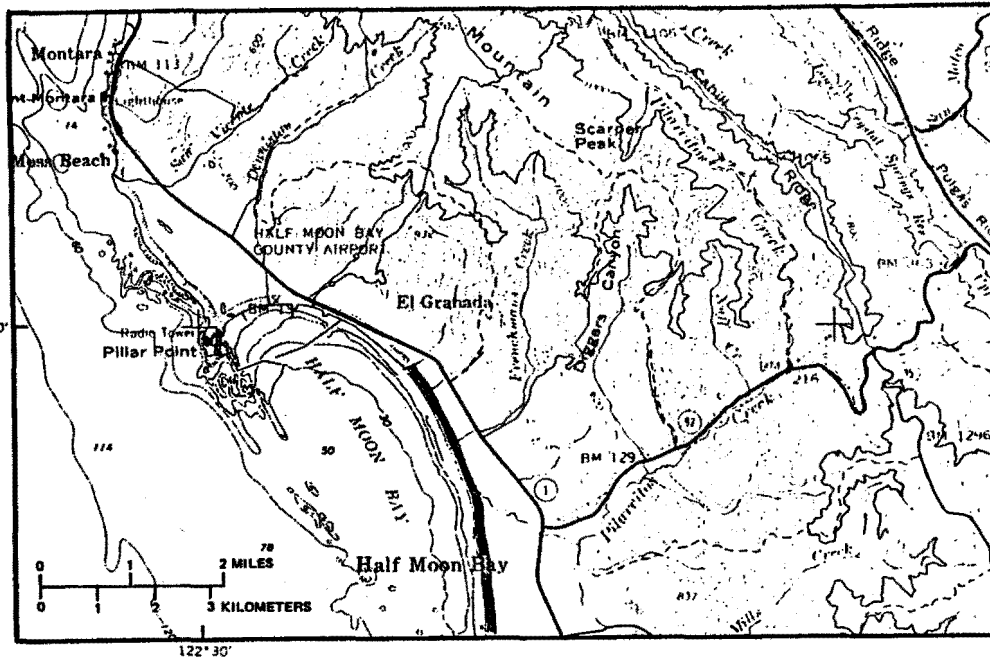
**JCP**

## Site Plan

PROPERTY ON VILLEMAR ST MOSS BEACH

Project No.	Date	FIGURE 2
JCP 3059	NOV 1990	

## County regulations for bluff-top development



### EXPLANATION OF SETBACKS

- EX - structures excluded
- DS - demonstrate stability in geotechnical reports
- NR - normal geotechnical reports for proposed land use

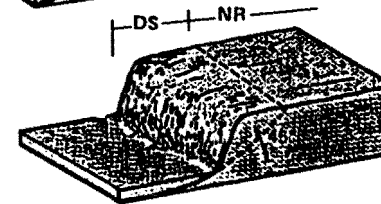
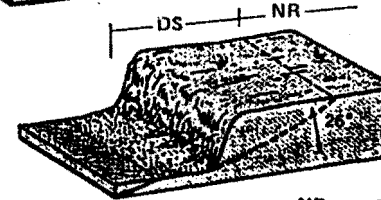
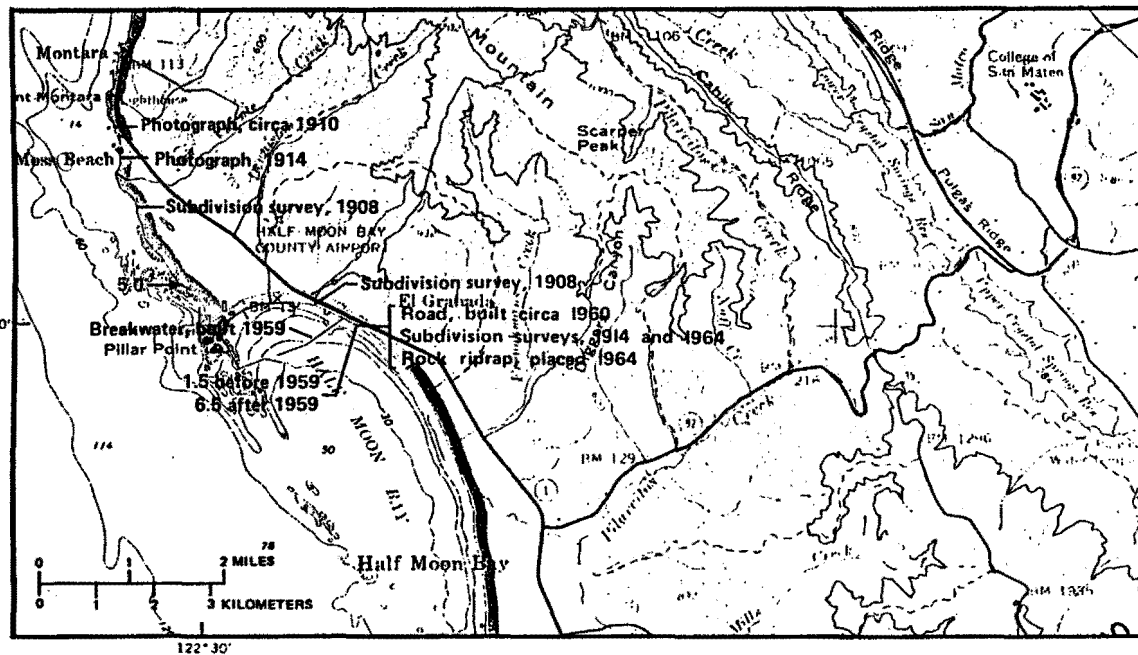


EXHIBIT NO.	8
APPLICATION NO.	A-1-SMC-98-049
NEEL & CHARNOCK	"Historic Bluff Erosion"
California Coastal Commission	

## Historic bluff erosion



### AVERAGE RATE OF EROSION

Greater than 1 foot (0.3 m) per year

Less than 1 foot (0.3 m) per year

5.0 → Rate, in feet per year, at locality indicated by arrow

### SOURCES OF DATA

- Based mostly on comparison of:
  - (1) Aerial and ground photographs taken 1926 - 70
  - (2) Maps made in 1850 - 1956
- Supplemental information from other archival materials and from field investigations of manmade features, as noted on the map

