

CALIFORNIA COASTAL COMMISSION

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| Filed: | October 16, 2001 |
| 49 th Day: | Opened and Continued |
| Staff: | Randall Stemler |
| Staff Report: | September 25, 2003 |
| Hearing Date: | October 8, 2003 |
| Commission Action: | |

STAFF REPORT:
DE NOVO HEARING ON APPEAL

| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APPEAL NO.: | A-1-MEN-01-056 |
| APPLICANTS: | Gale and Dorothy Williams |
| AGENT: | Ed McKinley |
| LOCAL GOVERNMENT: | County of Mendocino |
| DECISION: | Approval with Conditions |
| PROJECT LOCATION: | 27560 South Highway One, near Schooner Gulch, south of Point Arena, Mendocino County (APN 027- 421-06) |
| PROJECT DESCRIPTION: | Construction of a 2,460 square-foot, 23.85-foot-high, single-family residence, with a 632-square-foot attached garage/mechanical room, a septic system, connection to an existing private water system, driveway, concrete walkway, and wooden decks. |
| APPELLANTS: | (1) Friends of Schooner Gulch, Attn: Peter Reimuller; (2) Sierra Club, Mendocino-Lake Group, Attn: Rixanne Wehren; (3) Hillary Adams; (4) Roanne Withers. |

SUBSTANTIVE FILE:
DOCUMENTS

- 1) Mendocino County CDP No. 35-01; and
- 2) Mendocino County Local Coastal Program

STAFF NOTES:

1. Procedure

On January 9, 2002, pursuant to Section 30625 of the Coastal Act and Section 13115 of Title 14 of the California Code of Regulations, the Coastal Commission found that the appeal of Mendocino County's approval raised a substantial issue with respect to the grounds on which the appeal had been filed. As a result, the County's approval is no longer effective, and the Commission must consider the project *de novo*. The Commission may approve, approve with conditions (including conditions different than those imposed by the County), or deny the application. Because the proposed development is between the first road and the sea, the applicable test for the Commission to consider is whether the proposed development is in conformity with the certified Local Coastal Program and with the public access and public recreation policies of the Coastal Act. Testimony may be taken from all interested persons at the *de novo* hearing.

2. Submittal of Additional Information by the Applicant

For the purposes of *de novo* review by the Commission, the applicant has provided Commission staff with supplemental information consisting of a geotechnical slope stability analysis and report and an arborist's investigation and report. The supplemental information addresses issues raised by the appeal and provides additional information that was not a part of the record when the County originally acted to approve the coastal development permit. The supplemental geologic report includes a bluff stability and aerial photograph analysis with revised bluff edge setback recommendations, an updated aerial photographic analysis, and discussion related to the recommended bluff edge setback with regard to sea level rise. The supplemental arborist's report evaluates the existing forest stand composition, age, condition and life expectancy as well as how removal of additional trees to accommodate the proposed development would affect the remaining trees, taking into consideration such factors as disease, wind throw, root loss, and bluff retreat.

SUMMARY OF STAFF RECOMMENDATION *DE NOVO*:
APPROVAL WITH CONDITIONS

The staff recommends that the Commission approve with conditions the coastal development permit for the proposed project on the basis that, as conditioned by the Commission, the project is consistent with the County of Mendocino certified LCP and the access policies of Chapter 3 of the Coastal Act.

The development, as approved by the County, consists of a 2,460-square-foot, 23.85-foot-high, single-family residence, with a 632-square-foot attached garage/mechanical room, a septic system, driveway, concrete walkway, and wooden decks. The subject property is an approximately half-acre parcel located within a mature, planted, Monterey pine forest with sparse understory. The parcel is situated at the edge of a bluff on a coastal terrace at an elevation ranging between 33 feet and 61 feet above sea level. A lateral frontage road borders the property on the east side, and runs north-south between the parcel and Highway One.

Since the Commission found that the appeal raised a substantial issue of conformance with the LCP, the applicant has submitted additional information regarding geologic slope stability, arborist investigation and landscaping recommendations to achieve visual screening. Staff recommends that the Commission attach eight (8) special conditions, including conditions to 1) require that all terms and conditions of the permit are recorded as deed restrictions; 2) impose design restrictions on the color and materials used, as well as require lighting to be shielded to ensure the appearance of the proposed structures will blend with their surroundings; 3) require conformance of the design and construction plans to the geotechnical report recommendations to ensure geologic stability; 4) prohibit future bluff or shoreline protective devices; 5) require the applicants to assume the risk of geologic hazard and waive liability for the Commission; 6) require a revised landscape plan that requires the planting of additional trees and the maintenance of landscaping to ensure the development would be subordinate to the character of its setting; 7) require an erosion and runoff control plan to control sedimentation and protect water quality; and 8) acknowledge that the Commission's action has no effect on conditions imposed by the local government pursuant to an authority other than the Coastal Act.

Staff recommends that the Commission find the project, as conditioned, is consistent with the provisions of the certified Mendocino County LCP and the Coastal Act public access and recreation policies.

I. MOTION, STAFF RECOMMENDATION *DE NOVO*, AND RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. A-1-MEN-01-056 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.

Resolution to Approve 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 certified County of Mendocino LCP, is located between the sea and the nearest public road to the sea, and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment.

II. STANDARD CONDITIONS: (See Attachment)

III. SPECIAL CONDITIONS:

1. Deed Restriction

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

2. Design Restrictions

- A. All exterior siding and roofing of the proposed structures shall be composed of the colors proposed in the application or darker earthtone colors only. The current owner or any future owner shall not repaint or stain the house or other approved structures with products that will lighten the color of the house or other approved structures without an amendment to this permit. In addition, all exterior materials, including roofs and windows, shall be non-reflective to minimize glare; and
- B. All exterior lights, including any lights attached to the outside of the buildings, shall be the minimum necessary for the safe ingress and egress of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the subject parcel.

3. **Conformance of the Design and Construction Plans to the Geotechnical Investigation Report**

- A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with the recommendations contained in the Geotechnical Investigation report dated March 16, 2001, and Supplemental Bluff Stability and Aerial Photograph Analysis report dated April 18, 2002 prepared by BACE Geotechnical Consultants. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that a licensed professional (Certified Engineering Geologist or Geotechnical Engineer) has reviewed and approved all final design, construction, and drainage plans and has certified that each of those plans is consistent with all of the recommendations specified in the above-referenced geotechnical report approved by the California Coastal Commission for the project site.
- B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. **No Future Bluff or Shoreline Protective Device**

- A. By acceptance of this permit, the applicants agree, on behalf of themselves and all successors and assigns, that no bluff or shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit No. A-1-MEN-01-056, including, but not limited to, the residence with the attached garage, foundations, septic system, concrete walkways and driveway in the event that the development is threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, ground subsidence or other natural hazards in the future. By acceptance of this permit, the applicants hereby waive, on behalf of themselves and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235 or under Mendocino County Land Use Plan Policy No. 3.4-12, and Mendocino County Coastal Zoning Code No 20.500.020(E)(1).
- B. By acceptance of this Permit, the applicants further agree, on behalf of themselves and all successors and assigns, that the landowner shall remove the development authorized by this permit, including the residence with the attached garage, foundations, septic system, concrete walkways and driveway

if any government agency has ordered that the structures are not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

- C. In the event the edge of the bluff recedes to within 10 feet of the principal residence but no government agency has ordered that the structures not be occupied, a geotechnical investigation shall be prepared by a licensed geologist or civil engineer with coastal experience retained by the applicant, that addresses whether any portions of the residence are threatened by wave, erosion, storm conditions, or other natural hazards. The report shall identify all those immediate or potential future measures that could stabilize the principal residence without shore or bluff protection, including but not limited to removal or relocation of portions of the residence. The report shall be submitted to the Executive Director and the appropriate local government official. If the geotechnical report concludes that the residence or any portion of the residence is unsafe for occupancy, the permittee shall, within 90 days of submitting the report, apply for a coastal development permit amendment to remedy the hazard which shall include removal of the threatened portion of the structure.

5. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicants acknowledge and agree: (i) that the site may be subject to hazards from landslide, bluff retreat, erosion, subsidence, and earth movement; (ii) to assume the risks to the applicants and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

6. Revised Landscape Plan

- A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-MEN-01-056**, the applicants shall submit a revised final landscape plan for review and approval of the Executive Director. The revised landscape plan shall substantially conform with the landscaping plan developed by Greg Ziemer Landscaping, submitted to the California Coastal Commission on

December 11, 2001, and received by the Commission on December 18, 2001, except that the plan shall provide for the following changes to the project:

1. Landscape Plan Revisions
 - a. The landscape plan shall be revised to eliminate the use of English holly (*Ilex aquafloium*). A suitable substitute shall be used in its place. Only native and/or non-invasive plant species appropriate for the growing conditions of the site shall be used in the landscaping plan.
 - b. Five additional 5-gallon sized trees from the approved landscaping plant list and five additional wax myrtle shrubs shall be planted in well-distributed locations along the southern bluff-edge portion of the property to augment the long-term effectiveness of the visual screening currently provided by existing trees.
 - c. The landscape plan shall include a planting schedule, which ensures that all planting shall be completed within 60 days after completion of construction.
 - d. The landscape plan shall provide that all plantings and all existing trees on the parcel be maintained in good growing conditions throughout the life of the project, and to ensure continued compliance with the landscape plan. If any of the existing trees or any of the trees and plants to be planted according to the plan die or are removed for any reason, they shall be immediately replaced in-kind, except for any Monterey pines that die which shall be replaced with new tree or non-invasive species already utilized in the landscaping plan that will grow to a similar or greater height.
 - e. No limbing or pruning of the visually screening trees already existing or planted pursuant to the approved landscaping plan shall occur unless a permit amendment is obtained and issued prior to the commencement of limbing and pruning.
 - f. The revised landscape plan shall incorporate all recommendations provided by consulting arborist Rob Gross of DendroTech as contained in his report submitted to the California Coastal Commission on June 10, 2003, and received by the Commission on June 13, 2003, including, but not limited to, the recommendations that: (1) a pier and grade beam foundation be used as recommended by the geotechnical consultant, (2) the landscaping be diversified by planting a variety of species, including species that provide foliage lower in the understory, (3) root areas of trees to be retained be mulched and

covered, and tree trunks and limbs be protected from physical damage during project construction, and (4) irrigation and wind screen protection be provided for newly planted landscaping.

- B. The permittee shall undertake development in accordance with the approved final landscape plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. **Erosion and Runoff Control Plan**

- A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-MEN-01-056**, the applicants shall submit an Erosion and Runoff Control Plan for review and approval of the Executive Director. The Erosion and Runoff Control Plan shall incorporate design elements and/or Best Management Practices (BMPs) which will serve to minimize the volume and velocity of stormwater runoff leaving the developed site, and to capture sediment and other pollutants contained in stormwater runoff from the development, by facilitating on-site infiltration and trapping of sediment generated from construction. The final drainage and runoff control plans shall at a minimum include the following provisions:

1. A physical barrier consisting of bales of straw placed end to end shall be installed between any construction and the drainage ditch running along the driveway bordering the northern parcel boundary. The bales shall be composed of weed-free rice straw, and shall be maintained in place throughout the construction period.
2. Vegetation at the site shall be maintained to the maximum extent possible and any disturbed areas shall be replanted or seeded with native vegetation immediately following project completion.
3. All on-site debris stockpiles shall be covered and contained at all times.
4. Provide that runoff from the roof, driveway and other impervious surfaces shall be collected and directed into pervious areas on the site (landscaped areas) for infiltration to the maximum extent practicable in a non-erosive manner, prior to being conveyed off-site. Where gutters and downspouts are used, velocity reducers shall be incorporated, to prevent scour and erosion at the outlet.

- B. The permittee shall undertake development in accordance with the approved Erosion and Runoff Control plan. Any proposed changes to the approved plan shall be

reported to the Executive Director. No changes to the approved plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

8. Conditions Imposed By Local Government.

This action has no effect on conditions imposed by a local government pursuant to an authority other than the Coastal Act.

IV. FINDINGS AND DECLARATIONS:

A. Project History/Background.

On September 27, 2001 the Coastal Permit Administrator (CPA) for Mendocino County approved a Coastal Development Permit for a 2,460-square-foot, 23.85-foot-high, single-family residence, with a 632-square-foot attached garage/mechanical room, septic system, driveway, concrete walkway, and wooden decks at 27560 Highway One, one mile northwest of Schooner Gulch, south of Point Arena. The Coastal Permit Administrator approved the project with a total of five Special Conditions. The conditions are attached on pages 11 and 12 of Exhibit No. 4. The CPA's decision was not appealed at the local level to the Board of Supervisors.

After the close of the local appeal period, the County issued a Notice of Final Action on the coastal development permit, which was received by Commission staff on October 15, 2001 (Exhibit No. 4). The County's approval was appealed to the Coastal Commission in a timely manner on October 16, 2001, within 10 working days of receipt by the Commission of the County's Notice of Final Action. The County's approval was appealed by the Friends of Schooner Gulch, the Mendocino - Lake Group of the Sierra Club, Hillary Adams, and Roanne Withers. The appellants asserted that the proposed development would be inconsistent with 1) the visual policies and standards of the certified LCP for protecting highly scenic areas, 2) bluff setback restrictions, and 3) the requirement for sufficient information to be provided at the time of the application.

On October 22, 2001, staff requested all relevant documents and materials regarding the subject approval from the County. These materials were received by the Commission on November 28, 2001. On November 14, 2001, the Commission opened and continued the appeal hearing.

On January 9, 2002, the Commission found that a substantial issue had been raised with regard to the consistency of the project as approved by the County with the provisions of the certified LCP regarding geologic hazards and the protection of visual resources.

The Commission continued the *de novo* portion of the appeal hearing.

B. Project and Site Description.

Project Setting

The project site is a blufftop parcel above Bowling Ball Beach approximately three miles south of Point Arena, one mile northwest of Schooner Gulch, and 1,000 feet southeast of Ross Creek in an area along the Mendocino coastline designated as highly scenic (See Exhibits 1 and 2). The parcel ranges in elevation between 33 and 61 feet above sea level, and is approximately a half-acre in size. The property is accessed by a paved, common driveway off Highway One to the north-northeast. The common driveway ends in a cul-de-sac at the east-northeast corner of the property. A gravel driveway extends from the cul-de-sac, basically along the northeast property line to the west-northwest neighboring residence. Neighboring two-story single-family houses currently exist on both sides of the project site. The subject property is currently well forested, predominantly with mature, planted, Monterey pine trees with sparse understory consisting of poison oak, coyote brush, and native blackberries. There are no indications of Environmentally Sensitive Habitat Areas (ESHA) existing on the property.

The property is zoned Rural Residential, 5 Acres Minimum, DL. Within the Rural Residential Zone, a single family residence is a permitted use, subject to approval of a coastal development permit.

The parcel is visible from Highway One for a distance of approximately 300 feet for motorists traveling south, but is not visible while traveling north on Highway One due to the nature of the topography. Highway One is at a lower elevation than the subject property, and views are limited due to the forested landscape on the subject property, as well as from thickets of willow vegetation growing along the highway. The view of the property from Schooner Beach and its publicly accessed headlands is very limited. Where the property would be in view, the neighboring house just to the southwest would screen the proposed house. Views of the proposed house would be partially visible from a short portion of the Ross Creek/Whiskey Shoals public coastal access trail across Ross Creek to the west. The uppermost portion of the residence may be visible from Bowling Ball Beach. Multi-species landscape plantings north and east of the residence are intended to provide visual screening to address views from these vantage points.

Project Description

The proposed project is the construction of a 2,460-square-foot two-story single-family residence, with a 632-square-foot attached garage/mechanical room. The average height of the residence would be 23.85 feet above natural grade. The maximum height from existing grade would be no more than twenty-seven feet at any point on the house. The height at the middle of the house would be twenty-five and one-half feet. The project includes installation of a septic system, connection to an existing private water system, and construction of an all-

weather surfaced driveway, concrete walkway, and wooden decks. The project would involve the removal of approximately 44 live Monterey pine trees.

C. Planning and Locating New Development.

LCP Provisions

LUP Policy 3.9-1 of the Mendocino County Land Use Plan states that new development shall be located within or near existing developed areas able to accommodate it or in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. The intent of this policy is to channel development toward more urbanized areas where services are provided and potential impacts to resources are minimized.

LUP Policy 3.8-1 states that Highway 1 capacity, the availability of water and sewage disposal system and other known planning factors shall be considered when considering applications for development permits.

The property is zoned Rural Residential, Five Acres Minimum, Development Limitation Combining District (DL). Within the Rural Residential Zone, a single-family residence is a permitted use, subject to approval of a coastal development permit. Coastal Zoning Code Chapter 20.376 establishes the prescriptive standards for development within Rural Residential (RR) zoning districts. Single-family residences are a principally permitted use in the RR zoning district. The minimum parcel size is 5 acres, pursuant to Coastal Zoning Code (CZC) Section 20.376.020(C). Setbacks for the subject parcel are twenty feet to the front and six feet on the side yards, pursuant to CZC Sections 20.376.045. The project is located in a designated highly scenic area. The proposed residence is 23.85 feet tall as measured from average grade. Per LUP Policy 3.5-3 and CZC Section 20.504.015, the maximum allowable building height in this location is 18 feet (average) above natural grade (and one-story) unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures. If those two criteria can be met, the building height can be raised to a maximum of 28 feet above average grade. CZC Section 20.376.065 sets a maximum of 20% structural coverage on RR lots of less than two acres in size.

Discussion

The proposed single-family residence would be consistent with the rural residential zoning for the site. As discussed above, the development as proposed would consist of a 23.85-foot-tall, two-story, 2,460-square-foot, single-family residence, with a 632-square-foot attached garage. The proposed development represents 17.3% coverage of the approximately .41-acre parcel consistent with the maximum 20% structural coverage standard for the zoning district. As discussed in the visual resource finding below, the development is consistent with the LCP height requirements.

The proposed development would be served by Point Arena Water Works. Sewage would be handled by an on-site septic system. The Mendocino County Division of Environmental Health has determined that the proposed septic system would have adequate capacity to serve the proposed development and has granted its approval. Development of the site as a single-family residence is envisioned under the certified LCP. The significant cumulative adverse impacts on traffic capacity of development approved pursuant to the certified LCP on lots meeting minimum parcel size standards were addressed at the time the LCP was certified. Therefore, as conditioned, the proposed development is located in an area able to accommodate the proposed development, consistent with the applicable provisions of LUP Policy 3.9-1.

As discussed below, the proposed development has been conditioned to include mitigation measures, which will minimize all significant adverse environmental impacts.

Therefore, the Commission finds that as conditioned, the proposed development is consistent with LUP Policies 3.9-1, 3.8-1, and with Zoning Code Sections 20.376 as the development will be located in a developed area, there will be adequate services on the site to serve the proposed development, and the project will not result in significant adverse individual or cumulative impacts on highway capacity, scenic values, or other coastal resources.

D. Geologic Hazards

1. Summary of LCP Provisions

LUP Policy 3.4-1 states the following in applicable part:

"The County shall review all applications for Coastal Development permits to determine threats from and impacts on geologic hazards arising from seismic events, tsunami runup, landslides, beach erosion, expansive soils and subsidence and shall require appropriate mitigation measures to minimize such threats. In areas of known or potential geologic hazards, such as shoreline and bluff top lots and areas delineated on the hazards maps, the County shall require a geologic investigation and report, prior to development to be prepared by a licensed engineering geologist or registered civil engineer with expertise in soils analysis to determine if mitigation measures could stabilize the site..."

LUP Policy 3.4-7 and Coastal Zoning Code Section 20.500.020(B) state that:

"The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be

determined from information derived from the required geologic investigation and from the following setback formula:

$$\text{Setback (meters)} = \text{Structure life (years)} \times \text{Retreat rate (meters/year)}$$

The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.

All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologist's report [emphasis added]."

LUP Policy 3.4-12 and Zoning Code Section 20.500.020(E)(1) state that:

"Seawalls, breakwaters, revetments, groins, harbor channels and other structures altering natural shoreline processes or retaining walls shall not be permitted unless judged necessary for the protection of existing development, public beaches or coastal dependent uses."

Section 20.500.015(A) of the Coastal Zoning Code states in applicable part:

- "(1) Preliminary Investigation. The Coastal Permit Administrator shall review all applications for Coastal Development Permits to determine threats from and impacts on geologic hazards.*
- (2) Geologic Investigation and Report. In areas of known or potential geologic hazards such as shoreline and bluff top lots and areas delineated on the hazards maps, a geologic investigation and report, prior to development approval, shall be required. The report shall be prepared by a licensed engineering geologist or registered civil engineer pursuant to the site investigation requirements in Chapter 20.532."*

Section 20.500.010 of the Coastal Zoning Code states that development shall:

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

Section 20.500.020(B) of the Coastal Zoning Code states in applicable part:

- “(1) New structures shall be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (seventy-five (75) years). New development shall be set back from the edge of bluffs a distance determined from information derived from the required geologic investigation and the setback formula as follows:*

$$\text{Setback (meters)} = \text{structure life (75 years)} \times \text{retreat rate (meters/year)}$$

Note: The retreat rate shall be determined from historical observation (aerial photos) and/or from a complete geotechnical investigation.

- ...
- (3) Construction landward of the setback shall not contribute to erosion of the bluff face or to instability of the bluff [emphasis added].”*

Discussion

The subject parcel is a bluff top parcel that overlooks the ocean. The bluffs range in height from 33 to 61 feet and are very steep. As described above, the project proposes to construct a new single-family residence with an attached garage/mechanical room and appurtenant development including a septic system, driveway, walkway, and decks. The new residence would be a new structure that Mendocino County LUP Policy 3.4-7 and Coastal Zoning Code Section 20.500.020(B) require to be set back a sufficient distance from the edge of the bluff to ensure its safety from bluff erosion and cliff retreat during the economic life span of 75 years. Additionally, these provisions require the setback to be a sufficient distance so as to eliminate the need for shoreline protection devices.

The applicant's geologist, BACE Geotechnical, performed a geotechnical investigation documented in a report dated March 16, 2001, that determined a bluff retreat rate of 1 ½ inches per year. The report recommended a bluff setback of 40 feet for the approved house to protect it from bluff retreat over a 75-year lifespan for the house based on comparison of historical photographs from the years 1964, 1977, and 1981 and a safety factor of four.

The Geotechnical Investigation reviewed photographs over a relatively short time-span equivalent to only half the 75-year economic lifespan of the house. The basic retreat rate of 1 ½ inches per year, as determined from examination of the photographs, was multiplied by a safety factor of four to arrive at the recommended bluff setback. The applicant's geologist maintained that the relatively high safety factor of four (4) would mitigate for the uncertainties of calculating bluff retreat rates using narrow periods of time for photo comparison, and for the uncertainties of future sea level rise due to global warming.

As discussed above, the County approval of the permit was appealed to the Commission and the appeal raised issues related to the adequacy of the coastal bluff setback in regard to the time-span of the photographs analyzed, and in relation to an advance in coastal bluff retreat

due to sea level rise. At the January 9, 2002 meeting, the Commission found that a substantial issue had been raised by the appeal.

For the purposes of the Commission's *de novo* review, additional information was requested from the applicants. These items included additional information that was not a part of the record when the County originally acted to approve the coastal development permit: 1) copies of the aerial photographs used in Mr. Olsborg's evaluation of the bluff retreat rate at the site and other supplemental information supporting his estimated rate; 2) a bluff stability analysis of the site; and 3) responses to comments the Commission received from the appellant and others concerning the effect of sea level rise on bluff retreat and other concerns about geologic hazards. Mr. Erik Olsborg of BACE Geotechnical prepared the requested geologic information and transmitted this information to Commission staff in letters dated April 18, 2002, and January 23, 2003.

Mr. Olsborg's April 18, 2002 transmittal contained results of the slope stability analysis with copies of the strength parameter plots. The strength parameters used in the stability analysis were determined from strength test results obtained from the 2001 geotechnical investigation, supplemented with test data and the geologist's experience from similar, nearby projects. As shown in the materials submitted, the pseudo static stability analysis indicated a factor of safety equal to 1.28. Mr. Olsborg's transmittal also included copies of the 1964 and 1981 aerial photographs used during the earlier geotechnical investigation, as well as a recently-obtained 2000 aerial photograph. In addition, as part of this supplemental analysis, two other points on the bluff edge south of the applicant's property were measured on the photographs.

As mentioned above, the original geotechnical investigation found a 1½- inch per year bluff retreat rate based on the analysis of three (3) historical aerial photographs covering a time span of 17 years. The addition of the year-2000 aerial photograph expanded the time span of coverage to 36 years. The revised photographic analysis using the 2000 aerial photograph concluded that the bluff retreat rate would average 3.3 inches per year, eroding back 20.6 feet over the 75-year economic lifespan of the house. This erosion estimate is greater than the original estimate, but allows for a factor of safety of almost 2 for the recommended 40-foot setback. Finally, the April 18, 2002 letter from Mr. Olsborg contained responses to comments received from the appellant and others related to slope stability and increased erosion as the sea level rises due to global warming. Mr. Olsborg stated that the landslide located a few properties to the south "is a localized feature with no potential impact on the Williams' property. As previously stated in BACE's 2001 geotechnical investigation report, there are no landslides in the near vicinity of the William's property." In regard to the appellant's contention that an increased bluff retreat rate can be expected from sea level rise, Mr. Olsborg replies that: "[s]ea level rise appears probable, however, the projected rise (1.6 feet over the next century, or 1.2 feet in the next 75 years) will be a gradual process, not an over-night event." Mr. Olsborg refers to the cross-sectional schematic drawing provided in a letter dated January 7, 2002 from the appellant to the Commission to illustrate "contrary geological evidence" supporting the contention that "when the sea level rises a measurable amount it will rapidly and without hesitation further erode the cliffs to arrive at a new

equilibrium with the slope of the wave-cut terrace." Mr. Olsborg states that the cross section sketch provided by the appellant of the bluff and adjacent wave-cut terrace showing a slope of two percent (one foot vertical in 50 feet horizontal) is misleading, because in reality

"most of the wave-cut terrace is exposed at only minus tides, and the full terrace is relatively flat and extends seaward for hundreds of feet. The terrace is being planed-off flat by the ocean since current sea levels were achieved approximately 5 to 7 thousand years ago. As indicated by our test pits, borings, and our laboratory strength tests at the several properties investigated by BACE at Bowling Ball Beach, the site bedrock is low to moderate in hardness. The bedrock becomes friable to soft on the bluff face where exposed to wind and water (slaking). It takes time for the rocks to be weakened enough to erode by slaking. This relatively slow erosion rate should continue, even as the sea level rises."

Coastal Commission staff geologist Dr. Mark Johnsson has reviewed the BACE reports, visited the site, and conferred with the applicants' geologist. After reviewing the additional materials submitted, Dr. Johnsson opined that the applicant's geologist's projection of the bluff retreat rate is appropriate.

Mendocino County LUP Policy 3.4-7 and CZC Section 20.500.020(B) require that new structures be set back a sufficient distance from the edge of the bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years) and the setback be of sufficient distance to eliminate the need for shoreline protection devices. As discussed above, BACE Geotechnical concluded that the bluff is eroding at an average rate of about 3.3-inches-per-year. Therefore, over a period of 75 years representing the economic life span of a house, the bluff would erode back approximately 20.6 feet. A factor-of-safety of almost two was applied to arrive at the 40-foot recommended bluff setback. After reviewing the requested additional documentation concerning the analysis of aerial photos, bluff retreat rate, and the recommended bluff top setback as well as the quantitative slope stability analysis and erosion potential, the Commission staff geologist opined that the applicants' geologist's projection of the bluff retreat rate and the other recommendations were reasonable. Special Condition No. 3 requires that all future development must be located no closer than 40 feet from the bluff edge. Therefore, the proposed development as conditioned will be set back a sufficient distance from the bluff edge to provide for a 75-year design life of the development consistent with LUP Policy 3.4-7 and CZC Section 20.500.020(B).

LUP Policy 3.4-1 states, in part, that geologic investigations for development in areas of known or potential geologic hazards shall determine if mitigation measures could stabilize the site. In its investigation of the site, BACE geotechnical advised that the structure should be supported on a system of cast-in-place drilled concrete piers interconnected with grade beams. To ensure that the applicants adhere to the recommendations suggested in their consultant's geotechnical reports, and that the development does not contribute significantly to geologic hazards, the Commission

attaches Special Condition No. 3. The special condition requires all final design and construction plans, including foundations, grading and drainage plans to be consistent with the recommendations contained in the geotechnical reports dated March 16, 2001, prepared by BACE Geotechnical Consultants. As conditioned, the development will include the measures determined by the geologic investigation to be necessary to stabilize the site consistent with LUP Policy 3.4-1.

The Commission also attaches Special Condition No. 4, which prohibits the construction of shoreline protective devices on the parcel, requires that the landowner provide a geotechnical investigation and remove the house and its foundation if bluff retreat reaches the point where the structure is threatened, and requires that the landowners accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion of the site. These requirements are consistent with LUP Policy 3.4-7 and Section 20.500.010 of the Mendocino County Coastal Zoning Ordinance, which state that new development shall minimize risk to life and property in areas of high geologic, flood, and fire hazard, assure structural integrity and stability, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding areas, nor in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The Commission finds that the proposed development could not be approved as being consistent with LUP Policy 3.4-7 and Zoning Code Section 20.500.010 and 20.500.020(B) if projected bluff retreat would affect the proposed development and necessitate construction of a seawall to protect it.

The applicants are proposing to construct a residence with portions of the development as close as approximately 40 feet to a bluff that is gradually eroding. Thus, the proposed development will be located in an area of high geologic hazard. The proposed development can only be found consistent with the above-referenced LCP provisions if the risks to life and property from the geologic hazards are minimized and if a protective device will not be needed in the future. The applicant has submitted information from a registered engineering geologist which states that if the new development is set back forty (40) feet from the bluff edge, it will be safe from erosion and will not require any devices to protect the proposed development during its useful economic life.

Although a comprehensive geotechnical evaluation is a necessary and useful tool that the Commission relies on to determine if proposed development is permissible at all on any given bluff top site, the Commission finds that a geotechnical evaluation alone is not a guarantee that a development will be safe from bluff retreat. It has been the experience of the Commission that in some instances, even when a thorough professional geotechnical analysis of a site has concluded that a proposed development will be safe from bluff retreat hazards, unexpected bluff retreat episodes that threaten development during the life of the structure sometimes still do occur. Examples of this situation include:

- The Kavich Home at 176 Roundhouse Creek Road in the Big Lagoon Area north of Trinidad (Humboldt County). In 1989, the Commission approved the construction of a

new house on a vacant blufftop parcel (Permit 1-87-230). Based on the geotechnical report prepared for the project it was estimated that bluff retreat would jeopardize the approved structure in about 40 to 50 years. In 1999 the owners applied for a coastal development permit to move the approved house from the blufftop parcel to a landward parcel because the house was threatened by 40 to 60 feet of unexpected bluff retreat that occurred during a 1998 El Nino storm event. The Executive Director issued a waiver of coastal development permit (1-99-066-W) to authorize moving the house in September of 1999.

- The Denver/Canter home at 164/172 Neptune Avenue in Encinitas (San Diego County). In 1984, the Commission approved construction of a new house on a vacant blufftop lot (Permit 6-84-461) based on a positive geotechnical report. In 1993, the owners applied for a seawall to protect the home (Permit Application 6-93-135). The Commission denied the request. In 1996 (Permit Application 6-96-138), and again in 1997 (Permit Application 6-97-90) the owners again applied for a seawall to protect the home. The Commission denied the requests. In 1998, the owners again requested a seawall (Permit Application 6-98-39) and submitted a geotechnical report that documented the extent of the threat to the home. The Commission approved the request on November 5, 1998.
- The Bennett home at 265 Pacific Avenue, Solana Beach (San Diego County). In 1995, the Commission approved a request to construct a substantial addition to an existing blufftop home (Permit 6-95-23). The minimum setback for the area is normally 40 feet. However, the applicants agreed to waive future rights to shore/bluff protection if they were allowed to construct 25 feet from bluff edge based on a favorable geotechnical report. The Commission approved the request on May 11, 1995. In 1998, a substantial bluff failure occurred, and an emergency permit was issued for a seawall. The follow-up regular permit (#6-99-56) was approved by Commission on May 12, 1999. On August 18, 1999, the Commission approved additional seawall and upper bluff work on this and several other properties (Permit #6-99-100).
- The Arnold project at 3820 Vista Blanca in San Clemente (Orange County). Coastal development permit (Permit # 5-88-177) for a blufftop project required protection from bluff top erosion, despite geotechnical information submitted with the permit application that suggested no such protection would be required if the project conformed to 25-foot blufftop setback. An emergency coastal development permit (Permit #5-93-254-G) was later issued to authorize blufftop protective works.

The Commission notes that the examples above are not intended to be absolute indicators of bluff erosion on the subject parcel, as coastal geology can vary significantly from location to location. However, these examples do illustrate that site-specific geotechnical evaluations cannot always accurately account for the spatial and temporal variability associated with coastal processes and therefore cannot always absolutely predict bluff erosion rates. Collectively, these examples have helped the Commission form it's opinion on the vagaries of geotechnical evaluations with regard to predicting bluff erosion rates.

The BACE Geotechnical Investigation report states that their geological and engineering services and review of the proposed development was performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. *"No other warranty, expressed or implied, is provided as to the conclusions and professional advice presented in the report."* This language in the report itself is indicative of the underlying uncertainties of this and any geotechnical evaluation and supports the notion that no guarantees can be made regarding the safety of the proposed development with respect to bluff retreat.

Geologic hazards are episodic, and bluffs that may seem stable now may not be so in the future. Therefore, the Commission finds that the subject lot is an inherently hazardous piece of property, that the bluffs are clearly eroding, and that the proposed new development will be subject to geologic hazard and could potentially someday require a bluff or shoreline protective device, inconsistent with LUP Policy 3.4-7 and CZC Sections 20.500.010 and 20.500.020(B). The Commission finds that the proposed development could not be approved as being consistent with LUP Policy 3.4-7 and Coastal Zoning Code Section 20.500.010 and 20.500.020(B) if projected bluff retreat would affect the proposed development and necessitate construction of a seawall to protect it.

Based upon the geologic report prepared by the applicants geologist and the evaluation of the project by the Commission's staff geologist, the Commission finds that the risks of geologic hazard are minimized if the residence is set back approximately 40 feet or more from the bluff edge as proposed. However, given that the risk cannot be eliminated and the geologic report cannot assure that shoreline protection will never be needed to protect the residence, the Commission finds that the proposed development is consistent with the certified LCP only if it is conditioned to provide that shoreline protection will not be constructed. Thus, the Commission further finds that due to the inherently hazardous nature of this lot, the fact that no geology report can conclude with any degree of certainty that a geologic hazard does not exist, the fact that the approved development and its maintenance may cause future problems that were not anticipated, and because new development shall not engender the need for shoreline protective devices, it is necessary to attach Special Condition No. 4 prohibiting the construction of seawalls and Special Condition No. 5 requiring the waiver of liability.

In addition, as noted above, some risks of an unforeseen natural disaster, such as an unexpected landslide, massive slope failure, erosion, etc. could result in destruction or partial destruction of the house or other development approved by the Commission. In addition, the development itself and its maintenance may cause future problems that were not anticipated. When such an event takes place, public funds are often sought for the clean-up of structural debris that winds up on the beach or on an adjacent property. As a precaution, in case such an unexpected event occurs on the subject property, the Commission attaches Special Condition No. 4, which requires the landowner to accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site, and agree to remove the house should the bluff

retreat reach the point where a government agency has ordered that the structure not be occupied.

The Commission finds that Special Condition No. 1 is required to ensure that the proposed development is consistent with the LCP and Special Condition No. 1 is required to provide notice of potential hazards of the property and help eliminate false expectations on the part of potential buyers of the property, lending institutions, and insurance agencies that the property is safe for an indefinite period of time and for further development indefinitely into the future, or that a protective device could be constructed to protect the approved development. The condition requires that the applicant record and execute a deed restriction approved by the Executive Director against the property that imposes the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property.

Additionally, the Commission attaches Special Condition No. 5, which requires the landowner to assume the risks of extraordinary erosion and geologic hazards of the property and waive any claim of liability on the part of the Commission. Given that the applicants have chosen to implement the project despite these risks, the applicants must assume the risks. In this way, the applicants are notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicants to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards. In addition, the requirement of Special Condition No. 1 that a deed restriction be recorded will ensure that future owners of the property will be informed of the risks, the Commission's immunity from liability, and the indemnity afforded the Commission.

The Commission notes that Section 30610(a) of the Coastal Act and Chapter 20.532 of the County's Coastal Zoning Code exempt certain additions to existing single family residential structures from coastal development permit requirements. Pursuant to this exemption, once a house has been constructed, certain additions and accessory buildings that the applicant might propose in the future are normally exempt from the need for a permit or permit amendment. However, in this case because the project site is located within a highly scenic area, future improvements to the approved project are not exempt from permit requirements pursuant to Section 30610(a) and Section 13250(b)(1) of the Commission's regulations. Section 30610(a) requires the Commission to specify by regulation those classes of development, which involve a risk of adverse environmental effects and require that a permit be obtained for such improvements. Pursuant to Section 30610(a) of the Coastal Act, the Commission adopted Section 13250 of Title 14 of the California Code of regulations. Section 13250 specifically authorizes the Commission to require a permit for additions to existing single-family residences that could involve a risk of adverse environmental effect. Moreover, Section 13250(b)(1) indicates that improvements to a single-family structure in an area designated as highly scenic in a certified land use plan involve a risk of adverse environmental effect and therefore are not exempt. As discussed previously, the entire subject property is within an area designated in the certified Mendocino Land Use Plan as

highly scenic. Therefore, pursuant to Section 13250(b)(1) of the Commission's regulations, future improvements to the approved development would not be exempt from coastal development permit requirements and the County and the Commission will have the ability to review all future development on the site to ensure that future improvements will not be sited or designed in a manner that would result in a geologic hazard.

The Commission thus finds that the proposed development, as conditioned, is consistent with the policies of the certified LCP regarding geologic hazards, including LUP Policies 3.4-1, 3.4-7, 3.4-12, and Coastal Zoning Code Sections 20.500.010, 20.015.015, and 20.500.020, since the development as conditioned will not contribute significantly to the creation of any geologic hazards, will not have adverse impacts on the stability of the coastal bluff or on erosion, will not require the construction of shoreline protective works, and the Commission will be able to review any future additions to ensure that development will not be located where it might result in the creation of a geologic hazard. Only as conditioned is the proposed development consistent with the LCP policies on geologic hazards.

D. Water Quality

1. Summary of LCP Provisions

LUP Policy 3.1-25 states:

"The Mendocino Coast is an area containing many types of marine resources of statewide significance. Marine resources shall be maintained, enhanced and, where feasible, restored; areas and species of special biologic or economic significance shall be given special protection; and the biologic productivity of coastal waters shall be sustained."

Coastal Zoning Code Section 20.492.020(B) incorporates sedimentation standards and states in part:

"(B) To prevent sedimentation of off-site areas, vegetation shall be maintained to the maximum extent possible on the development site. Where necessarily removed during construction, native vegetation shall be replanted to help control sedimentation."

(C) Temporary mechanical means of controlling sedimentation, such as hay baling or temporary berms around the site may be used as part of an overall grading plan, subject to the approval of the Coastal Permit Administrator."

2. Discussion

Storm water runoff from new residential development can adversely affect the biological productivity of coastal waters by degrading water quality. LUP Policy 3.1-25 requires the

protection of the biological productivity of coastal waters. Section 20.492.020 of the Mendocino County Coastal Zoning Code sets forth sedimentation standards to minimize sedimentation of environmentally sensitive areas and off-site areas. Specifically, Section 20.492.020(B) requires that the maximum amount of vegetation existing on the development site shall be maintained to prevent sedimentation of off-site areas, and where vegetation is necessarily removed during construction, native vegetation shall be replanted afterwards to help control sedimentation.

As discussed above, the subject parcel is located on a coastal terrace atop a steep coastal bluff. Runoff originating from the development site that is allowed to drain over the bluff edge or drain indirectly to the ocean via the Ross Creek drainage would contain entrained sediment and other pollutants in the runoff that would contribute to degradation of the quality of marine waters.

Sedimentation impacts from runoff would be of greatest concern during and immediately after construction. Consistent with CZC Section 20.492.020(B), the Commission attaches Special Condition No. 7 to minimize erosion and sedimentation impacts from the proposed construction of the residence. Special Condition No. 7 requires that the applicants submit for the review and approval of the Executive Director an Erosion and Runoff Control Plan that would provide that (1) straw bales be installed to contain runoff from construction areas, (2) on-site vegetation be maintained to the maximum extent possible during construction, (3) any disturbed areas be replanted or seeded with native vegetation following project completion, (4) all on-site stockpiles of construction debris be covered and contained to prevent polluted water runoff, and (5) runoff from the roof, driveway, and other impervious surfaces of the development be collected and directed into pervious areas on the site for infiltration and that velocity reducers be used on roof downspouts.

The Commission finds that as conditioned, the proposed development is consistent with Section 20.492.020 because erosion and sedimentation will be controlled and minimized by (1) maintaining on-site vegetation to the maximum extent possible; (2) replanting or seeding any disturbed areas with native vegetation following project completion; (3) covering and containing debris stockpiles at all times; (4) using straw bales to control runoff during construction; and (5) directing runoff from the completed development in a manner that would provide for infiltration into the ground. Furthermore, the Commission finds that the proposed development as conditioned is consistent with the provisions of LUP Policy 3.1-25 requiring that the biological productivity of coastal waters be sustained because storm water runoff from the proposed development would be directed away from the coastal bluff and would be controlled on site by infiltration into vegetated areas.

E. Visual Resources

1. Summary of LCP Provisions

LCP Provisions

LUP Policy 3.5-1 states in applicable part:

"The scenic and visual qualities of Mendocino county 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 designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting."

LUP Policy 3.5-3 states, in applicable part:

"The visual resource areas listed below are those which have been identified on the land use maps and shall be designated as "highly scenic areas," within which new development shall be subordinate to the character of its setting. Any development permitted in these areas shall provide for the protection of ocean and coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes...

- *Portions of the coastal zone within the Highly Scenic Area west of Highway 1 between the south boundary of the City of Point Arena and the Gualala River as mapped with noted exceptions and inclusions of certain areas east of Highway 1.*

In addition to other visual policy requirements, new development west of Highway One in designated 'highly scenic areas' is limited to one story (above natural grade) unless an increase in height would affect public views to the ocean or be out of character with surrounding structures... New development should be subordinate to natural setting and minimize reflective surfaces... [emphasis added]."

NOTE 1: LUP Map No. 28 designates all of the area west of Highway one along the portion of the coast where the project is located as highly scenic.

NOTE 2: Coastal Zoning Ordinance 20.504.015(A)(4) reiterates this section of coastline as being a "highly scenic area."

LUP Policy 3.5-5 states, in applicable part:

"Providing that trees will not block coastal views from public areas such as roads, parks and trails, tree planting to screen buildings shall be encouraged ...[emphasis added]."

Coastal Zoning Ordinance Section 20.504.010 states:

"The purpose of this section is to insure that 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."

Coastal Zoning Ordinance Section 20.504.015(C) states, in applicable part:

"(1) Any development permitted in highly scenic areas shall provide for the protection of coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes."

(2) In highly scenic areas west of Highway 1 as identified on the Coastal Element land use plan maps, new development shall be limited to eighteen (18) feet above natural grade, unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures."

(3) New development shall be subordinate to the natural setting and minimize reflective surfaces. In highly scenic areas, building materials shall be selected to blend in hue and brightness with their surroundings."

...

(5) Buildings and building groups that must be sited in highly scenic areas shall be sited: (a) Near the toe of a slope; (b) Below rather than on a ridge; and (c) In or near a wooded area."

(7) Minimize visual impacts of development on terraces by the following criteria:

(a) Avoiding development, other than farm buildings, in large open areas if an alternative site exists;

(b) Minimize the number of structures and cluster them near existing vegetation, natural landforms or artificial berms;

(c) Provide bluff setbacks for development adjacent to or near public areas along the shoreline;

(d) Design development to be in scale with rural character of the area.

...
(10) Tree planting to screen buildings shall be encouraged, however new development shall not allow trees to interfere with coastal/ocean views from public areas.
... [emphasis added].”

2. Discussion.

As previously described, the subject property is located on a blufftop parcel above Bowling Ball Beach on a coastal terrace, in an area along the Mendocino coastline designated highly scenic under the Mendocino County LCP. The site is approximately three miles southeast of Point Arena, situated on the southwest side of Highway One, approximately one mile northwest of Schooner Gulch, and approximately 1,000 feet southeast of Ross Creek. The subject property is currently well forested, predominantly with mature, planted, Monterey pine trees with sparse understory. Many of the existing trees would be removed to accommodate the proposed development. A narrow band of trees would remain to encircle most of the perimeter of the proposed residence.

As described above, the application proposes to construct a 2,460-square-foot, two-story, single-family residence, with a 632-square-foot attached garage/mechanical room. The average height of the residence would be 23.85 feet above natural grade. The maximum height from existing grade would be no more than twenty-seven feet at any point on the house. The height at the middle of the house would be twenty-five and one-half feet. The height of the residence would be 23.85 feet tall as measured from average grade. The roof would be composed of walnut colored Owens Corning MiraVista® resin/glass fiber shake shingles. The structural siding and wood trim would be cedar or redwood shingles and redwood boards stained an earth toned color described as Duckback “Canyon Brown” (color chip #DB-1907). Cultured stone facing described as “Chardonnay Limestone” (color chip #CSV-2045) would be used for the lower portion of the building and for the single chimney. The lower portions of the structure where this stone facing would be used would be completely screened by landscaping. The chimney presents very minor surface areas visible to the public. The Chardonnay Limestone stone facing is composed of dark, earth tone, mottled colors, and is not highly reflective.

The above listed visual resource protection policies set forth three basic criteria that development at the site must meet to be approved. First, LUP Policy 3.5-1 and CZC Section 20.504.010 require that development be sited and designed to protect views to and along the ocean and scenic coastal areas. Second, LUP Policy 3.5-3 and CZC Section 20.504.015(C)(2) generally require that new development in highly scenic areas be limited to one story and 18 feet in height. Finally, LUP Policies 3.5-1, 3.5-3, and 3.5-

4 and CZC Section 20.504.015(C)(3) require that new development in highly scenic areas be subordinate to the character of its setting.

1. Protecting Views To and Along the Coast

LUP Policy 3.5-1 and CZC Sections 20.504.010 and 20.504.015(C)(1) require permitted development to be sited and designed to protect views to and along the ocean and scenic coastal areas from public areas including roads and trails.

The subject parcel is geographically situated such that the proposed residential development would not affect views to the ocean from public areas including highways, roads, coastal trails, beaches, or coastal streams. As described above, the subject site is a coastal bluff top parcel located on a coastal terrace 45 to 55 feet above the northern-most end of Bowling Ball Beach. The property ranges between approximately 33 feet in elevation at the northern corner of the parcel, to almost 61 feet at the eastern corner. The two corners of the parcel located along the coastal bluff are almost 10 feet higher than the middle portion of the bluff edge, and the entire property tilts slightly toward the south, away from the bluff edge. Highway One is located to the south of the property and is significantly lower than the coastal bluff terrace, effectively eliminating the view of the ocean from the highway in this vicinity.

Therefore, the Commission finds that the proposed development as conditioned will protect public views to and along the ocean and scenic coastal areas consistent with visual resource protection provisions LUP Policy 3.5-1 and CZC Sections 20.504.010 and 20.504.015(C)(1) of the certified LCP.

2. Consistency with Height Requirements

According to the certified LCP provisions of LUP Policy 3.5-3, new development located in an area designated as highly scenic is limited to one story above natural grade unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures. Likewise, according to CZC Section 20.504.015(C)(2) new development located in an area designated as highly scenic is limited to eighteen feet above natural grade, unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures. If these two criteria can be met, the building height can be raised to a maximum of twenty-eight feet and include two stories.

As noted above, the average height above natural grade of the proposed structure is 23.85 feet, only six feet higher than the 18-foot standard specified by CZC Section 20.504.015(c)(2). In addition, the structure would be two story, differing from the one-story standard specified by LUP Policy 3.5-3. Thus, the only way the development could be found consistent with these LCP policies is if the increased height would not (a) affect public views to the ocean or (b) be out of character with surrounding structures.

As discussed in the previous section, there are no views afforded through the property to the ocean from Highway One or other public vantage points. Therefore, the increased height above one story and 18 feet would not affect public views to the ocean.

With regard to whether the increase height would be out of character with surrounding structures, within the same subdivision as the proposed development there are numerous two-story houses, including both of the houses on either side of the subject parcel (Exhibit No. 11). The Jones residence located on a .67-acre, bluff top lot immediately to the north of the subject parcel is a two-story house built an average of 22 feet above natural grade. This approved development also includes a two-story detached garage and guest room built an average of 20 feet above natural grade. The Calone parcel located immediately to the south of the subject property has an approved two-story residence built an average of 23 feet above natural grade. The proposed two-story house on the subject parcel would be built an average of 23.85 feet from natural grade, conforming to the characteristic height of the adjoining parcel's structures. As described below, the proposed residence would not be out of character with the size and bulk of the neighboring structures on the adjoining parcels. The Calone residence located to the south is a 2,404-square-foot structure with an attached garage and additional decking. The Jones residence located to the north is a 1,550-square-foot structure and an 880-square-foot detached garage and guest room structure, both with additional decking. The proposed residential structure would be 2,460 square feet, which is within 30 to 56 square feet of the size of the development on the neighboring parcels. Therefore, the Commission finds that because of the 23.85-foot height and two story aspect of the proposed structure would (a) not affect views to the ocean, and (b) not be out of character with surrounding structures, the proposed development is consistent with the height limitations of LUP Policy 3.5-3 and CZC Section 20.504.015(C)(2).

3. Subordinate to the Character of its Setting

LUP Policies 3.5-1, 3.5-3, and 3.5-4, and CZC Section 20.504.015(C)(3) require that new development in highly scenic areas be subordinate to the character of its setting. To help ensure that new development will be subordinate, LUP Policy 3.5-4 also requires that buildings located within areas designated highly scenic shall be sited in or near the edge of a wooded area rather than in open areas and utilize natural landforms or artificial berms to screen development. In addition, Policy 3.5-5 states that tree planting to screen buildings be encouraged. Furthermore, the County's Coastal Zoning Ordinance Section 20.504.010 states that permitted development shall be sited and designed to minimize the alteration of landforms. Coastal Zoning Ordinance Section 20.504.015(C)(3) requires that in highly scenic areas, building materials, including siding and roof materials, shall be selected to blend in hue and brightness with their surroundings.

Several aspects of the project as proposed will help make the development subordinate to the character of its setting. The single-family residence would be located within a subdivision of other existing two-story structures built on either side of the subject parcel along the bluff top. The proposed house would be placed within a forested setting on the

parcel, and the project would retain selected visual screening trees to help protect views along the coast from the highway and public recreational trail. The proposed development includes additional tree planting and other landscaping to provide increased visual screening of the residence to help protect public views of scenic coastal areas in the vicinity.

Public views of the proposed house from Bowling Ball Beach would be extremely limited if existent at all. Commission staff conducted a site visit of the subject area to assess the visibility of the proposed project from public viewing locations. Story poles had been erected to indicate the maximum height of the proposed residential structure. Regarding views from the public beach, using a pair of binoculars and an open-reel tape measure, it was determined that the public would have to be 90 to 95 feet out from the sandy beach at the base of the bluffs (walking across the bedrock trenches below the mean high tide line that, in part, give Bowling Ball Beach its name) to see the very tip of a story pole. However, most public use of Bowling Ball Beach in the vicinity of the proposed development occurs along the very narrow fringe of sand and cobble at the immediate base of the bluffs, landward from the location where the tips of the story pole was visible. In addition, beach users can only access the part of Bowling Ball Beach from which the tips of the story pole was visible during very low tides; the tide was a minus tide of 1.3 at the time the visual resource survey along the beach was conducted by staff.

Regarding views from public roads and trails, there would be a brief view of the property for motorists and bicyclists traveling south on Highway One from Point Arena. The proposed house site juxtaposed on the east-facing hillside against a backdrop of trees would be within view to passing motorists for a few seconds. A similar view of the proposed house site more from the northwest would be afforded to hikers using the Ross Creek/Whiskey Shoals public access trail. This short, vertical access trail traverses the hillslope to the north and west above Ross Creek from Highway One to the northern end of Bowling Ball Beach and provides access to the Whiskey Shoals lateral trail to the north along the ocean, as well as to the very narrow strand of sandy beach leading south along Bowling Ball Beach at the base of the steep bluffs to Schooner Gulch State Park. The proposed residence would also be partially visible from the headlands of the Whiskey Shoals subdivision along the southern portion of the Whiskey Shoals public trail. The view of the proposed residence from this angle would be to the southeast across Ross Creek. From this vantage point, one already sees a two-story residence and detached guest house in the foreground. The proposed residence would be located in the stand of Monterey pine trees on the knoll behind this neighboring development. Finally, only limited views of the proposed house through the trees would be afforded to boaters at sea.

Regarding the house itself, the colors and materials proposed for the residential development would be in character with the neighboring structures in the area. The siding and trim color (Duckback "Canyon Brown") is a dark stain that would adequately blend with the forested setting. Limestone cultured stone (CSV-20-45) would be used as the stone facing for the siding of the lower portion of the structure, and for the single chimney. The color proposed

by the applicant for the stone-work is "Chardonnay," a mottled, textured stone facing that is a dark earthtone color, and not highly reflective. The Chardonnay color contains various color elements that would help blend the development with the dappled forest background. The lower portion of the structure that would have stone facing applied, would not be readily visible. Landscaping as proposed would help screen what might be visible otherwise. The chimney would also be faced with the same Chardonnay stone-work, but the visible chimney profile would be minimal as seen from the highway and public trails, and would blend with the forested background. To ensure that the building materials of the development as proposed, including siding and roof materials, continue to blend in hue and brightness with their surroundings and are subordinate to the character of its setting during the life of the structure, the Commission attaches Special Condition No. 2. This special condition requires that the current owner and any future owner not repaint or stain the house with products that will lighten the color of the house as approved without an amendment to the permit. In addition, all exterior materials, including roofs and windows, are required to be non-reflective to minimize glare. Furthermore, Special Condition No. 2 requires that all exterior lights, including any lights attached to the outside of the buildings, shall be the minimum necessary for the safe ingress and egress of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the subject parcel.

The applicant has also proposed a landscape plan that would help screen the proposed house from public views along the identified Ross Creek/Whiskey Shoals trail and Highway One corridors. Visual screening would be achieved by planting a combination of lower growing shore pines and Leyland cypress along the north property line, and backing these with taller growing white fir as well as the existing Monterey pine. As a person walks toward the ocean along the Ross Creek/Whiskey Shoals Trail, the proposed house would be mostly screened from view by these trees and the neighboring structures. Likewise, for a person driving south on Highway One, these proposed landscaping trees, as well as the trees proposed for planting along the east side of the house, would provide visual screening of the proposed structure from the approximately 300 feet of roadway along which the house is visible. The landscape plan includes wax myrtle plantings to fill in the gaps between the tree trunks, thus creating a solid wall of vegetation as the trees mature.

A principal aspect of the proposed development that bears on whether the development would be subordinate to the character of its setting is the proposed removal of 46 of the 77 trees existing on the property to accommodate the proposed development. These trees include 3 dead specimens, 15 trees in the location where the septic system would be established, 4 trees where the driveway would be built and 24 trees where the house would be constructed.

As mentioned above, the applicant provided an arborist's report for the purposes of the Commission's *de novo* review. This report evaluates the existing forest stand composition, age, condition and life expectancy as well as how removal of additional trees to accommodate the proposed development would affect the remaining trees, taking into

consideration such factors as disease, wind throw, root loss, and bluff retreat. The arborist, Rob Gross, reported that the predominant stand of trees on the parcel consists of Monterey pine, planted about 30 years ago. Mr. Gross states that the trees were planted close together forming an "artificially dense" stand. His report continues:

"[T]his uncommonly dense planting has led to the characteristic skinny trees here. These trees all compete for sun so much that all the foliage is at the treetops, with the exception of some of the edge trees, which have foliage on the sides. This growth form is weak, due to top-heavy weight distribution and poor stem taper both of which are structural flaws and both of which can individually or together lead to tree failure... The stand density will be a problem for the trees in the long run, the trees can live much longer if they are cultivated and well maintained... Thinning limited stems from this stand would reduce tree-to-tree competition for limited soil and water nutrients... The lower trunk will not re-foliate with this tree species. New landscape plants are indicated to specifically foliate the understory, which currently has little live foliage."

In addition to numbering, mapping the location and species and calculating the diameter-at-breast-height of each of the 77 trees existing on the property, Mr. Gross conducted an evaluation of their relative health by rating their condition. Four condition levels were established: 1) dead; 2) poor condition (less than 20% crown, considerable dead materials or slow growing); 3) okay condition (with a thick canopy, some dead materials); and 4) fine condition (no visible dead or missing foliage, vigorous). Out of the 46 trees that would be removed to accommodate the proposed development, only 6 are considered to be in good condition, including 3 in the area where the septic system would be located and 3 in the area where the house would be constructed. All of the other trees to be removed are either already dead or considered to be in poor condition.

The subject parcel is less than half an acre in size and the applicant is constrained by setbacks on all sides limiting the siting of the residence to roughly the center of the property, thereby removing alternatives for siting that would require the removal of fewer trees. The only available location for the house on the site is as proposed. From the north side of the property, the residence must be set back 50 feet from the property line to accommodate the neighbors' existing 30-foot driveway easement and a 20-foot setback from the easement required by the County Zoning Code. From the rear, along the ocean side of the property, development would abide by the recommended 40-foot geologic hazard setback from the edge of the coastal bluff. The side yard to the west includes the on-site septic system which forces the house up against the opposite side yard setback. The proposed house is moderate in size, consisting of a 1, 431-square-foot footprint that includes a 632-square-foot attached garage. The second story increases the total living space to a modest 2,460 square feet.

Placement of the building does allow existing visually screening trees to be retained around the periphery of the property rather than siting the house against one or more sides of the property requiring their removal. One of the recommendations that Mr. Gross makes is that

thinning of the stand would benefit the remaining trees by reducing tree-to-tree competition for sunlight, water, and nutrients. Mr. Gross makes recommendations for protecting the existing trees to be retained from potential damage during construction activities and also recommends a diversity of new landscape plantings as proposed in the landscape plan. If the trees to be retained are protected from damage during construction as recommended, and benefit from increased sunlight, water and nutrients due to a reduction in tree-to-tree competition as discussed above, then the remaining trees would continue to provide visual screening of the proposed development and the development would be subordinate to the character of its setting. Therefore, the Commission attaches Special Condition No. 6, designed to mitigate the visual affects of the residence on public coastal views by requiring the applicant to submit a revised landscape plan that includes 1) conformance with the applicant's current proposed landscaping plan and arborist's recommendations; 2) additional landscape planting along the south bluff-facing edge of the parcel to provide additional visual screening; and 3) maintenance and replacement of visual screen trees and landscaping. The additional planting of at least 5 trees and 5 wax myrtle shrubs required by the special condition would augment the screening along the ocean side of the property and would assure that younger landscaping will remain to continue to screen the development from the Whiskey Shoals trail and the ocean as the mature existing trees eventually reach the end of their normal lifespan.

To ensure that any future buyers of the property will be aware of the limitations of Special Condition Nos. 6 and 2 on tree removal and limbing, maintaining the dark colors, prohibiting the use of reflective glass and maintaining a certain kind and array of exterior lighting fixtures, the Commission imposes Special Condition No. 1. This condition requires that the applicant execute and record a deed restriction approved by the Executive Director against the property that imposes the special conditions of this permit as covenants, conditions, and restrictions on the use and enjoyment of the property. As conditioned, the proposed development would be subordinate to the character of its setting as required by LUP policy 3.5-1, 3.5-3, 3.5-4, and CZC Section 20.504.015(c)(3) by providing for perimeter screening in keeping with the forested nature of the property and ensuring that all exterior materials and colors will blend with the hue and brightness of the colors of its surroundings as required by CZC Section 20.504.015(c)(3).

4. Conclusion

Therefore, for all of the above reasons, the Commission finds that the proposed development as conditioned will protect public views to and along the coast, conform to height requirements, and be subordinate to the character of its setting consistent with the visual resource protection provisions of the certified LCP.

F. Public Access and Recreation

1. Coastal Act Access Policies

Projects located between the first public road and the sea and 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, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions. Section 30210 states that maximum access and recreational opportunities shall be provided consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. Section 30211 states that 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. Section 30212 states that public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, adequate access exists nearby, or agriculture would be adversely affected.

2. LCP Provisions

The Mendocino County LUP includes a number of policies regarding standards for providing and maintaining public access. Policy 3.6-9 states that offers to dedicate an access easement shall be required in connection with new development for all areas designated on the land use plan maps. Policy 3.6-28 reiterates that new development on parcels containing the accessways identified on the land use maps shall include an irrevocable offer to dedicate an easement.

LUP Policy 3.6-27 states:

"No development shall be approved on a site which will conflict with easements acquired by the public at large by court decree. Where evidence of historic public use indicates the potential for the existence of prescriptive rights, but such rights have not been judicially determined, the County shall apply research methods described in the Attorney General's 'Manual on Implied Dedication and Prescriptive Rights.' Where such research indicates the potential existence of prescriptive rights, an access easement shall be required as a condition of permit approval. Development may be sited on the area of historic public use only if: (1) no development of the parcel would otherwise be possible, or (2) proposed development could not otherwise be sited in a manner that minimizes risks to life and property, or (3) such siting is necessary for consistent with the policies of this plan concerning visual resources, special communities, and archaeological resources. When development must be sited on the area of historic public use an equivalent easement providing access to the same area shall be provided on the site."

Note: This policy is implemented verbatim in Section 20.528.030 of the Coastal Zoning Code.

3. Discussion

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

As described above, the subject parcel is located on a coastal bluff approximately 33 to 61 feet above the ocean. There is no physical access from the subject parcel to the shoreline due to the very steep drop off. The property is situated approximately 600 feet south of the Ross Creek Shoreline Access to the north and a little more than $\frac{3}{4}$ of a mile north of the Schooner Gulch/Bowling Ball Beach Shoreline Access, both providing signed vertical coastal shoreline access from Highway One to the beach. The County's Land Use Map #28 for the portion of the county containing the subject parcel designates the beach at the base of the coastal bluff west of the project site for proposed lateral coastal access. The Coastal Element also indicates the intention of establishing a bluff top trail in this location for public coastal access. However, no evidence exists that the parcel has been used by the public to gain access to the coast. Coastal Commission staff did not identify any trails on the subject property. In addition, the construction of the proposed residence would not significantly increase the demand for new public access.

Therefore, the Commission finds that the proposed development does not have any significant adverse impact on existing or potential public access, and that the project as proposed, which does not include provision of public access, is consistent with the requirements of the Coastal Act Sections 30210, 30211, and 30212 and the public access policies of the County's certified LCP.

G. California Environmental Quality Act.

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirement 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 the proposed development may have on the environment.

The Commission incorporates its findings on conformity with LCP policies at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein, in the findings addressing the consistency of the proposed project with the certified LCP, the proposed project has been conditioned to be found consistent with the Mendocino County LCP and the access and recreation policies of the Coastal Act. Mitigation measures, which will minimize all adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

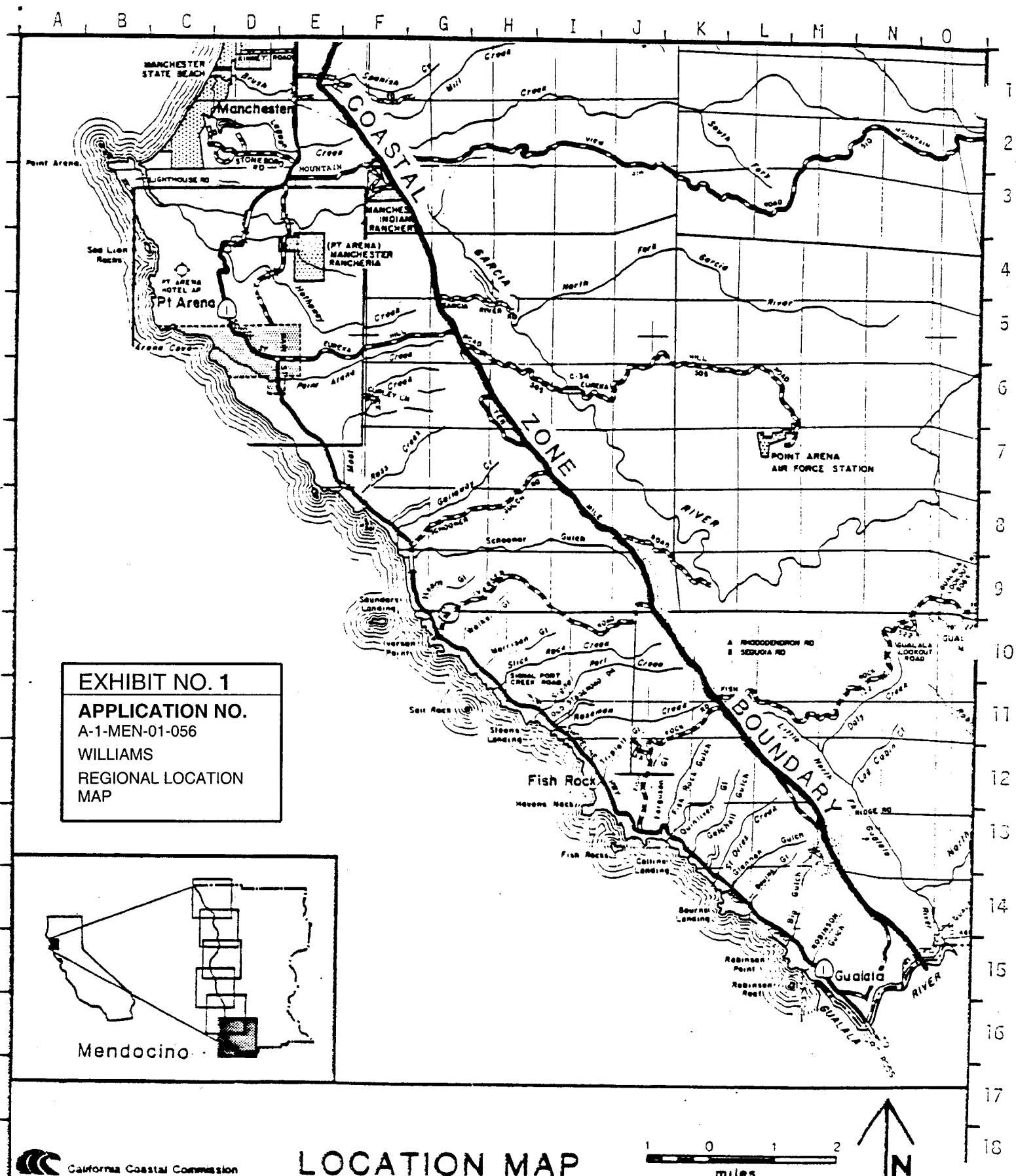
Exhibits

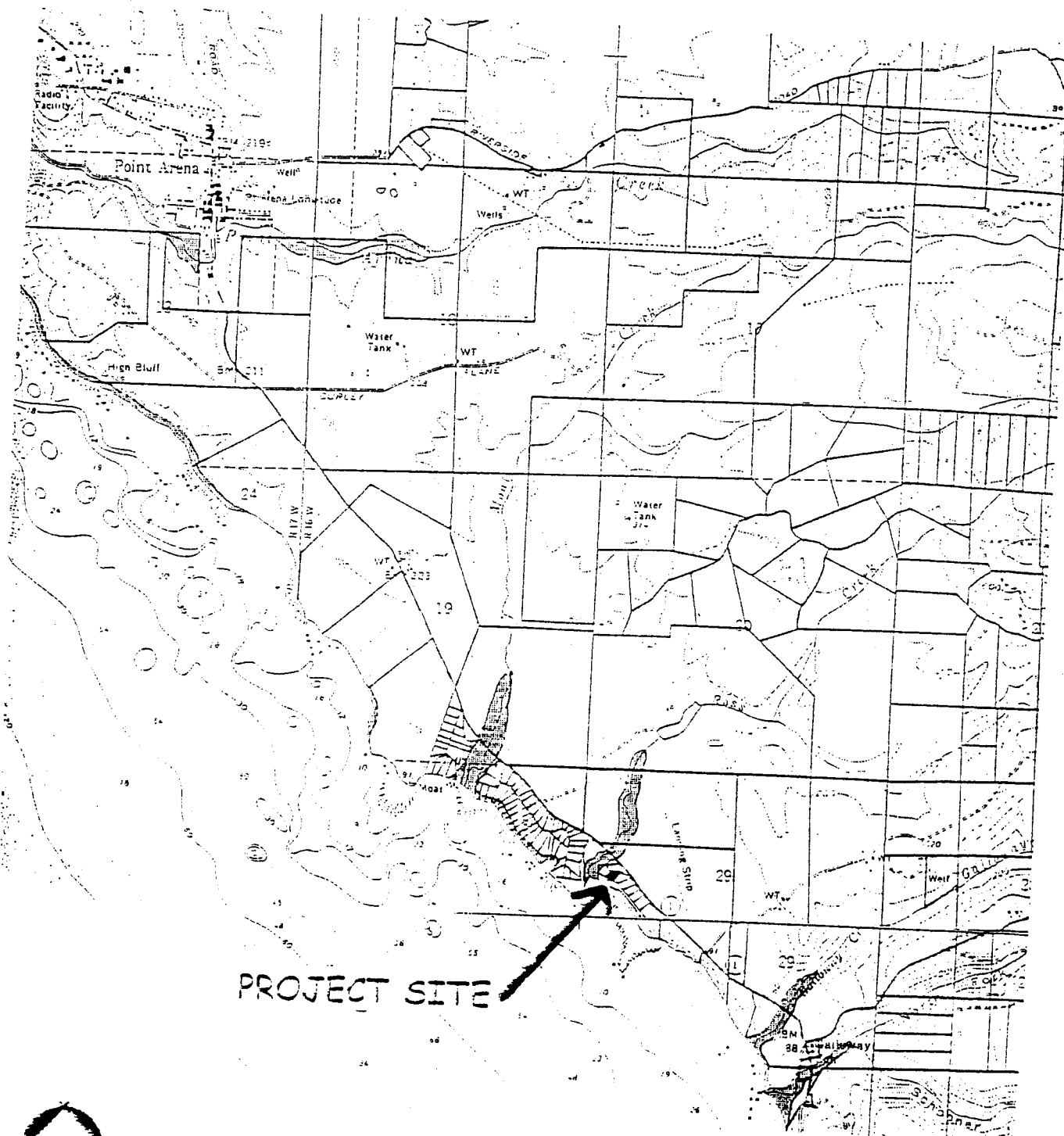
1. Regional Location Map
2. Vicinity Map
3. Project Plans
4. Notice of Final Action
5. Appeal
6. Geological Investigation
7. Landscape Plan
8. Arborist's Report
9. Appellant's Correspondence
10. Correspondence
11. Photographs of Neighboring Houses

ATTACHMENT

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 condition will be resolved by the Executive Director of 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.





NO SCALE

EXHIBIT A

EXHIBIT NO. 2

APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

VICINITY LOCATION

MAP

RESIDENCE FOR GALE WILLIAMS
27560 S. HWAY 1, PT. ARENA
AP#27-421-06

5-7-01

MAY 22 2001

AUG 22 2001

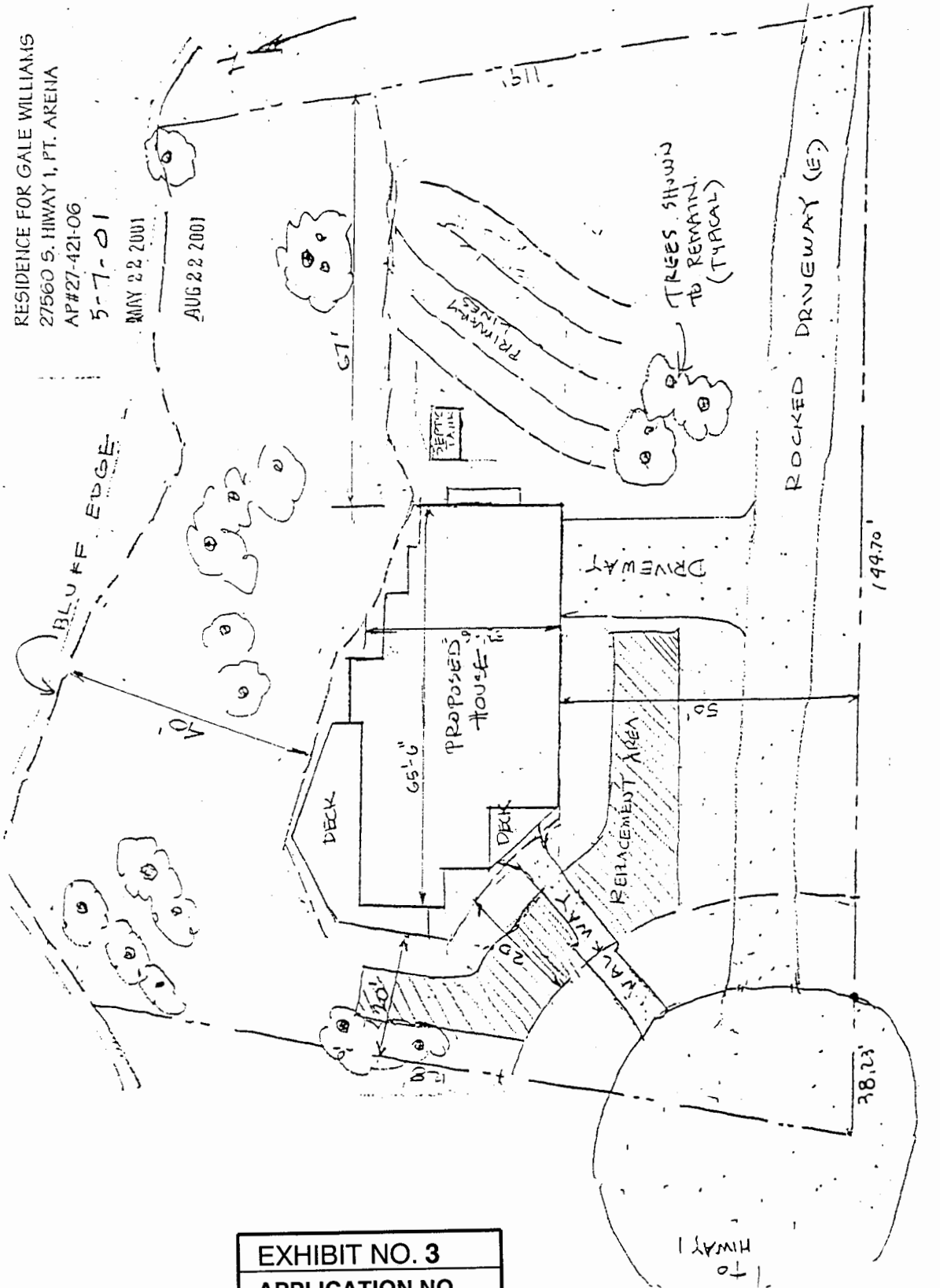


EXHIBIT NO. 3

APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

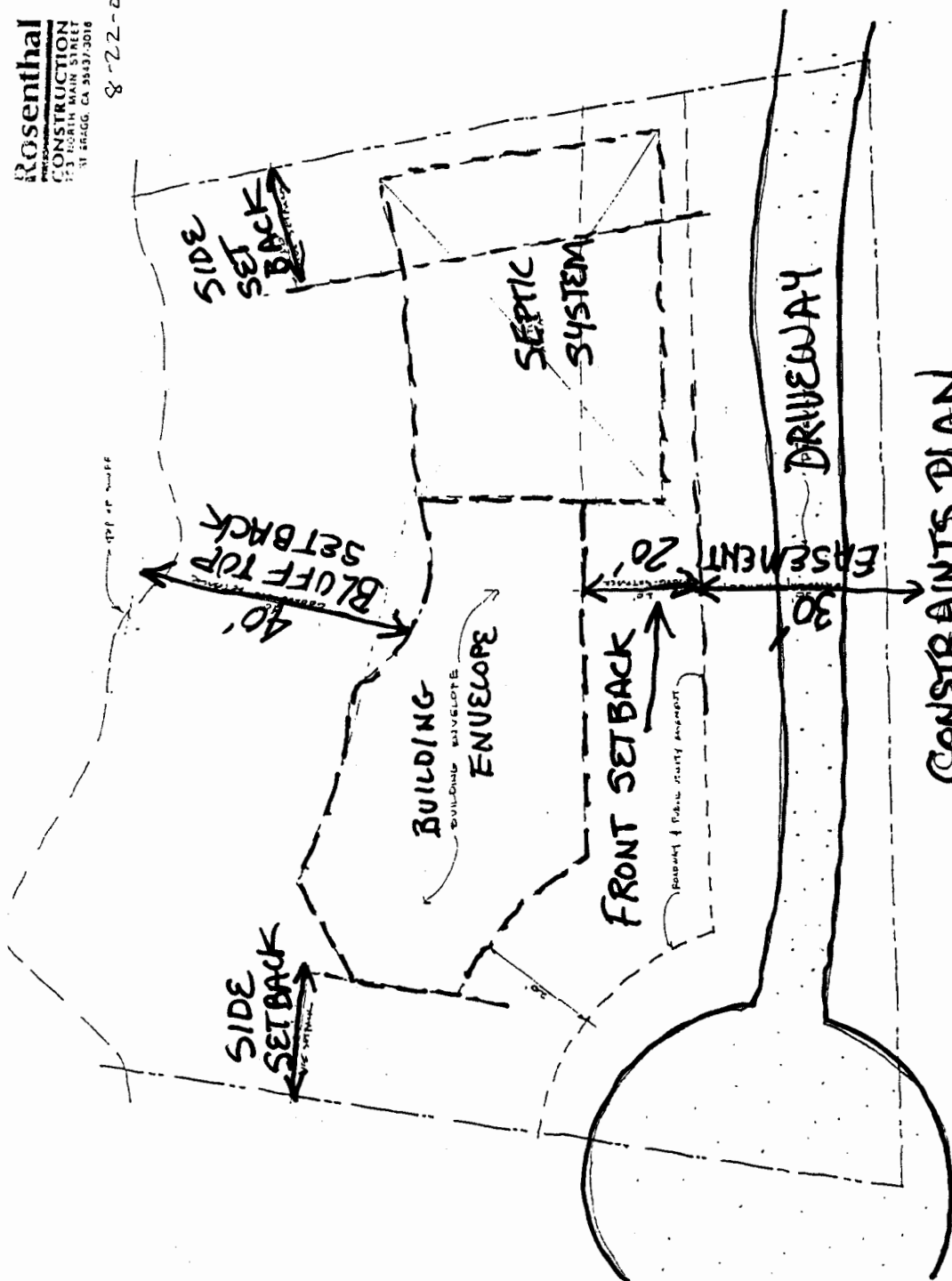
PROJECT PLANS

(1 of 6)

SITE PLAN

Rosenthal
CONSTRUCTION
 173 NORTH MAIN STREET
 Yuba City, TX 75401
 817-222-0101

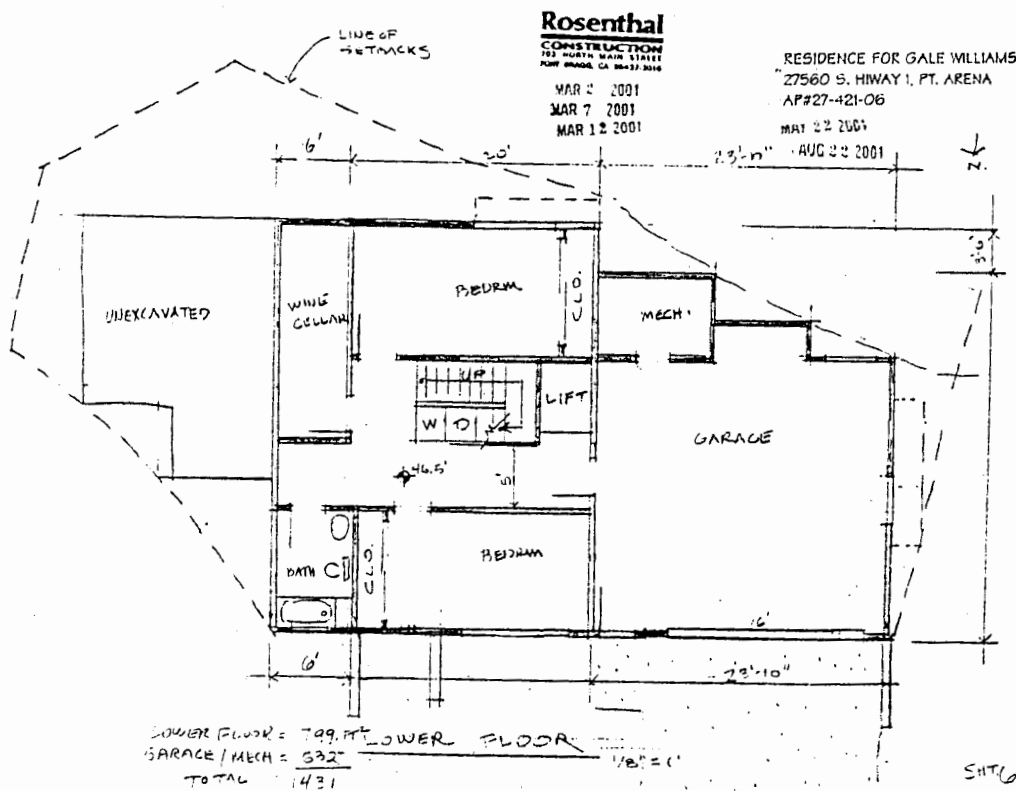
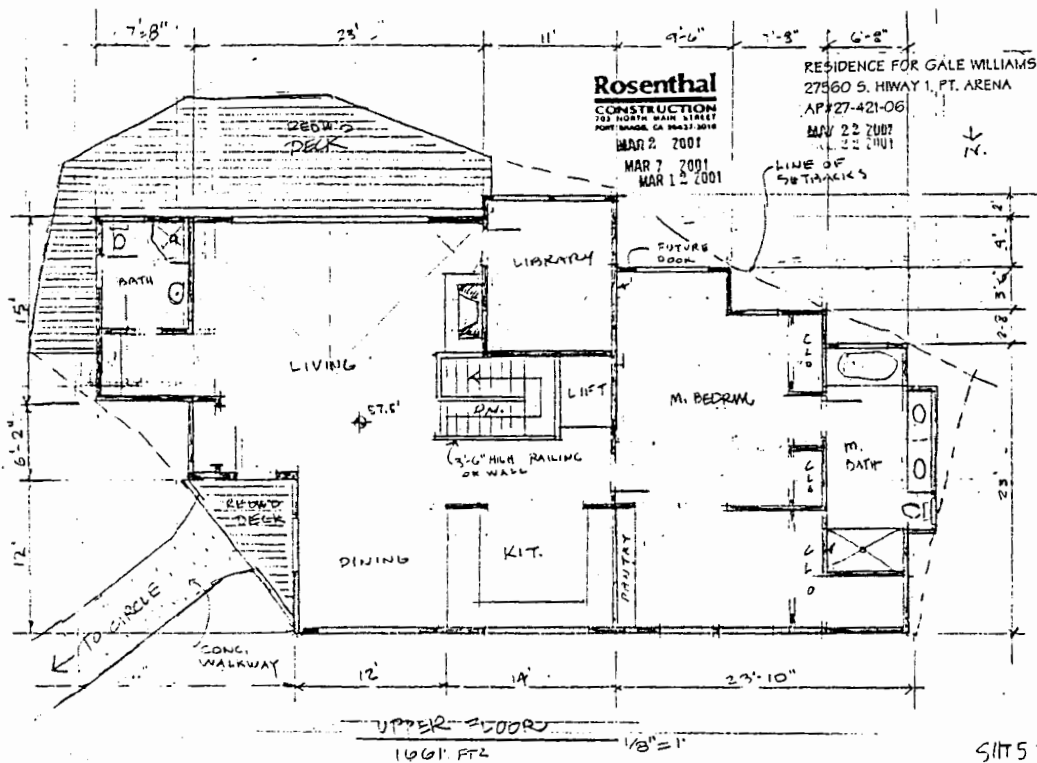
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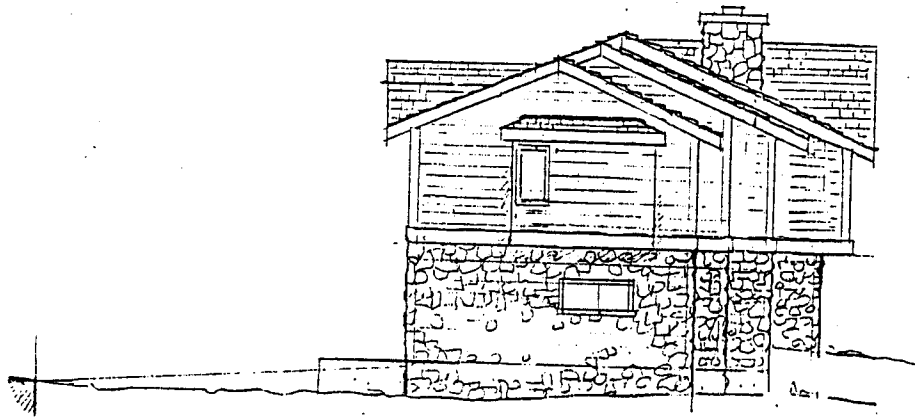


CONSTRAINTS PLAN

RESIDENCE FOR GALE WILLIAMS
 27560 S. HWY 1, FT. ARENA
 AP#27-421-06

NO SCALE





WEST ELEVATION

1/8" = 1'

RESIDENCE FOR GALE WILLIAMS
27560 S. HWAY 1, PT. ARENA
AP#27-421-06

Rosenthal

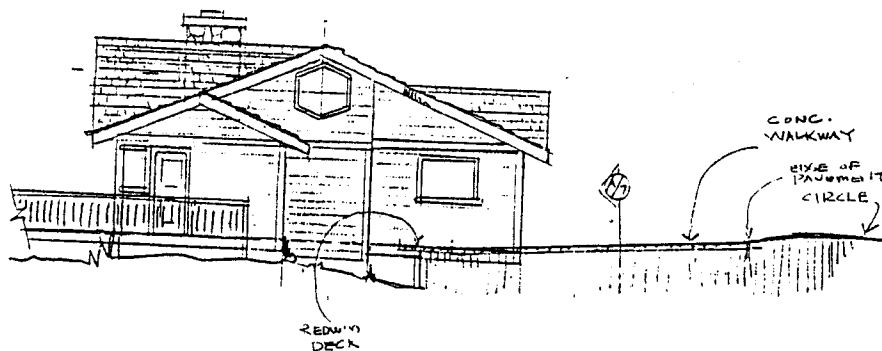
CONSTRUCTION
707 NORTH MAIN STREET
FORT BRAGG, CA 95427-3018

MAR 2 2001

MAR 7 2001

MAR 12 2001

AUG 22 2001



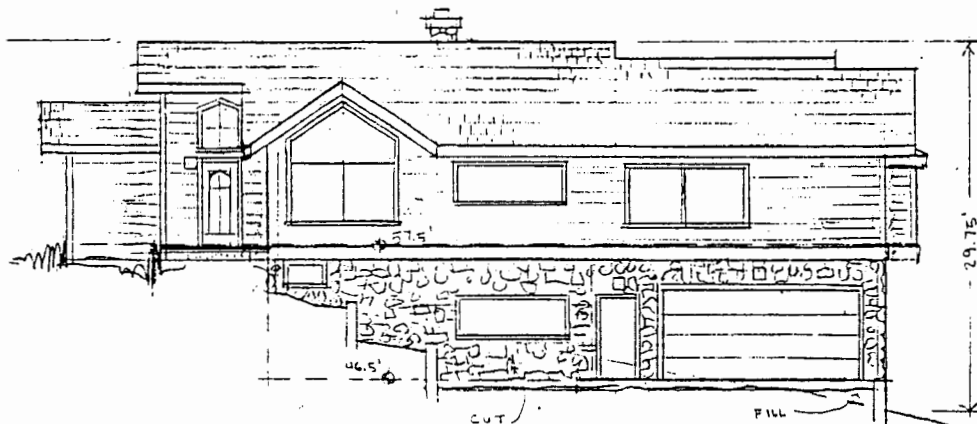
EAST ELEVATION

1/8" = 1'

MAY 22 2001

RESIDENCE FOR GALE WILLIAMS
27560 S. HWAY 1, PT. ARENA
AP#27-421-06

SIDING: REDWOOD SHINGLES &
 CULTURED STONE - CRANDONNEY LIMENTONE
 FINISH: DUCKBACK "CANYON" STAIN
 ROOF: ARCH. GRANGE COMP SHINGLES
 COLOR: BLACK OR GREY
 □ DENOTES SHIELDED EXTERIOR
 LIGHT FIXTURE
 AVERAGE HT. = 23.85'



NORTH ELEVATION

1/8" = 1'

RESIDENCE FOR GALE WILLIAMS
 27560 S. HWAY 1, PT. ARENA
 AP#27-421-06

Rosenthal
 CONSTRUCTION
 153 NORTH WADE STREET
 FORT BANGS, CA 95421-3018

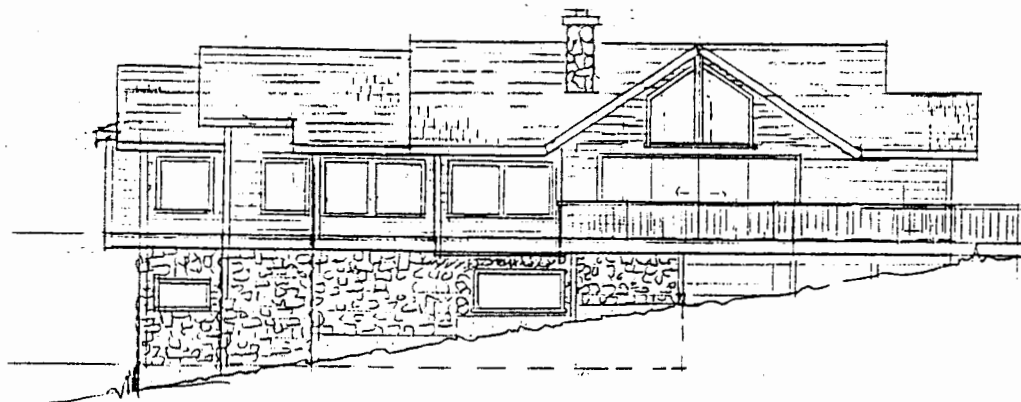
MAR 2 2001

MAR 7 2001

MAR 12 2001

MAY 22 2001

AUG 22 2001



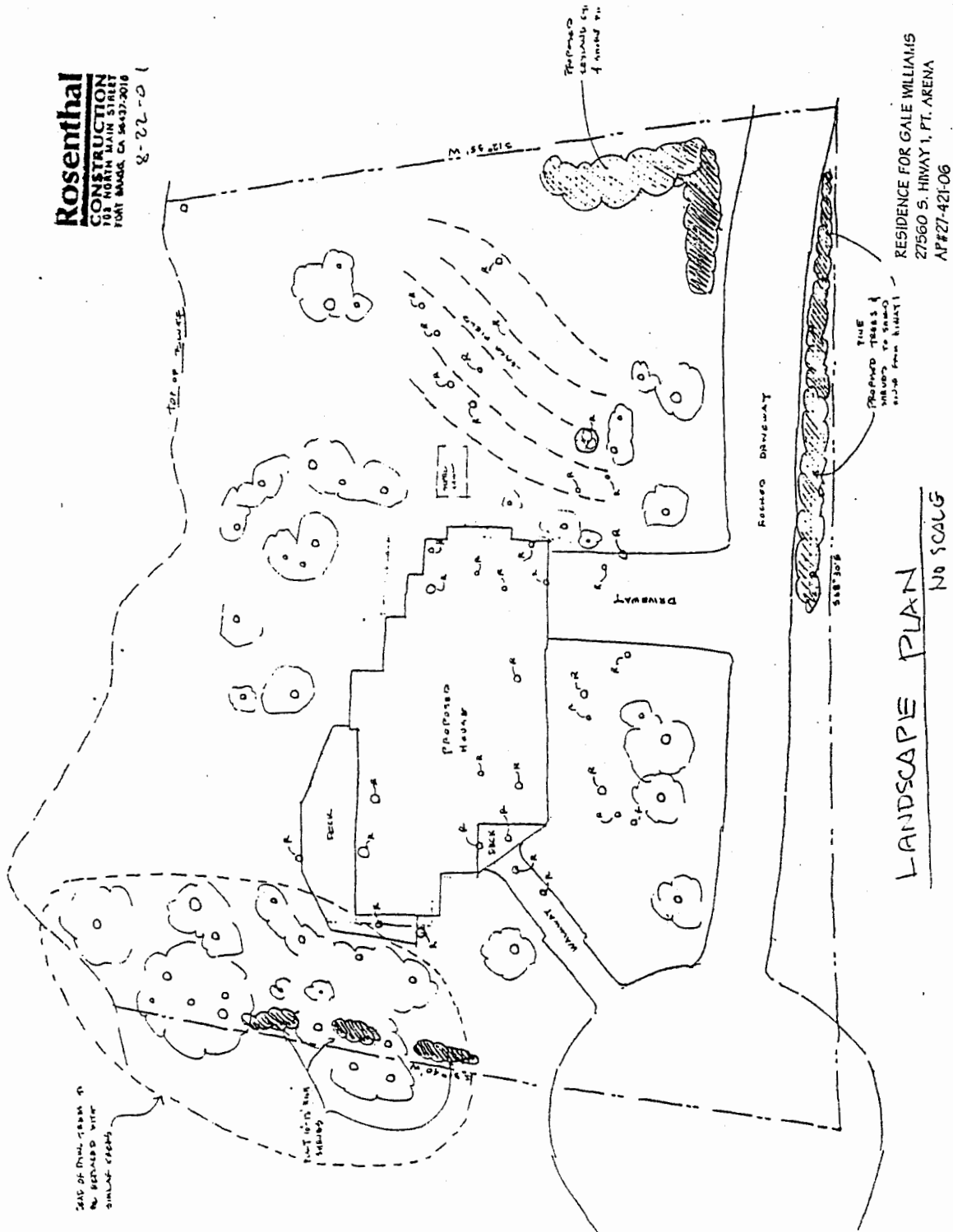
SOUTH ELEVATION

1/8" = 1'

RESIDENCE FOR GALE WILLIAMS
 27560 S. HWAY 1, PT. ARENA
 AP#27-421-06

Rosenthal
CONSTRUCTION
 101 NORTH MAIN STREET
 FORT SAUNDERS, CA 94437-2018

8-22-01



RESIDENCE FOR GALE WILLIAMS
 27560 S. HWY 1, PT. ARENA
 AP#27-421-06

LANDSCAPE PLAN
 NO SCALE



-MEN-01-115

RAYMOND HALL
DIRECTOR

COUNTY OF MENDOCINO

DEPARTMENT OF PLANNING AND BUILDING SERVICES

MAILING ADDRESS:
790 SO. FRANKLIN
FORT BRAGG, CA 95437

TELEPHONE
(707) 964-5379

RECEIVED
OCT 15 2001

CALIFORNIA
COASTAL COMMISSION

October 9, 2001

NOTICE OF FINAL ACTION

Action has been completed by the County of Mendocino on the below described project located within the Coastal Zone.

CASE#: CDP #35-01
OWNER: Gale & Dorothy Williams
AGENT: Ed McKinley
REQUEST: Construct a 2,460 square foot single-family residence with a 632 square foot attached garage/mechanical room, average height to be 23.85 feet from natural grade; install septic system; connect to existing private water system; construct a driveway, concrete walkway and wooden decks.
LOCATION: W side of Highway One approximately 200 feet S of Ross Creek at Mile Marker 12.10 at 27560 S. Highway One (APN 027-421-06).
PROJECT COORDINATOR: Doug Zanini

HEARING DATE: September 27, 2001

APPROVING AUTHORITY: Coastal Permit Administrator

ACTION: Approved with Conditions.

See staff report for the findings and conditions in support of this decision.

The project was not appealed at the local level.

The project is appealable to the Coastal Commission pursuant to Public Resources Code, Section 30603. An aggrieved person may appeal this decision to the Coastal Commission within 10 working days following Coastal Commission receipt of this notice. Appeals must be in writing to the appropriate Coastal Commission district office.

| | |
|----------------------------------|----------------|
| EXHIBIT NO. | 4 |
| APPLICATION NO. | A-1-MEN-01-056 |
| WILLIAMS | |
| NOTICE OF FINAL ACTION (1 of 12) | |

COASTAL PERMIT ADMINISTRATOR ACTION SHEET

CASE#: CDP 35-01 HEARING DATE: 9/27/01

OWNER: Williams

ENVIRONMENTAL CONSIDERATIONS:

☒ Categorically Exempt

☐ Negative Declaration

☐ EIR

FINDINGS:

☒ Per staff report

☐ Modifications and/or additions

ACTION:

☒ Approved

☐ Denied

☐ Continued _____

CONDITIONS:

☒ Per staff report

☒ Modifications and/or additions

See attached

C. R. Full

Signed: Coastal Permit Administrator

2 of 12

Modified Conditions for CDP 35-01 William

Special Condition #3

* Insert after "... non-reflective glass," before, "Any change..."

"Roofing shall match the walnut color in the Owens Corning MarVista Shake brochure submitted on 9/27/01. The existing deck may be of concrete in lieu of redwood decking."

Special Condition #5

Add after "... preliminary landscape plan in Exhibit G of this report,"

"and the preliminary plan as submitted to the CPA hearing on 9/27/01."

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-1

OWNER/APPLICANT: Gale and Dorothy Williams
834 22nd Street
Santa Monica, CA 90403

AGENT: Ed McKinley
237 Morrow Street
Fort Bragg, CA 95437

REQUEST: Construct a 2,460 square foot single family residence with a 632 square foot attached garage/mechanical room, average height to be 23.85 feet from natural grade; install a septic system; connect to existing private water system; construct a driveway, concrete walkway and wood decks.

LOCATION: On the west side of Highway One approximately 200 feet south of Ross Creek at Mile Marker 12.10 at 27560 S. Highway One (APN 027-421-06).

APPEALABLE AREA: Yes (west of the 1st public road & blufftop lot)

PERMIT TYPE: Standard

TOTAL ACREAGE: 0.41 acres

ZONING: RR:L-5-DL

GENERAL PLAN: RR-5-DL

EXISTING USES: Vacant

SUPERVISORIAL DISTRICT: 5

ENVIRONMENTAL DETERMINATION: Categorically Exempt, Class 3

PROJECT DESCRIPTION: The applicant proposes to construct a 2,460 square foot single family residence with a 632 square foot attached garage/mechanical room. The average height of the residence is proposed to be 23.85 feet from natural grade. The applicant proposes to install a septic system, connect to an existing private water system and construct an all-weather surface driveway, concrete walkway and wood decks. The project would require the removal of approximately 36 bishop pines. In addition, the applicant proposes to install screening plantings north and east to screen the residence from the highway.

LOCAL COASTAL PROGRAM CONSISTENCY RECOMMENDATION: The proposed project is consistent with the applicable goals and policies of the Local Coastal Program as described below.

Land Use. The proposed single-family residence is compatible with the Rural Residential zoning district and is designated as a principal permitted use. The project is located in a designated highly scenic area. The proposed residence is 23.85 feet tall as measured from average grade. Per policy 3.5-3 of the Coastal Element and Section 20.504.015 of the Coastal Zoning Code, the maximum allowable building height in

4 of 12

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-2

this location is 18 feet (average) above natural grade (and one-story) unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures. If those two criteria can be met, the building height can be raised to a maximum of 28 feet.

The location of the structure on the parcel is approximately 20-30 feet above Highway One. As such, the structure will not block a view to the ocean from Highway One. The four residences in the same neighborhood are all two-stories in height. Therefore, based on the visual analysis below, the proposed building height complies with the Local Coastal Plan policies and ordinances relating to height limitations.

Per Section 20.376.045 of the Coastal Zoning Code, the minimum building setback from property lines is 20 feet in the front and 6 feet on the sides. The proposed buildings are located a minimum of 20 feet from the closest property line; therefore, the proposed project meets the required setbacks.

Public Access. The project is on a blufftop parcel. The property is situated approximately 200 feet south of the Ross Creek shoreline access and approximately one mile north of the existing shoreline access at Schooner Gulch/Bowling Ball Beach. Coastal Access Coordinator, Louisa Morris states:

The project will be visible from the Moat Creek/Ross Creek public access trail. As such, care should be taken to minimize visual impacts to the following public viewsheds – from this trail (Moat/Ross Creeks), Bowling Ball Beach (which has an offer to dedicate (Auguste, APN 27-433-05) and Schooner Gulch State Park. In addition, the parcel should be inspected for possible prescriptive use atop the bluff and on the beach. Twenty-three feet may be too high.

Proposed lateral coastal access is also identified on the County's Land Use Map on the beach west of this parcel. The Coastal Element indicates the intention of establishing a blufftop trail in this location as well. Establishing a contiguous trail along the blufftop in this location is problematic in that small parcels have been created in this area which would create conflicts with public access along the blufftop. Furthermore, a nexus cannot be established linking the project's impact on public access facilities to the benefits derived from the exaction of an access easement across the property. No prescriptive trails were identified as a result of staff's site visit. Therefore, no dedication for a public trail has been required for this application.

Hazards. The Development Limitation (DL) combining district overlay was assigned to parcels which, according to available data, have serious constraints that may prevent or seriously limit development. The parcels along Bowling Ball Beach, including the subject parcel, were given the DL designation due to narrow parcel width and a steep and fragile bluff face.

Section 20.500.020 (B) (1) of the Mendocino County Coastal Zoning Code states:

"New structures shall be setback a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). New development shall be setback from the edge of bluffs a distance determined from information derived from the required geological investigation..."

Policy 3.4-4 of the Mendocino County Coastal Element states:

"Property owners should maintain drought-tolerant vegetation within the required blufftop setback. The County shall permit grading necessary to establish proper drainage or to install landscaping and minor improvements in the blufftop setback."

5912

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-3

Policy 3.4-9 states:

"Any new development landward of the blufftop setback shall be constructed so as to ensure that surface and subsurface drainage does not contribute to the erosion of the bluff face or to the instability of the bluff itself."

BACE Geotechnical performed a geotechnical investigation of this parcel on March 16, 2001. The investigation concludes:

"From a geotechnical engineering standpoint, we judge that the site is suitable for the proposed residential development. The main geotechnical considerations affecting the project are bluff retreat, bluff stability, seismic ground shaking, weak soils, and the impact of the residential construction on the site..."

Comparison between file photographs taken in 1977 and 1964 and 1981 aerial photographs of the area as it appears today show that the bluff has retreated at an average rate of about 1-1/2 inches per year. Such a rate would result in the loss of as much as about 9-1/2 feet of the bluff in 75 years (considered by the California Coastal Commission to be the economic lifespan of a house) Multiplying by a factor of safety of four, and rounding up slightly, a bluff setback of 40 feet should be suitable for the proposed residence and leachfield."

The proposed residence has been set back 40 feet from the bluff. The investigation includes discussions and recommendations necessary to build a safe residence. Special Condition #1 is included to ensure that all the recommendations of the BACE report are followed.

The Coastal Commission and Mendocino County have been applying a deed restriction for blufftop parcels where the development is within 100 feet of the bluff prohibiting the construction of seawalls with the requirement that the structures be removed from the property if threatened by bluff retreat. The restriction also requires that the landowner be responsible for any clean up associated with portions of the development that might fall onto a beach. It is anticipated that the Coastal Commission will continue to apply this deed restriction for any blufftop development. Staff recommends including Special Condition #2 to address this issue.

Visual Resources. The proposed project lies within a designated "highly scenic" area and is subject to the visual resource policies within the Mendocino County Coastal Element and Chapter 20.504 of the County Zoning Code.

Policy 3.5-1 of the Mendocino County Coastal Element states:

"The scenic and visual qualities of Mendocino County 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 designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting."

6412

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-4

Policy 3.5-3 states:

"Any development permitted in [highly scenic] areas shall provide for the protection of ocean and coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes."

"...In addition to other visual policy requirements, new development west of Highway One in designated highly scenic areas is limited to one-story (above natural grade) unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures...New development shall be subordinate to the setting and minimize reflective surfaces..."

Colors/Materials: The materials/colors proposed for the exterior of the residence are:

Roof: Architectural grade composition shingles – black or gray
Siding: Cedar or redwood shingles and redwood boards – Duckback "Canyon" stain; Chardonnay Limestone cultured stone (CSV-20-45)
Trim: Wood trim – Duckback "Canyon" stain
Ext. Lighting: Fixture to be Kichler Model K-9234- BK with an architectural bronze finish

The proposed residence is two-stories and exceeds 18 feet in height. Story poles have been erected to indicate the height and the location of the proposed residence. The siting options on this parcel are limited because of the required setbacks and the geotechnical setback (See Exhibit C). Construction of a one-story building in the proposed location is difficult due to the sloping topography of the site. In addition, all of the residences along the access road to the parcel are two-stories in height. Therefore, this project is in character with surrounding structures.

The residence would be plainly visible from Highway One and will be partially visible from the coastal access trail to the north. The uppermost portion of the residence may be partially visible from Bowling Ball Beach at a distance and from the Caltrans vista point to the south. The dark colors and the shadows of the remaining trees should visually subordinate the project to the character of its setting.

The selected materials and colors are dark earthtones. The house is located in a grove of pine trees and would blend into the background. The trees provide a backdrop for the residence as seen from all public view areas. Special Condition #3 ensures that the building materials and colors will not be changed without prior approval of the Coastal Permit Administrator. Special Condition #4 protects the screen trees that are to remain.

The applicant has submitted a landscape plan to provide additional screening of the residence as seen from Highway One north of the parcel and as potentially seen from the southern view areas (see Exhibit G). Staff agrees with the concept and location of the plantings but would have to see a final landscape plan to comment on the number and species of trees. Special Condition # 5 requires the submittal of a final landscape plan before the coastal development permit is issued.

Policy 3.5-5 states:

"Providing that trees will not block coastal views from public areas such as roads, parks and trails, tree planting to screen buildings shall be encouraged. In specific areas, identified and adopted on the land use plan maps, trees currently blocking views to and along the coast shall be

7412

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-5

*required to be removed or thinned as a condition of new development in those specific areas.
New development shall not allow trees to block ocean views."*

The subject site is within a "Tree Removal" area designated on the County's Land Use Plan map. Because the elevation of the site is over 20 feet higher than Highway 1 to the east, removal of trees would not open any public views to the ocean. Therefore, no removal or thinning of trees is required for this permit. Approximately 36 trees would be removed to implement this project. The proposed residence will be located among the remaining trees.

Section 20.504.035 (A) (2) of the Coastal Zoning Code states:

"Where possible, all lights, whether installed for security, safety or landscape design purposes, shall be shielded or shall be positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the parcel on which it is placed."

Kichler Model K-9234- BK is downcast and shielded. Therefore, the exterior lighting complies with Section 20.504.035 of the Coastal Zoning Code.

Natural Resources. The parcel to the east of the subject site is zoned as "Rangeland", which is afforded protection as an agricultural resource in the County Zoning Code. Section 20.508.015 (A) (1) states:

"No new dwellings in a residential area shall be located closer than two hundred (200) feet from an agriculturally designated parcel unless there is no other feasible building site on the parcel."

The subject residence is separated from the RL designated land by Highway 1 and the private road. The proposed residence would be elevated above the RL land. Therefore, it is not anticipated that there would be a conflict with the agricultural uses to the east. Also, there is no alternative building site within the parcel that would meet the requirement of the 200-foot setback; therefore, the proposed project is consistent with this requirement.

Mary Rhyne, Botanist, prepared a botanical survey. Ms. Rhyne found no rare or endangered plants on the project site.

Archaeological/Cultural Resources. This project was referred to the Northwest Information Center of the California Historical Resources Inventory at Sonoma State University (SSU) for an archaeological records search. SSU responded that the site has a probability of containing archaeological resources and further investigation was recommended. Thad Van Bueren, Registered Professional Archaeologist, performed an Archaeological Survey of this parcel on May 3, 2001. The survey found no historical or archaeological resources on the property. The survey was referred to the Mendocino County Archaeological Commission for acceptance. The survey was accepted on June 13, 2001. The applicant is advised by Standard Condition #8 of the County's "discovery clause" which establishes procedures to follow should archaeological materials be unearthed during project construction.

Groundwater Resources. The site is located within an area mapped as Critical Water Resources (CWR) by the County's Coastal Groundwater Study. The project is to be provided water by the Pt. Arena Water Works. A letter from Pt. Arena Water Works indicating that service is to be provided is in the Planning file.

Transportation/Circulation. The property is accessed from Highway 1 via a private road that serves the existing subdivision. The project would not involve any alterations to the existing paved road. The

8 of 12

**STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT**

**CDP# 35-01
September 27, 2001
CPA-6**

project would contribute incrementally to cumulative traffic volumes on Highway 1 and other local roadways. It has been determined that these traffic impacts are not significant. Therefore, no mitigation is required.

Zoning Requirements. The project complies with the zoning requirements for the Rural Residential District set forth in Section 20.376.015, et.seq., and with all other zoning requirements of Division II of Title 20 of the Mendocino County Code.

PROJECT FINDINGS AND CONDITIONS: Pursuant to the provisions of Chapter 20.532 and Chapter 20.536 of the Mendocino County Code, staff recommends that the Coastal Permit Administrator approve the proposed project, and adopt the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and
2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and
3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and
4. The proposed development, if constructed in compliance with the conditions of approval, will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act; and
5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and
6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.
7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.

STANDARD CONDITIONS:

1. This action shall become final on the 11th day following the decision unless an appeal is filed pursuant to Section 20.544.015 of the Mendocino County Code. The permit shall become effective after the ten (10) working day appeal period to the Coastal Commission has expired and no appeal has been filed with the Coastal Commission. The permit shall expire and become null and void at the expiration of two years after the effective date except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.

9912

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-7

To remain valid, progress towards completion of the project must be continuous. The applicant has sole responsibility for renewing this application before the expiration date. The County will not provide a notice prior to the expiration date.

2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division II of Title 20 of the Mendocino County Code.
3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.
4. That this permit be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.
5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.
6. This permit shall be subject to revocation or modification upon a finding of any one (1) or more of the following:
 - a. That such permit was obtained or extended by fraud.
 - b. That one or more of the conditions upon which such permit was granted have been violated.
 - c. That the use for which the permit was granted is so conducted as to be detrimental to the public health, welfare or safety or as to be a nuisance.
 - d. A final judgment of a court of competent jurisdiction has declared one (1) or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one (1) or more such conditions.
7. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.
8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

10/12

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 35-01
September 27, 2001
CPA-8

SPECIAL CONDITIONS:

1. The applicant shall incorporate all recommendations within the Geotechnical Investigation prepared by BACE Geotechnical dated March 16, 2001, into the design and construction of the proposed residence.
2. 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 Coastal Permit Administrator that shall provide that:
 - a) The landowner understands that the site may be subject to extraordinary geologic and erosion hazard and landowner assumes the risk from such hazards;
 - b) The landowner agrees to indemnify and hold harmless the County of Mendocino, its successors in interest, advisors, officers, agents and employees against any and all claims, demands, damages, costs, and expenses of liability (including without limitation attorneys' fees and costs of the suit) arising out of the design, construction, operation, maintenance, existence or failure of the permitted project. Including, without limitation, all claims made by any individual or entity or arising out of any work performed in connection with the permitted project;
 - c) The landowner agrees that any adverse impacts to the property caused by the permitted project shall be fully the responsibility of the applicant;
 - d) The landowner shall not construct any bluff or shoreline protective devices to protect the subject single-family residence, garage, septic system, or other improvements in the event that these structures are subject to damage, or other erosional hazards in the future;
 - e) The landowner shall remove the house and its foundation when bluff retreat reaches the point where the structure is threatened. In the event that portions of the house, garage, foundations, leach field, septic tank, or other improvements associated with the residence fall to the beach before they can be removed from the blufftop, the landowner shall remove all recoverable debris associated with these structures from the beach and ocean and lawfully dispose of the material in an approved disposal site. The landowners shall bear all costs associated with such removal;
 - f) The document shall run with the land, bind all successors and assigns, and shall be recorded free of all prior liens and encumbrances, except for tax liens.
3. All exterior building materials and finishes shall match those specified in the coastal development permit application. Windows shall be made of non-reflective glass. Any change in approved colors or materials shall be subject to the review and approval of the Coastal Permit Administrator for the life of the project.
4. All existing trees within the construction area which screen the proposed residence from Highway 1 and which are not indicated on the landscape plan for removal shall be protected during the construction phase with construction fencing. All screening trees

11/4/12

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT


CDP# 35-01
September 27, 2001
CPA-9

shall be retained. In the event that the screening trees die during the life of the project, they shall be replaced with similar species in the same location.

5. Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Coastal Permit Administrator, a final landscape plan based on the preliminary landscape plan in Exhibit G of this report. Specifications shall be included to indicate species, size, and establishment techniques, (e.g. irrigation, fertilization, etc.). All required landscaping shall be established prior to the final inspection of the dwelling, or occupancy, whichever occurs first and shall be maintained in perpetuity.

Staff Report Prepared By:

8/29/01
Date


Doug Zanini
Supervising Planner

Attachments: Exhibit A- Location Map
Exhibit B- Site Plan
Exhibit C- Constraints Map
Exhibit D- Floor Plans
Exhibit E- Elevations
Exhibit F- Elevations
Exhibit G- Landscape Plan

Appeal Period: 10 days
Appeal Fee: \$555

12/4/12

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION

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

RECEIVED
OCT 10 2001

APPEAL FROM COASTAL PERMIT
DECISION OF LOCAL GOVERNMENT

CALIFORNIA
COASTAL COMMISSION

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

SECTION I. Appellant(s)

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

Friends of Schooner Gulch
BOX 4
PT. ARENA CA 95468 (707) 882-2001
Zip Area Code Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port
government: MENDOCINO CO.

2. Brief description of development being
appealed: SINGLE family dwelling

3. Development's location (street address, assessor's parcel
no., cross street, etc.): 27560 S. Hwy One, MM 12.10
APN 027-421-06

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-MEN-01-056

DATE FILED: 10/16/01

DISTRICT: North Coast

H5: 4/88

| | |
|------------------|----------------|
| EXHIBIT NO. | 5 |
| APPLICATION NO. | A-1-MEN-01-056 |
| WILLIAMS | |
| APPEAL (1 of 21) | |

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

- a. ☒ Planning Director/Zoning Administrator c. ☐ Planning Commission
- b. ☐ City Council/Board of Supervisors d. ☐ Other _____

6. Date of local government's decision: SEPT 27, 20017. Local government's file number (if any): CDP 35-01SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

Gale and Dorothy Williams
834 22nd ST
STA. MONICA CA 90403

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) ED MCKINLEY (agent)
237 MORROW ST
FT BRAGG CA 95437

(2) Rixanne Wehren, Merbo-Lake Group, Sierra Club
Box 340 Albion Ca 95410.

(3) Julie Verman, Box 382, Gualala Ca 95445

(4) Roanne Withers, Box 198, Ft Bragg Ca 95437

(5) Superior David Colfax, Court House, Ukiah Ca
95482

6 Hillary Adams 1391 Cammer Rd Elk CA 95432

SECTION IV. Reasons Supporting This Appeal

Note: Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section, which continues on the next page.

2 of 21

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.)

LCP 20,504.015 A, C1, C2. The development
will not be subordinate to the character of its
setting. LCP 20,532.025 A. Incomplete
application. Letter to follow with additional
LCP citations.

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.

Additional Appellants:

- Taxanne Wehren
Mundo - Lake Group
Sierra Club
Box 340
Albion Ca 95410
- Hillary Adams
1391 Cameron Rd
Elk Ca 95432

Peter Reumiller

Signature of Appellant(s) or
Authorized Agent

Date 10/10/01

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

Section VI. Agent Authorization

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

- Julie Perran
Box 382
Gustaf Ca 95445
- Rodanne Withers
Box 198
Fort Bragg Ca 95437

Friends of Schorner Gulch

Signature of Appellant(s)

Date 10/10/01

3 of 21

Friends of Schooner Gulch

A Watershed Organization

P. O. Box 4, Point Arena, California 95468

(707) 882-2001, Fax (707) 882-2011

Executive Committee:

Lucie Marshall
Charles Peterson
Peter Reimuller

RECEIVED
OCT 29 2001

CALIFORNIA
COASTAL COMMISSION

October 11, 2001

Mr. Randy Stemler
California Coastal Commission
Box 4908
Eureka, CA 95502

RE: Williams Appeal (A-1-MEN-01-056)

Dear Mr. Stemler:

The original appeal form has already been sent to you. Following you will find the reasons and facts for our appeal.

Our organization was originally chartered over 20 years ago to protect the recreational values and especially the views of the "Schooner Gulch-Bowling Ball Beach-Saunders Reef Scenic View Corridor." The views across this bay are one of the several premiere views available to tourists and locals on the entire South Coast of Mendocino County.

These views are specifically recognized in the Local Coastal Plan, and the properties in question are designated Highly Scenic.

Reasons for Appeal

The Coastal Permit Administrator approved an application which was not complete. [Section 20.532.025 et seq., and especially paragraph A.] Complete details were not presented on matters of landscaping, colors, lighting, drainage, geology, and other items. [Sections 20.532 et seq. and 20.532.035 et seq., and especially paragraph A, and 20.536.010 et seq.]

We are not lawyers and cannot afford lawyers, but we have been told that the Sundstrom Decision speaks to the requirement for full submission of details at the time of the application, or certainly by the time of the public hearing.

From the Coastal Ridge to the Pacific Ocean, since 1986.

4 of 21

It is our contention that Mendocino County has established a procedural habit of approving Coastal Development Permits which are incomplete at the time of filing, and which in many cases are never completely submitted. This application is one of them.

Also, in many cases including this one, the CPA has approved applications the details of which were submitted to staff immediately prior to or during the hearing or were to be submitted for staff or CPA approval at some time after the approval hearing. This improper procedure robs the public of its right to complete information, the right to make informed comments at the hearing, and the requirement that decisions of the staff and the CPA will be subject to public hearing scrutiny.

It is extremely onerous for the public to be required to attend a public hearing just to be able to get the final details about a case. We live in a huge county, and we have to travel over 3 hours to attend a hearing. It is expensive, and time consuming, for our unpaid volunteers to be required to attend. While we can sympathize with the workload of the County staff and occasionally allow a few days of delay in the preparation of the staff report, it is too much of a burden to have to go to the hearings just to discover the final submission details regarding the case.

We have requested many times that the County obtain complete information regarding each application prior to accepting it for analysis and public hearing. Many times we have not been able to attend hearings and have found out after the hearing that substantial matters were changed at the hearing.

Landscaping: In the case at hand, we find that the final details regarding landscaping on this Highly Scenic Area lot have been delayed for approval at a later date.

Drainage: There is no drainage plan submitted. This is a sensitive area, and any drainage onto the beach must be engineered.

Colors: Final colors were not submitted to the CPA until the day of the hearing. The colors of the siding were never submitted, but were left to be described by words only.

Geological Report: The matter of global warming and rising seas and their effect on the cliff recession was never addressed.

Visibility

The development will not be subordinate to the character of its setting. [20.504.015 et seq., especially paragraphs A and C.] This lot is tilted toward the public

5 of 21

Highway One, unlike other lots in the area. This makes it very visible to the traveling public. Most of the other lots in the area are not so much in the public's view. This entire lot is visible from Highway One, and the from the ground up. The minimal and faulty landscaping which will probably be proposed after the hearing, the height variance, the colors chosen, and the possibility of interior light bulbs shining through the windows all contribute to a highly visible development in a Highly Scenic Area.

It was impossible for us to analyze the impact of the development because the view of the skinny whitened tops of the story poles was blocked by the trees (which will be removed for construction). The bottoms of some of the poles could be seen through the trees because the "screening" trees have no limbs on their bottom halves. So, it was not possible for us to actually see the height and bulk of the house, nor to be able to analyze what will actually happen to the view when the trees are removed for the house and for the septic field.

The trees on the lot appear to be about twice as tall as the story poles. The bottom half of the trees is mainly just trunks, with very little foliage there. That makes it possible to see the poles through the forest when you are close enough, such as from Highway One from the north. It also means that the trees on the lot will not shield the development from Highway One, especially when all the trees are removed from the building envelope and surrounding areas.

It is true that the development will not block the views of the ocean from the Highway, but the development itself will intrude on the landscape from the Highway because of its excessive height, bulk, and the fact that so many trees will be removed from the lot. Other houses in the area are more screened, lower, or hidden from view by the cut bank of the Highway. To say that other houses in the area are two storeys in height, and thereby have set a precedent for such a tall house, is not a tenable argument because this lot is more visible than those other lots and houses.

Views from the public trails in the area were not analyzed by staff or addressed in the report. The house will stand out strongly against the cliff top from the public trails at Ross Creek and at Whiskey Shoals Subdivision to the north. No landscaping is shown on those sides of the house to hide it from that angle.

The boundaries of the lot were not marked for field inspection, and neither the staff nor the public has an accurate idea of what the screening landscaping will look

6 of 21

like when the trees are removed. And if the neighbors remove the trees across the lines, this development will indeed become more highly visible.

Landscape Plan

Special Condition of Approval #5 states: "Prior to the issuance of the CDP, the applicant shall submit a final landscape plan [based on the preliminary plan] submitted at the hearing."

The "landscaping plan" submitted (late) with the plans is incomplete. It does not claim to actually accomplish an effective screening of the development. It was truly called a "preliminary plan." There is no security to the public that the plan will actually mature in a way that will create a long-term and effective buffer to hide the bulk, lights, height, and colors of the structure.

There are no performance standards submitted which would show how the landscape would screen the house. Only the most sketchy notes are included to specify the sizes or kinds of trees or bushes to be planted.

Further, the CPA and the County staff in general lack the kind of expertise that would enable them to accurately judge any plan, even if submitted with the original application. We feel that only a Licensed Landscape Architect is qualified to effectively develop a plan which will screen the development for the long-term.

The County has no list of approved experts, such as Licensed Landscape Architects, which could ensure the accuracy, effectiveness and viability of any landscape plan.

Certainly, at the two houses immediately next door to the north and south, Calone and Jones, which were approved and built within the last decade, the "landscaping" which the County required is a joke. In the case of Jones the landscaping was never effective and never will be. In the case of Calone, the "required" landscaping was never installed and probably would not effectively screen the house from the public views even if it were to be installed. In those cases no performance standards were required, and the staff analysis of the "landscaping" was wrong and ineffectual. Mendocino County staff and CPA are not qualified to design landscape screening. Only a Licensed Landscape Architect is qualified.

It is impossible to tell what the effect will be from down the coast to the south, or from the public beach and the State Park just below and to the south of the house. Indeed, the staff report says it "may" be visible from those areas.

7421

It is likely that the trees on the lot are approaching maturity, or have already. Bishop pines don't have a long life. These are very tall already, and the winds there are very strong. In the eventuality that the owner would remove trees through the years, the house would become definitely very visible in a very sensitive area. Given that problem, permanently young (house-height) shielding landscaping is called for on this development.

We all know that the Jones house, just to the north, is plainly in view from the public beach area and from the State Park and from the Highway One traveled way, turnouts and Vista Point to the south. The Jones house's visibility was an admitted "mistake" by the staff analyst who wrote up the Jones permit for the County. In fact, the staff report said that it would NOT be visible from the beach areas. As such, it significantly degrades the coastal views there and regrettably cannot be removed. It has NO landscaping requirement to screen that view. The visibility of the Jones house certainly cannot be claimed to be a precedent for acceptable visibility of the Williams development.

The development may be relying on trees on the neighboring lot(s) to shield it from the views from the public areas to the south as well. If that is so, it would be necessary to have a requirement to require shielding trees to be planted should those neighboring trees be removed in the future. Also, there should be no limbing or trimming of the shielding trees.

Furthermore, Mendocino County has no enforcement procedures, no enforcement officers, and no plans to institute landscape checking after a house is finalled. Our experience is that once the plan is approved, the applicant can ignore the landscaping requirements with impunity.

At the hearing, the agent for the applicant, when asked about the landscaping plan that was submitted, said, "We believe it will work." Obviously, this is an insufficient guarantee to the public that it actually will work. Much depends on the trees to be left on the adjoining lots, and much depends on the future health of the trees planted.

With the well-publicized advent of Sudden Oak Death (SOD) and the (endemic) Pitch Canker diseases on our coast, it is not possible for an building designer, an applicant, the applicant's agent, County staff or the CPA to know what the landscape will look like over the long-term. Only a trained, Licensed Landscape Architect would be able to best know what the landscape will accomplish over the actual lifespan of the development. Indeed, shore pines are called for in one note on the plan. We understand that shore pines are susceptible to Pitch Canker Disease and are dying in

Mendocino County. Only a Licensed Landscape Architect would be able to ensure the best possible plan for the protection of this Highly Scenic Area.

We feel large trees should be specified. And they should be specified as part of a rotating-screen system, whereby the first trees screen the development immediately, and a later date another screen matures to block the lower views after the first trees mature and are no longer effective.

The (probably tiny) ones which were marginally specified will just not mature fast enough in this windy and exposed location. The public needs a landscape screen in place immediately when the house is built, not in 10 or 20 or 30 years. Anything less is only lip service to "landscape screening" in a Highly Scenic Area. Planting just any old kind of trees is not going to solve our long-term landscape screen problem here.

Lights:

There is no standard or Special Condition in the approval which speaks to the problem of bright points of light shining through windows at night. Lighting at night, which may shine through the windows, could be a detriment from all view points. We feel this is a matter which has been necessary but lacking on many permits lately. Whereas exterior lighting is often spoken to and nominally regulated, interior lighting is in many cases more of a problem.

In the Clark case, on the same cliff to the south, there was no Special Condition that the lighting not be a problem at night. No performance standards were applied which would keep the light bulb from shining through the windows of the house to the beach at night and robbing the beach-going public of their right to a natural night sky. This has become a problem for night beach users on the State Park beach below.

We would recommend that the Commission establish a standard to define light intensities as they shine through windows at night. Perhaps a condition whereby any interior lighting which projects past the boundaries of the property would be required to be "diffused," and not point-sources.

Without such a standard the lights from within houses are often brighter and more obnoxious than those from exterior lighting, which is regulated. Without performance standards on interior lighting shining through windows this development will not be subordinate to the landscape as is required by the LCP.

9 of 21

Color.

The approved color of the stone facing for the house is too light in tone. It is not a "dark earthtone." On the original plans it was described as "Chardonney" color, whatever that is. We were not enlightened until the hearing when the agent produced the tiny lithographed picture from the manufacturer's catalog. As such, we had insufficient notice to study the color and determine whether it would blend with the landscape and represent a "dark earthtone." After the hearing, when we looked more closely at the sample it became apparent to us that it would not blend as required. The late submission served to confuse the public and did not provide the full disclosure required by the LCP.

Further, no performance standards were applied by the staff or the CPA to the color. If the manufacturer has a good day, it may be dark, but on a bad day the manufacturer may turn out a stone facing material which is not very close to the colors promised.

Many of us have bought clothing from catalogs which has turned out to be a different color than that shown in the catalog. Catalogs and the lithographic process have become notoriously inaccurate in their representation of colors. Often catalogs from the same printing will have variations in their color representation.

Clearly, choosing a color for a development from a catalog page is a delicate matter when the goal is to create a house which is subordinate to the landscape in a Highly Scenic Area. Performance standards and actual samples of materials are necessary to allow the staff, the public, and the CPA to make informed and accurate decisions or choices.

In many cases in the past the "words" used to describe colors turned out to be generic and subject to interpretation by staff or owner. Without having actual color chips and material samples in the file at the time the application is submitted the colors cannot be fairly analyzed by the public before the hearing.

The colors of the stone facing and the roof were submitted at the last minute during the hearing. They are tiny lithographic reproductions from a manufacturer's catalog. As such, they are insufficient to allow the public to know for sure what is happening. The staff and the CPA approved them in the fluorescent lighting of the meeting hall. Nobody knows how they will actually look outdoors and on genuine materials. They were never available to the public in the case file prior to the hearing.

In the neighboring Clark case, the colors of a roof sample submitted to and approved by staff after the public

10421

hearing turned out to be highly reflective and a blight to the view. In that case the County Counsel's office said the colors which had been submitted by the architect (as tiny color lithographic photos) represented a "failure of expectations." It was impossible for staff to judge the colors of the Clark house from the picture samples submitted by the architect, and they approved a roof color and material which is now an acknowledged problem, but we are stuck with it.

Likewise, the colors of the stain for the exterior siding, the roof materials, and the chimney stone require actual chips and samples of sufficient size, and require their submission with the original application. In this application, nothing was submitted until the hearing was underway, and the public was confused and unsure of the colors which were on the tiny lithographic reproductions. No stain color was submitted, only "words" to describe the color.

In an ocean environment, with ample light and changing cloud conditions, colors often look entirely different than they do in the office of the Planning Department. Inside the Planning offices, there is little light and it is fluorescent. With this in mind, the very least that must be submitted with the application is large color chips on the actual materials to be used in the final construction. This would give the public ample time to look at the colors and materials in the bright light of day and without the rush and bad lighting at the public hearing.

Next door to the south, at the Calone house, which was approved about 4 years ago, the staff allowed a light color to go on the house. This approval was made after the hearing, and without the benefit of the public's input. At a later date, the County Counsel's Office determined that the color "represented a failure of expectations" and Calone was required to repaint his house. The color finally approved by staff is still quite light and has a high reflectivity--certainly not a "dark earthtone." Since the landscaping was never installed at Calone's house, it still shines too brightly onto the public Highway when viewed from the south. Staff never required the building's trim to be repainted, and it remains a light color.

We have in this instance a complete failure of the County to ensure that the Calone development be "subordinate to the landscape." The County made a try to bring Calone into compliance, but lack of enforcement, lack of follow-up, lack of expertise, and lack of knowledge about materials and conditions and views all contributed to a grand failure. At

11 of 21

the present time, the Calone development seriously degrades the premiere view of the South Coast from Highway One.

At the hearing, the possible roof colors which the notification papers specified were "black or gray." At the hearing the roof color was changed by the agent to a dark walnut brown. The public had to be at the hearing to have any input into this change.

Special Condition #3 says that the CPA can approve and, perhaps, change the roof color at a later date without the benefit of a public hearing. We feel that the colors must stay dark if the roof is changed in the future. The County staff and the CPA have not been proven capable of making these choices, and only a public hearing would allow the public to stay involved.

Height

The LCP calls for a house height limit of 18 feet over natural grade in a Highly Scenic Area. Staff says that because there are taller houses in the area and because of the slope of the lot, that the applicant is entitled to an average height of 28 feet.

In reality, the north-east view of this house from Highway One will be 27' tall and will present considerable bulk to the traveling public. If there ever was a reason for the 18' height limit, it is for this very lot, and for this house in this location.

Too much house for this small lot is being proposed in this Highly Scenic Area. A single-storey house would be appropriate.

Geological Report

The record which the geologist researched is too short a span of time to reasonably assure that these cliffs will not recede at a different rate than he supposes. The oldest photograph cited is dated 1964. Thirty-five or 36 years is not a long enough baseline on which to base the next 75 years. The rate of erosion he has chosen (1-1/2 inches per year on average) is not justified in the report. He says it is based on "historical observations" yet fails to cite those observations.

He fails to identify the reference points for the "measurements" he has cited as the scientific reasons for the rate of recession. He cites "buildings" that were used, yet no buildings existed in this area at the time of the first aerial photos he has used, and if they did, they do not exist now and cannot therefore be used as reference points now.

12421

The scale of the maps he used does not meet the industry-accepted minimum of 1:12,000. In a letter to the owners he cites using a scale of 1:20,000, and admits it is a "very difficult scale to work with, since a parcel of land will appear extremely small. We routinely have portions of these photographs enlarged to make them useful." Blowing up a tiny aerial map to try to tease information out as small as 1-1/2 inches per year is slight-of-hand and not scientific. It is not possible to extract information from a small photograph, no matter how clear the negatives are. You have the same information when you blow it up, only it is fuzzier and larger. Therefore the information he has extrapolated from the short-time aerial record is leveraged inappropriately and cannot be considered a scientific analysis. The reference photos he claims to have used are not included in the report.

Global warming and the ensuing rising seas are nowhere mentioned in his report. In the letter to the owners he cites that a 4 times safety factor "is intended to provide for possible changes in the coming years, including climatic changes and predictable sea level changes.". What we read from this statement is that instead of scientific analysis, he has decided to set the house back a little further than he might have otherwise.

After conferring with a qualified geologist who works for a major state agency and is an expert on the matter of coastal cliff erosion, we would like to note that the geotechnical report fails to analyze and provide for the rise of the seas due to global warming. The Coastal Commission, we have been told by that authority, commonly recognizes that global warming in the 20th century resulted in an average sea level rise of .8 feet. In light of the commonly accepted fact that the seas will be rising more in the future, the Commission is now accepting a minimal figure of double that amount for the 21st century (2000-2099). Therefore the geotechnical report should analyze the cliff recession based on a figure of 1.6 feet of average sea level rise, minimum.

Enclosed is a recent page from the National Geographic, a very conservative and reliable publication. It says "Sea levels will likely rise 18 or more inches in the next century." Given that they will rise some, there is absolutely no analysis given to this lot's situation and how it will be affected by the rising seas. We know that rising seas will accelerate bluff subsidence. How much? How fast? We are not told. Without a scientific analysis of the rate of the cliff recession as the seas rise, all we are given here is guess-work and rule-of-thumb setbacks.

13 of 21

Summary

We still do not know what kind of landscape plan we will get with this house nor if it will work when it is installed. The County has been proven not qualified to approve or administer landscape plans.

Too much house is proposed for the lot. A single storey house would fit the lot and meet the requirements of the LCP.

The colors proposed for the house were not available to the public before the public hearing. It is not appropriate to approve this application without color chips and materials being on file during the entire 10 day notification period.

Interior lighting is not regulated and could create an exterior nuisance.

The geological plan is not based on science.

We request that Mendocino County staff be required to ensure that the final plans and specifications for all projects be on file and available for the public at least during the 10 day notification period in advance of the CPA's hearing. Last minute changes, last minute submittals, and conditional approvals of plan details to be made at later dates by staff or the CPA are not acceptable practice.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Reimuller", with a long horizontal flourish extending to the right.

Peter Reimuller
Secretary

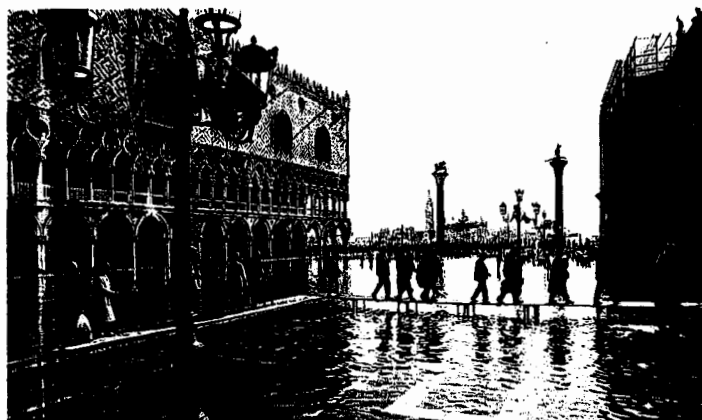
encl: page from September, 2001, National Geographic

14421

ENGINEERING

Canaletto to the Rescue

Looking to art for clues to save a soggy Venice



Three centuries after the artist Giovanni Antonio Canaletto—better known as Canaletto—painted his realistic views of Venice's architecture

(above right), his work may help Italians protect that city's treasured buildings from being swamped regularly by flooding seawater (above). Comparing the



ART RESOURCE (ABOVE): MICHAEL YAMASHITA

18th-century tidemarks portrayed in Canaletto's paintings with modern marks should help engineers in charge of a proposed dam to determine Venice's optimum water level. The project will hold the water, which now fluctuates with rising sea levels and seasonal storms, close to that optimum point.

Sea levels will likely rise 18 more inches in the next century. In addition, Venice's landmass is sinking—ten inches over the past 100 years, says a recent study.

CONSERVATION

Snakes Feel the Bite on Cambodian Lake

Declining fish catches over the past three years in Cambodia's Tonle Sap—the largest freshwater body in Southeast Asia—have led to heavy exploitation of the region's water snakes. Snakes have replaced fish as feed for local crocodile farms and are also consumed by humans. Water snake eggs, like these being extracted at a Cambodian market (right), are a particular delicacy. During 1999 and 2000 more than 8,500 water snakes were caught each day during the wet season. That rate of harvest may not be sustainable, says researcher Bryan Stuart of the Wildlife Conservation Society. He hopes to teach fishermen to recognize and release the most endangered of the snake species.



BRYAN STUART

Frienas of Schooner Gulch

A Watershed Organization

P. O. Box 4, Point Arena, California 95468

(707) 882-2001, Fax (707) 882-2011

Executive Committee:

*Lucie Marshall
Charles Peterson
Peter Reimuller*

RECEIVED
OCT 19 2001

CALIFORNIA
COASTAL COMMISSION

October 17, 2001

Mr. Randy Stemler
California Coastal Commission
Box 4908
Eureka, CA 95502

RE: Williams Appeal

Dear Mr. Stemler:

We did not have permission to put Julie Verran on the Williams appeal as an Additional Appellant. Please use this communication as my official request to strike her name from the original appeal we filed. If we receive permission in the future from her, we will contact you.

Please confirm--email would be sufficient for our purposes [peterr@mcn.org]. Thank you.

Sincerely,



Peter Reimuller
Secretary

From the Coastal Ridge to the Pacific Ocean, since 1986.

16921

Date: 10 - 30 - 2001**Peter Reimuller & Leslie Lindborg**

of pages (including this page)

Post Office Box 4, (45,500 Schooner Gulch Road)

Point Arena, California 95468

Time: 1 am pm

OCT 30 2001

(707) 882-2001, Fax (707) 882-2011, reimuller@mcn.org

To: Randy Stepler CALIFORNIA COASTAL COMMISSIONFrom: Peter Reimuller

Attention: _____

To Fax: () 445-7877Subject: WILLIAMS APPEAL

Please note these references:

GEOLOGICAL 20.504.010 (HSA's)

20.500.020 B 1 (Hazards)

LIGHTING

20.504.035 Note that this

definition includes
interior lighting
which becomes
de facto exterior
lighting.VISUAL

20.504.025 A (200' strip)

20.504.020 et seq especially
paragraphs C2 and D, (Special
neighborhoods)

Sincerely

Peter Reimuller

FRIENDS OF SCHOONER GULCH

P.S. you may find other relevant sections in
the Coastal Element of the General Plan
or in the Zoning Code of the Coastal Zone.

PPS. I'm in office this week, especially 2nd, 3rd,
and then gone Nov 3 → Dec 2. PR

17 of 21

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NOV 05 2001

CALIFORNIA
COASTAL COMMISSION

Dr. Hillary Adams
P. O. Box 1936
Mendocino, CA. 95432

November 2, 2001

Coastal Commissioners
c/o Mr. Randy Stemler
P. O. Box 4908
Eureka, Ca. 95502:

RE: A-1-MEN-01-056 - Williams

Dear Commissioners:

This letter is in support of the appeal of the Williams project (A-1-MEN-01-056) originated by Friends of Schooner Gulch-Bowling Ball Beach State Park.

The Williams project has numerous problems which are typical of Coastal Development Permits (CDP's) in Mendocino County. All of the problems mentioned in the original appeal concerning position, colors, interior lighting, height, landscaping, engineered drainage plans, monitoring and enforcement, can be seen repeated up and down the Mendocino coast in the Highly Scenic Areas which our certified Local Coastal Program (LCP) was designed to protect. This is largely due to inappropriate approval by Coastal Permit Administrators based on incomplete CDP's (Zoning Code Section 20.532 et seq.; 20.532. 015 et. seq, especially, paragraph A; and 20.536.010 et seq. LCP 3.5 et seq.) Most of the problems could be avoided by complete applications fully available for public review, by proper standards applied consistently throughout highly scenic areas, and by proper monitoring and enforcement. In other words, with better governance, the public would not be forced to appeal so many Mendocino County CDP's to the Coastal Commission. As it is, we must rely on the Coastal Commission to protect our certified LCP. Please find significant issue for the Williams appeal for the following reasons:

Visual Impacts in Highly Scenic Areas: (Zoning Code 20:504. 015 et seq. especially paragraphs 1 and C. LCP 3.5 et. seq.)

1) **Story poles** were not fully visible to the public without trespass. Story poles should be placed on **all corners** of the project, at the actual height from natural (not average) grade. The tops should be painted white, and the poles should be of a size and color that is easily seen by the public from public places such as beaches, scenic Highway One and coastal trails. The poles should be required to be in position at least two weeks prior to the public hearing. Any changes in plans should require a change in the story poles and a new public hearing. There are frequent examples houses which should have been kept to the "18' above natural grade" requirement which Mendocino County plannign staff has often allowed to become two-story houses, apparently because they believed the houses would not be seen from public areas either due to screening landscape, or because they used "average grade." The 18' height limit on the west side of Highway One and on ridgetops must be maintained, since that height is already over the height of an ordinary one story house, and because both screening landscape and new landscape plans have frequently been inadequate or changed(see below). In the Williams case, because of the visibility of the lot, the 18' from natural grade should be enforced.

Frequently, story poles are the only means the general public has of knowing that a project is being planned and what impact it might have. The present County policy allows applicants to chose their own material, including thin plastic tubing (e.g., Jones, A-1-MEN-00-028, Navarro

18 of 21

Ridge), The Jones' application claimed that their project would not be visible either from Highway One or the beach. The story poles were nearly invisible and only two were placed. The actual project is much larger, and in fact is quite visible from both the highway and the beach.

Applicants are allowed to choose the number of poles (e.g., Berlincourt A-1-MEN-98-094; Elk headlands; Levanthal and Schlosser, Architects). Only one pole was visible from Highway One and was in position for only a few days. There would have been no story poles had the public not objected. Citizens of Elk are now surprised at the high visibility and bulk of the project. A more recent example is CDP 77-99 (Newman), Levanthal and Schlosser, architects: two 18' high story-poles showing only the center of one facade were placed for a 3,612 sq. ft. house which has a long horizontal profile. It will be sited just below the crest of Navarro Ridge Road but due to the slope and lack of trees will be highly visible to both Highway One and the Navarro River Redwoods State Park beach below. Apparently, the actual height of the central section as approved may have been several feet higher than the poles indicated. The architects were not required to have more poles or to change the height in order to show the actual impact. In the case of CDP 65-01 (Thelen), a remodel which will nearly double the size of the building in a highly scenic area on Navarro Ridge, no story poles were required.

2) Samples for color and material. Mendocino County, in nearly every case, allows color to be determined after the public hearings by a single person, the Coastal Permit Administrator. Only if the public is present at the hearing and objects is there a chance for public review. Colors may be changed after the public hearings at the discretion of the Coastal Administrator or planning staff (see below: Fling). Consequently the color, as in the Williams case, is frequently inappropriate for protection of public views.

Actual samples should be required to be submitted at least 14 days in advance of the public hearing so that the public can see them, and so that the samples can be viewed on site in the ocean light during the public hearing. The public should always be allowed to visit the site during the hearing. In the Jones case cited above, the public was not allowed on site (Coastal Administrator Ray Hall). The samples should be of an actual material and of significant size with the proposed paint or stain colors applied. Changes should not be allowed during the public hearing unless those samples are also available for public review. Large color chips and material samples should be retained in the file for future enforcement issues.

Colors and materials which are finally approved should run with the deed. Any changes should require public review, not simply that of the Coastal Administrator or planning staff (Zoning Code Sec. 20.536.020 et seq. esp. Section C). There are numerous examples on Navarro Ridge and in Little River where colors have been changed from those required in the permit. An example is CDP 45-96 (Fling), a two-story house on a ridge top in a highly scenic area to the east of, and fully visible from, Highway One. Permit requirement: "earth toned and selected to blend in hue and brightness with the natural setting." The applicant originally proposed natural cedar or redwood siding protected by clear "duckback"; This was later amended to a gray with white trim and approved by the Planning Dept.). No landscape plan was originally required because of the screening trees, which were apparently subsequently removed.

A small color sample was approved for the Crahan project (just south of the Berlincourt project near Elk). The sample appears to be a dark tone in the Fort Bragg Planning Dept. Office, but very light on the building. Clearly the planning staff did not consider the effect of bright light from the Pacific ocean. Like the Williams project, the Crahan project is highly visible to the public

19421

and to Highway One due to the conformation of its lot. Its landscaping plan consists of a group of trees on a berm which will take many years to shield the house from scenic Highway One.

3) Interior Lights. These are a serious problems up and down the Mendocino coast in highly scenic areas. For example, CDP 16-95 (Witchener- 33745 Navarro Ridge Road) a two-story house on a low ridgetop, directly above Navarro Headlands in a designated highly scenic area. According to its permit, this house should not be visible from Highway One, but in fact it stands out starkly on the low ridge. The house was apparently placed differently from the permitted position (monitoring and enforcement problems). It has no landscaping plan, since it was not expected to be visible from Highway One. At night, huge interior lights are both disconcerting and blinding for drivers on the otherwise dark highway. The house appears light beige in color with dark trim and does not blend with its natural setting in any way whatsoever.

4) Landscaping inadequate to mitigate visual impacts. (LCP 3.5 et seq, esp. 3.5.5) Where buildings cannot be sited out of the public viewshed due to lot conformation, landscaping is the only alternative. Landscape plans by licensed landscape architects should be required in all highly scenic areas. Mature trees that are to be removed should be clearly marked by bright tape visible to the public.

Mendocino County is notorious for not requiring the implementation of landscape plans on CDP's or monitoring their implementation and health. For example, 1) CDP 4-93 (Tadlock,) on Navarro Ridge, a two-story house which appears light beige in color with no trees behind it. It has a landscaping plan which was never implemented. The County's efforts toward enforcement appear to have been a single telephone call made last year. 2) Wolsky, 11400 South Highway One, several miles south of Elk in the Bridgeport Landing area; a large two-story house which appears to be cream colored. It is located on the west side of Highway One in an open field on the edge of a coastal bluff. The landscaping plan was apparently partially planted but allowed to die. If the County has made attempts to enforce this permit plan, no results are visible.

Particularly insidious is the practice of removing the lower limbs from the existing mature trees which the coastal planning staff have determined will provide "adequate natural screening." The limbs are typically removed after the house is built and the Planning Dept. has signed off on the project. There are numerous examples of this practice along the coast. Efforts over the past year by the public to have a clause inserted in the landscaping terms requiring that lower limbs and screening branches remain in place have been futile.

Te County has gradually improved its landscaping requirements concerning replacement, watering, feeding and wind protection, as a result both of actions taken by the Coastal Commission on appeal and the insistence of the public on the County level. However, the County seldom requires sufficient trees, or a landscaping plan which will show the growth patterns prior to the 40 year grow out. Trees which are described as fir or pine are allowed to be shown in the plans as fluffy, deciduous trees so that four or five trees appear adequate. The result is misleading to both staff and public. Fast-growing bushes should be combined with more mature trees during the early years. The landscape plans should be done by a licensed landscape architect and be phased for growing time to protect the public viewshed immediately, not forty years in the future.

Species of trees must be varied for fast and more slowly growing trees, for a balance of natives and otherwind /salt tolerant species. Many of our natives are now succumbing to endemic Pitch Canker diseases. Bishop Pine live only 75-100 years before they begin to drop their limbs

20 of 21

and die. Many of the Bishop pine which have grown up along the Mendocino Coast and are expected to supply "adequate natural screening" are of that age. They are highly susceptible to disease. Landscape plans must allow for replacement as the trees age, and for species which can continue to fill in the lower areas where the house is publicly visible.

Safety

1) **Engineered drainage and grading plans.** (Zoning Code 20.492 et. seq). Almost no Mendocino CDP requires engineered drainage plans. Consequently the public cannot tell whether or not the drainage will be adequate and where it will spill. In the Williams case this is critical. Similarly, Mendocino County does not have a grading ordinance, although its General Plan required such an ordinance to have been in place many years ago. At least one lawsuit was filed against Mendocino County recently in order to obtain the grading ordinance required by the General Plan. The County presently has a grading committee working on such an ordinance, but the plans presently going through the Planning Dept. are frequently inadequate to the situation.

Monitoring and Enforcement:

No matter how good the landscaping plans, the color choices, and the siting on the lot, if there is inadequate monitoring and enforcement, our coastal views will not be protected and our LPC will not be properly implemented. Until recently, Mendocino County apparently had 1.5 enforcement personnel for the entire county. Lake County, similar in population size and without the additional task of coastal enforcement, has five enforcement officers. Recently, the primary enforcement officer in Mendocino County quit. Ray Hall, Planning Director, has stated that it will be at least six month before this officer is replaced. Mr. Hall has also apparently stated that projects which are appealed to the Coastal Commission cannot be enforced by the Mendocino County, indicating that the appeal takes the enforcement issue out of the County's jurisdiction. Such an interpretation suggests that the Planning Director of Mendocino County does not wish to enforce CDP permit terms. It is also apparent from the lack of enforcement of the permit terms on CDP's which have **not** been appealed to the Coastal Commission (see examples above) that enforcement has a very low priority under the Planning Dept. of Mendocino County.

The Economic Effect

Mendocino County has allowed almost all of the traditional natural resources which formed the base of the coastal economy to be depleted. River and ocean fishing, both commercial and sportsfishing, is nearly extinct. The tourist facilities that depended upon salmon and crab fishing are closed. The last of the magnificent redwoods are being clearcut at an unprecedented rate. That leaves the Mendocino coast with only one economic base: tourism. Millions of tourist come here every year to visit the State Parks, to shop in our stores, to stay in the bed-and-breakfast facilities. They come for the peace and the magnificent coastal views. Because of the poor governance in our county, we must rely on the Coastal Commission to help protect our certified Local Coastal Program. Please vote to find substantial issue for the Williams appeal: A-1-MEN-01-056.

Sincerely,

Hillary Adams

Dr. Hillary Adams

21 & 21



BACE Geotechnical
A Division of Brunson Associates, Inc.

| |
|-----------------------------------|
| EXHIBIT NO. 6 |
| APPLICATION NO. A-1-MEN-01-056 |
| WILLIAMS GEOTECHNICAL |
| INVESTIGATION (1 of 31) |

September 25, 2001

11509.2

Gale and Dorothy Williams
834 22nd Street
Santa Monica, CA 90403

RECEIVED
DEC 18 2001
CALIFORNIA
COASTAL COMMISSION

RE: Response to September 18, 2001 Letter From Friends of Schooner Gulch to Mendocino County Planning Department, Proposed Residence, 27560 South Highway One, Mendocino County, California, CDP 35-01

Dear Mr. & Mrs. Williams:

This letter is in response to the September 18, 2001 letter from the Friends of Schooner Gulch to Mr. Doug Zanini of the Mendocino County Planning Department, regarding your planned residence at 27560 South Highway One, Mendocino County, California. In their letter they raise several issues concerning our Geotechnical Investigation report dated March 16, 2001. Their issues and our responses are as follows:

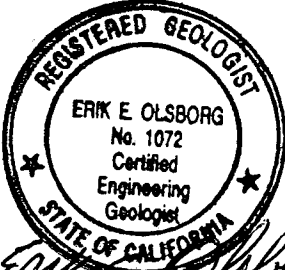
- Sea Level Rise and Erosion Rate - The bluff setback recommended in our report is based upon an erosion rate of 1-1/2 inches per year (based upon historical observations and photographs) times a factor of safety of four. The 4 times safety factor is intended to provide for possible changes in the coming years, including climatic changes and predictable sea level changes.
- Accuracy of Aerial Photograph Measurements - The 1964 and 1981 aerial photographs used for this study were originally at a scale of 1:20,000 (1" = 1667'), which is a very difficult scale to work with, since a parcel of land will appear extremely small. We routinely have portions of these photographs enlarged to make them useful. Since the enlargements are made directly from the negatives, the photographic quality and precision for measurements is very good.
- Method of Measurements - Distances between unchanged, fixed points on both the 1964 and 1981 aerial photographs (such as house to highway and driveway intersection, highway to creek channel, point on driveway to highway centerline, etc.) were measured on each photograph to first establish that the photographs had the same relative scale. Distances to

the bluff edges were measured from the Highway One centerline; although the highway and shoulder widths may change as the highway is improved over the years, the centerline location usually stays in approximately the same location (unless major realignment occurs).

- Time Span of the Photographs - Our erosion rate is based upon the 1964 and 1981 aerial photograph measurements as well as photographs of other portions of the bluff edge taken by the undersigned in 1977 elsewhere at Bowling Ball Beach. These photographs document the actual erosion rate during nearly half of a 75-year period. Older photographs could be obtained and studied, but the scales and the clarity are typically poor; furthermore, there would be no way of enlarging the old photos with any degree of precision. Therefore, the older photographs could not be used as a basis for measuring erosion rates.

We trust the above information suits your needs at this time. Please contact us if we can be of further service to you on this project.

Respectfully submitted,


Erik E. Olsborg
Engineering Geologist - 1072

cc: Ed McKinley

EEO/PRD/seb

20F31



GEOTECHNICAL INVESTIGATION

WILLIAMS RESIDENCE
27560 SOUTH HIGHWAY ONE
POINT ARENA, CALIFORNIA

11509.1

March 16, 2001

30F31

Brunsing Associates, Inc.



GEOTECHNICAL INVESTIGATION

WILLIAMS RESIDENCE
27560 SOUTH HIGHWAY ONE
POINT ARENA, CALIFORNIA

11509.1

prepared for

Gale and Dorothy Williams
834 22nd Street
Santa Monica, CA 90403

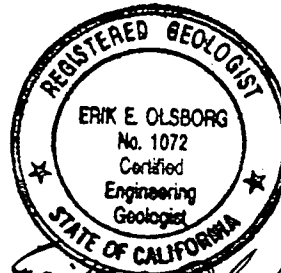
prepared by

BACE GEOTECHNICAL
A Division of Brunsing Associates, Inc.
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March 16, 2001



Peter R. Dodsworth
Geotechnical Engineer - 278



Erik E. Olsborg
Engineering Geologist - 1072



TABLE OF CONTENTS

| | Page No. |
|-------------------------------------|----------|
| 1.0 INTRODUCTION | 1 |
| 2.0 INVESTIGATION | 2 |
| 2.1 Research | 2 |
| 2.2 Field Exploration | 3 |
| 2.3 Laboratory Testing | 3 |
| 3.0 SITE CONDITIONS | 4 |
| 4.0 REGIONAL GEOLOGY | 4 |
| 5.0 SITE GEOLOGY AND SOILS | 5 |
| 6.0 DISCUSSION AND CONCLUSIONS | 6 |
| 6.1 General | 6 |
| 6.2 Bluff Retreat/Building Setback | 6 |
| 6.3 Bluff Stability | 7 |
| 6.4 Seismicity and Fault Rupture | 7 |
| 6.5 Weak Soils | 7 |
| 6.4 Construction Impact | 7 |
| 7.0 RECOMMENDATIONS | 8 |
| 7.1 Site Grading | 8 |
| 7.2 Drilled Pier Foundation Support | 8 |
| 7.3 Seismic Design Criteria | 9 |
| 7.4 Retaining Walls | 10 |
| 7.5 Concrete Slabs-On-Grade | 10 |
| 7.6 Driveway Construction | 11 |
| 7.7 Site Drainage | 11 |
| 7.8 Additional Services | 11 |
| 8.0 LIMITATIONS | 11 |
| ILLUSTRATIONS | 13 |
| DISTRIBUTION | 25 |

50F31



LIST OF ILLUSTRATIONS

| | |
|------------------------------------------------------|--------------------|
| Vicinity Map | Plate 1 |
| Site Geologic Map | Plate 2 |
| Logs of Borings | Plates 3 through 6 |
| Soil Classification Chart and Key to Test Data | Plate 7 |
| Physical Properties Criteria for Soil Classification | Plate 8 |
| Rock Characteristics Chart | Plate 9 |
| Retaining Wall Drainage Details | Plate 10 |
| Lateral Earth Pressures | Plate 11 |



1.0 INTRODUCTION

This report presents the results of the Geotechnical Investigation performed by BACE Geotechnical (BACE), a division of Brunsing Associates, Inc., for the proposed residential development of 27560 South Highway One, Mendocino County, California. The property, A.P. No. 27-421-06, is located on a coastal bluff above Bowling Ball Beach, approximately three miles south of Point Arena, as shown on the Vicinity Map, Plate 1.

The property is shown on a topographic map prepared by Richard A. Seale, dated December 1999. It is anticipated that the project will include a new single-family residence on the easterly half of the property and a leach field on the westerly half of the site, as shown on the Site Geologic Map presented on Plate 2.

According to preliminary project plans, dated March 12, 2001, prepared by Rosenthal Construction, the new residence will be one and two-story, wood-frame construction. The residence will have both slab-on-grade and supported floors. The garage is expected to have slab-on-grade floors. Retaining walls will be required on the uphill sides of the structure. The extent of site grading has not been determined at this time. However it is anticipated that the cut and fill slopes will not exceed two to three feet in height in the building areas to create a level building pad with proper site drainage.

Our approach to providing geotechnical guidelines for the design of this project utilized our knowledge of the geologic conditions in the site vicinity, and experience with similar projects. As outlined in our Service Agreement transmitted June 12, 2000, our scope of services for the geotechnical investigation included subsurface exploration, laboratory testing and engineering and geologic analyses in order to provide recommendations regarding:

1. The geologic suitability of the site for the proposed development, including discussion of areas of geologic hazards (bluff stability);
2. The potential effects of seismicity and fault rupture;
3. Site grading;
4. Foundation support;
5. Support of concrete slab-on-grade floors;
6. Site drainage;
7. Retaining wall design criteria;
8. Additional geotechnical services, as appropriate.

7 of 31



2.0 INVESTIGATION

2.1 Research

As part of our investigation, we studied aerial photographs and researched various published geologic maps and reports and unpublished consultants' reports for other properties on the bluffs above Bowling Ball Beach. The aerial photographs, dated 1964 and 1981, were enlarged to a scale of one-inch equals approximately 200 feet. The published and unpublished references reviewed for this project include:

- Davenport, C.W., Geology and Geomorphic Features Related to Landsliding, Point Arena 7.5 - Minute Quadrangle, Mendocino County, California, dated 1984, California Division of Mines and Geology (CDMG).
- Hays, T.D., Geotechnical Investigation, A.P. No. 27-433-01, Mendocino County, California, dated March 22, 1977, Thomas D. Hays & Associates
- Konigsmark, T., A Trip to Bowling Ball Beach, in Geologic Trips, Sea Ranch, dated 1994.
- Olsborg, E.E., Faulted Wave-Cut Terrace Near Point Arena, Mendocino County, California, in California Geology, Volume 45/Number 1, dated January/February, 1992, California Division of Mines and Geology (CDMG)
- Olsborg, E.E., and A.H. Graff, Geotechnical Investigation, A.P. No. 27-433-01, Mendocino County, California, dated October 12, 1994, BACE Geotechnical
- Olsborg, E.E., and A.H. Graff, Geotechnical Investigation, A.P. No. 27-421-10, Mendocino County, California, dated July 11, 1988, Field Engineering Associates, Inc.
- Wagner, D.L. and E.J. Bortugno, Geologic Map of the Santa Rosa Quadrangle, Regional Geologic Map No. 2A, dated 1982, CDMG
- Williams, J.W. and T.L. Bedrossian, Geologic Factors in Coastal Zone Planning, Schooner Gulch to Gualala River, Mendocino County, California, dated 1976, CDMG.

80F31



The undersigned, Erik E. Olsborg, performed the field exploration/geologic reconnaissance portion of the Geotechnical Investigation by Thomas D. Hays & Associates while an employee of that firm in 1977. As part of the study for A.P. No. 27-433-01, field photographs of the property bluffs taken in 1977 were compared with the bluffs as they appeared in 1994.

2.2 Field Exploration

The field exploration consisted of geologic reconnaissance and subsurface exploration. Our reconnaissance consisted of observations of the bedrock and soils exposed on the bluff face in the property vicinity. Our subsurface exploration included drilling and logging four test borings to depths ranging from approximately 14½ to 20¼ feet below the ground surface. The boring locations are shown on Plate 2. The field exploration was conducted on July 19, 2000 with a track-mounted drill rig. Our engineering geologist logged each boring and obtained samples of the soil and rock materials for visual classification and laboratory testing.

Relatively undisturbed tube samples of the soil and rock materials encountered were obtained by driving a 3-inch outside diameter Sprague & Henwood split-barrel sampler using a 140 pound drop hammer falling 30 inches per blow. The inside of the sampler barrel contained 2.4 inch I.D. brass liners for retaining the soil and weathered rock materials. The blows required to drive the sampler were converted to equivalent "Standard Penetration" blow counts for correlation with empirical test data. Sampler penetration resistance (blow counts) provides a relative measure of soil/rock consistency and strength.

The test boring logs, showing the soil and rock materials encountered and the depths of the samples taken, are presented on Plates 3 through 6. The soil classification system used to describe the soils is outlined on Plate 7, and the physical properties criteria used for the soil descriptions are presented on Plate 8. The rock characteristics used to describe the rock materials are presented on Plate 9.

2.3 Laboratory Testing

Representative samples of the soil and rock materials obtained from the borings were tested in our laboratory to evaluate their geotechnical engineering characteristics. Laboratory testing included moisture content, dry density, and triaxial shear strength. The test results are summarized on the boring logs in the manner shown on the Key to Test Data, Plate 7.

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3.0 SITE CONDITIONS

The property is located on a coastal bluff on the southwest side of Highway One, approximately one mile northwest of Schooner Gulch. The ocean bluff is about 70 to 75 feet in vertical height, with a slope gradient of about one half horizontal to one vertical (1/2 H:1V) and localized portions that are near vertical. The bluff rises above a near-level wave-cut platform that is fully exposed only at low (minus) tides. The wave-cut platform, which is comprised of bare rock, extends several hundred feet out into the ocean. The platform is striated by the truncated strikes of the individual rock beds that comprise the platform and adjacent bluff.

The property is accessed by a paved, common driveway off Highway One. The common driveway ends in a cul-de-sac at the east-northeast corner of the property. A gravel driveway extends from the cul-de-sac along the northeast property line to the west-northwest neighboring residence.

The upper terrace level and bluff line undulates at the property. The east-southeast half and the northeast side of the property slopes to the west-northwest with a moderately steep slope gradient of approximately 5H:1V. A swale extends from the central portion of the bluff edge toward (landward) the north-northeast property corner. The swale slopes very gently, about 10H:1V, back from the bluff, then moderately steeply, about 5H:1V, near the neighbor's driveway. The bluff edge slopes up again from the swale to the southwest corner of the site.

The bluff face is striated by differential erosion of the exposed, tilted rock beds. Talus piles periodically form at the bluff toe below the more-erodible beds. A small sandy beach is located at the bluff toe. The beach (as typical of near-shore environments) diminishes during the winter months. Waves wash across this beach at high tides, removing the talus piles frequently.

The upper terrace level contains a thicket of pine trees with some fallen branches and underbrush. The ground surface in the proposed residence site is covered with 4 to 8 inches of pine needle mulch. The bluff face is mostly bare rock. No surface water or evidence of ground-water seepage was observed during our September 2000 field exploration.

4.0 REGIONAL GEOLOGY

Mendocino County is within the northern Coast Ranges geomorphic province of California. The coastal region of southwesterly Mendocino County is comprised of rocks of the Point Arena Terrane of the Salinian Block. The Point Arena



Terrane extends west of the San Andreas Fault from Manchester to Fort Ross in Sonoma County. The rocks of this terrane consist of a sequence of consolidated continental and marine sediments from Late Cretaceous to Eocene age. The sedimentary rocks (primarily sandstone, shale and conglomerate) are generally well-bedded, occasionally fractured and friable to hard. The basement rocks underlying the Point Arena Terrane are comprised of spilitized basalt (altered by low grade metamorphism), representative of oceanic crust.

5.0 SITE GEOLOGY AND SOILS

Site bedrock, as found in our test borings and exposed on the bluff face adjacent to the property, consists of interbedded claystone, siltstone, sandstone and minor shale of the Miocene Epoch, Gallaway-Skooner Gulch Formation. The gray to orange-brown rock strata are thin-bedded, closely to little fractured, low to moderate in hardness and moderately to deeply weathered. Site bedding orientation consists of a north-northwest trending strike with a moderately steep dip (50 to 54 degrees from horizontal) to the southwest.

Slaking (crumbling when exposed to air and water) of the claystone, siltstone and shale beds is causing erosion of the bluff face. Small (sand-sized) rock particles intermittently drift down the bluff face when subject to wind action. The slaking forms a talus deposit, up to several feet in thickness, at the bluff toe. The talus deposits are periodically washed away by waves during high tides and storms.

The upper terrace level of the property was created during the Pleistocene Epoch, when glaciation caused sea level fluctuations which created a series of steps or terraces cut into the coastal bedrock by wave erosion. Shallow marine sediments were deposited on the wave-cut, bedrock platforms while they were submerged beneath the ocean. Some of these marine deposits have been locally eroded away as the terrace began to emerge from the ocean approximately 14,000 years ago. Present sea levels were achieved about five to seven thousand years ago.

No evidence of landsliding was observed at the site. In the referenced 1992 California Geology article, Olsborg noted (from a distance) an "apparent landslide where the top of the bluff tilts back." This "tilts back" area is a portion of the subject property bluff. Upon closer observation during our present study, the top of the bluff has apparently been previously eroded at an angle. The rock beds exposed on the bluff face dip uniformly with the rest of the rock beds of the bluff. Therefore, Pleistocene, or somewhat later erosion, is responsible for the "tilts back" appearance, not landsliding.



One to three feet of Pleistocene terrace deposits were observed within portions of the upper bluff edges at the property. The terrace deposits consist of dark gray silty sand. Terrace deposits were not encountered in our test borings.

The bedrock in the proposed residence site is covered by 4 to 7 feet of silt and clay residual soils at our test boring locations. The majority of the silts and clays are medium stiff to hard; the upper 1 to 2 feet of these soils are soft, porous and contain roots.

No evidence of faulting was observed in the property vicinity, and generally available published references show no active faults on, or trending towards, the property. Two inactive faults (no rupture in Holocene time) are located several hundred feet southeast of the property. The active San Andreas Fault is located within the Garcia River Canyon, approximately six kilometers northeast of the site.

The Coast Ranges geomorphic province is in a zone of high seismic activity associated with the San Andreas Fault system, which passes through the south Mendocino coastal area. Future damaging earthquakes could occur on the San Andreas Fault during the lifetime of the proposed structure.

6.0 CONCLUSIONS

6.1 General

From a geotechnical engineering standpoint, we judge that the site is suitable for the proposed residential development. The main geotechnical considerations affecting the project are bluff retreat, bluff stability, seismic ground shaking, weak soils, and the impact of the residential construction on the site. These and other issues are discussed below.

6.2 Bluff Retreat/Building Setback

Comparison between file photographs taken in 1977, and the 1964 and 1981 aerial photographs of the area as it appears today show that the bluff has retreated at an average rate of about 1-½ inches per year. Such a rate would result in the loss of as much as about 9 ½ feet of the bluff in 75 years (considered by the California Coastal Commission to be the economic lifespan of a house). Multiplying by a factor of safety of four, and rounding up slightly, a bluff setback of 40 feet should be suitable for the proposed residence and leachfield.



6.3 Bluff Stability

No evidence of gross instability, such as landsliding, was observed on the bluff at the property or near the vicinity. However, as with all ocean bluff or hillside sites in general, some risk of instability exists and must be accepted by the property owner. The current standard of practice in geotechnical engineering makes it possible to identify most areas of existing instability, and/or to make recommendations which lower the risk of instability to levels that are generally acceptable, but cannot make total assurances of mitigating all possible future instability.

6.4 Seismicity and Fault Rupture

The site will be subject to strong ground shaking during future, nearby, large magnitude earthquakes. In general, the intensity of the ground shaking at the site will depend on the distance to the causative earthquake epicenter, the magnitude of the shock and the response characteristics of the underlying earth materials. Structures founded in firm soil or rock, and designed in accordance with the current Uniform Building Code (UBC), are well suited to resist the detrimental effects of seismic shaking.

Since the active San Andreas Fault is about six kilometers away from the site, and the faults observed by BACE several hundred feet from the site were found to be inactive, we judge the potential for surface fault rupture at this site to be very low.

6.5 Weak Soils

The near surface topsoils are weak, porous and moderately compressible. These soils could undergo erratic and detrimental settlement under the planned structure foundation loads. Foundations will, therefore, have to be supported on the underlying firm soil or bedrock, to mitigate these potential detrimental effects.

6.6 Construction Impact

In general, the proposed development, constructed in accordance with our recommendations, should have very little effect upon the bluff stability. The planned leach field location, as shown approximately on Plate 2, is geologically suitable. The property should not be adversely affected by the installation and operation of an approved septic tank/leachfield waste disposal system at this location. To reduce the possibility of adverse effects of sewage effluent on the



soils exposed on the upper bluff, the final leachfield location should not be closer than 40 feet from the edge of the bluff.

7.0 RECOMMENDATIONS

7.1 Site Grading

Grading should be kept to the minimum required to provide access to the building site and to construct proper site drainage within the building envelope.

Areas to be graded should be cleared to remove vegetation. Surface soils containing weeds, brush, mulch, and root growth should be stripped from planned grading areas. In general, the depth of stripping should be about 4 to 10 inches. Deeper stripping may be locally required to remove concentrations of organics such as tree roots. Strippings should not be reused as fill material; however, they may be stockpiled for future use in landscaping, if desired.

After stripping, soft/weak soils should be removed to their full depth, which is expected to be about one to two feet at our boring locations. Soils exposed by this operation should be scarified, moisture conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction per ASTM D 1557 test procedures.

Fill material should be free of organic matter, rocks greater than four inches in largest dimension, and be low in expansion potential (expansion index less than 40 per ASTM D 4829). On-site soils in a "cleaned" condition (i.e., less organics and oversized rock) should be suitable for re-use as fill within planned building areas.

Fill, on-site or imported, should be placed in thin lifts, moisture conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction based on the ASTM D 1557 test procedures.

7.2 Drilled Pier Foundation Support

The structure should be supported on a system of cast-in-place drilled concrete piers interconnected with grade beams. The piers should be a minimum of 16 inches in diameter. Piers should extend through the weak, near-surface soils a minimum of 6 feet below the lowest adjacent soil grade, and at least 4 feet into firm, weathered bedrock materials. Typical pier depths are anticipated to range from 8 to 11 feet below the ground surface, as determined by BACE during the drilling operations.



Spacing for the piers should be no closer than 3 pier diameters, center to center. Support for the piers may be gained from skin friction resistance equal to 800 pounds per square foot (psf) of pier surface area for dead plus long-term live downward loads. For the total downward load design, including wind or seismic forces, increase downward capacity by 50 percent. Uplift frictional capacity for piers should be limited to $2/3$ of the allowable downward capacity.

Resistance to lateral loads can be obtained using passive earth pressure against the face of the piers. An allowable passive pressure of 250 psf per foot of depth, plus 450 psf (triangular distribution) is appropriate for design. Passive pressure should be neglected in the weak soil zones, and within the upper six inches of subgrade soils, unless the surface is confined by concrete slabs or pavement. Below the weak soil zones, passive pressure can be projected over two pier diameters, and should be limited to depths above 7 times pier diameter.

When final pier depths have been achieved, as determined by BACE, the bottoms of the pier holes should be thoroughly cleaned of loose material. BACE should observe the drilling and final clean out of the pier holes and the placement of reinforcing steel and concrete.

No ground water was encountered in our test borings during our July 2000 field exploration. If ground water is encountered during construction, the pier holes should be dewatered prior to placement of reinforcing steel and concrete. Alternatively, concrete can be tremied into place with an adequate head to displace water or slurry, if more than six inches of ground water has entered the pier hole. Concrete should not be placed by freefall in such a manner as to hit the sidewalls of the excavation.

During bidding, we recommend that proposed foundation drillers be given a copy of this report to review. The foundation contractor should be prepared to case pier holes where caving occurs.

7.3 Seismic Design Criteria

The structure should be designed and constructed to resist the effects of strong ground shaking (up to at least Modified Mercalli Intensity IX) in accordance with current building codes. The Uniform Building Code (UBC), 1997 edition, indicates the following seismic criteria are appropriate for design:

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Seismic Zone Factor, $Z = 0.40$

Soil Profile Type = S_c

Seismic Coefficients, $C_a = 0.40 N_a$

$C_v = 0.56 N_v$

Near Source Factors $N_a = 1.2$

$N_v = 1.5$

Seismic Source Type = A (San Andreas Fault)

Distance to Fault = 6 km

7.4 Retaining Walls

The retaining or subsurface walls should be provided with permanent drainage to prevent buildup of hydrostatic pressure. Drainage and backfill details are presented on Plate 10. Quality, placement and compaction requirements for backfill behind subsurface walls are the same as previously presented for select fill. Light compacting equipment should be used near the wall to avoid overstressing the walls.

Our recommended lateral earth pressures for retaining wall design are presented on Plate 11. These pressures do not consider additional loads resulting from adjacent foundations, vehicles, or other downward loads. BACE can provide consultation regarding surcharge loads, if needed.

7.5 Concrete Slabs-on-Grade

During foundation and utility trench construction, previously compacted subgrade surfaces may be disturbed. Where this is the case, the subgrade should be moisture conditioned as necessary, and recompact to provide a firm, smooth, unyielding surface compacted to at least 90 percent relative compaction.

Slab-on-grade floors should be underlain by at least 4 inches of clean, free-draining gravel or washed crushed rock, graded in size from 1-1/2 or 3/4 inches maximum to 1/4 inches minimum to act as a capillary moisture break. In areas where movement of moisture through the slab would be detrimental to its intended use, installation of a vapor barrier should be considered.

Exterior concrete flatwork (e.g., sidewalks and patios) can be placed directly on compacted subgrade soils as described in the previous sections of this report.



7.6 Driveway Construction

Grading for the driveway should be performed in accordance with the recommendations presented in Section 6.1. The upper 6 inches of driveway subgrade soils should be compacted to at least 95 percent relative compaction, prior to the placement of aggregate base. The subgrade should also be non-yielding under heavy equipment loads. Aggregate base should be placed in 6 to 8 inch lifts, moisture conditioned as necessary to near optimum moisture content, then compacted to at least 95 percent relative compaction.

7.7 Site Drainage

Uncontrolled surface and/or subsurface water is often the cause of slope instability and foundation problems. Care must be taken to intercept and divert concentrated surface flows and subsurface seepage away from the structural improvements, building foundations and bluff edges. Concentrated flows such as from roof downspouts, driveways, area drains and the like should be collected in a closed pipe and discharged into a functioning storm drain system or into a natural drainage area well away from foundations and the bluff.

7.8 Additional Services

Prior to construction, BACE should review the final grading and building plans, and geotechnical-related specifications for conformance with our recommendations.

During construction, BACE should be retained to provide periodic observations, together with field and laboratory testing, during site preparation, placement and compaction of fills and backfills, and foundation construction. Drilled pier excavations should be reviewed by BACE while the excavation operations are being performed. Our reviews and testing would allow us to verify conformance of the work to project guidelines, determine that the soil and rock conditions are as anticipated, and to modify our recommendations, if necessary.

8.0 LIMITATIONS

This investigation and review of the proposed development was performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. No other warranty, either expressed or implied, is provided as to the conclusions and professional advice presented in this report. Our conclusions are based upon reasonable geologic and engineering interpretation of available data.

17 of 31



The soil and rock samples taken and tested, and the observations made, are considered to be representative of the site; however, soil and geologic conditions may vary significantly between points of subsurface exploration. As in most projects, conditions revealed during construction may be at variance with the preliminary findings of our investigation. If this occurs the changed conditions must be evaluated by BACE Geotechnical and revised recommendations provided as required.

This report is issued with the understanding that it is the responsibility of the Owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of all other design professionals for the project, and incorporated into the plans, and that the Contractor and Subcontractors implement such recommendations in the field. The safety of others is the responsibility of the Contractor. The Contractor should notify the Owner and BACE if the Contractor considers any of the recommended actions presented herein to be unsafe or otherwise impractical.

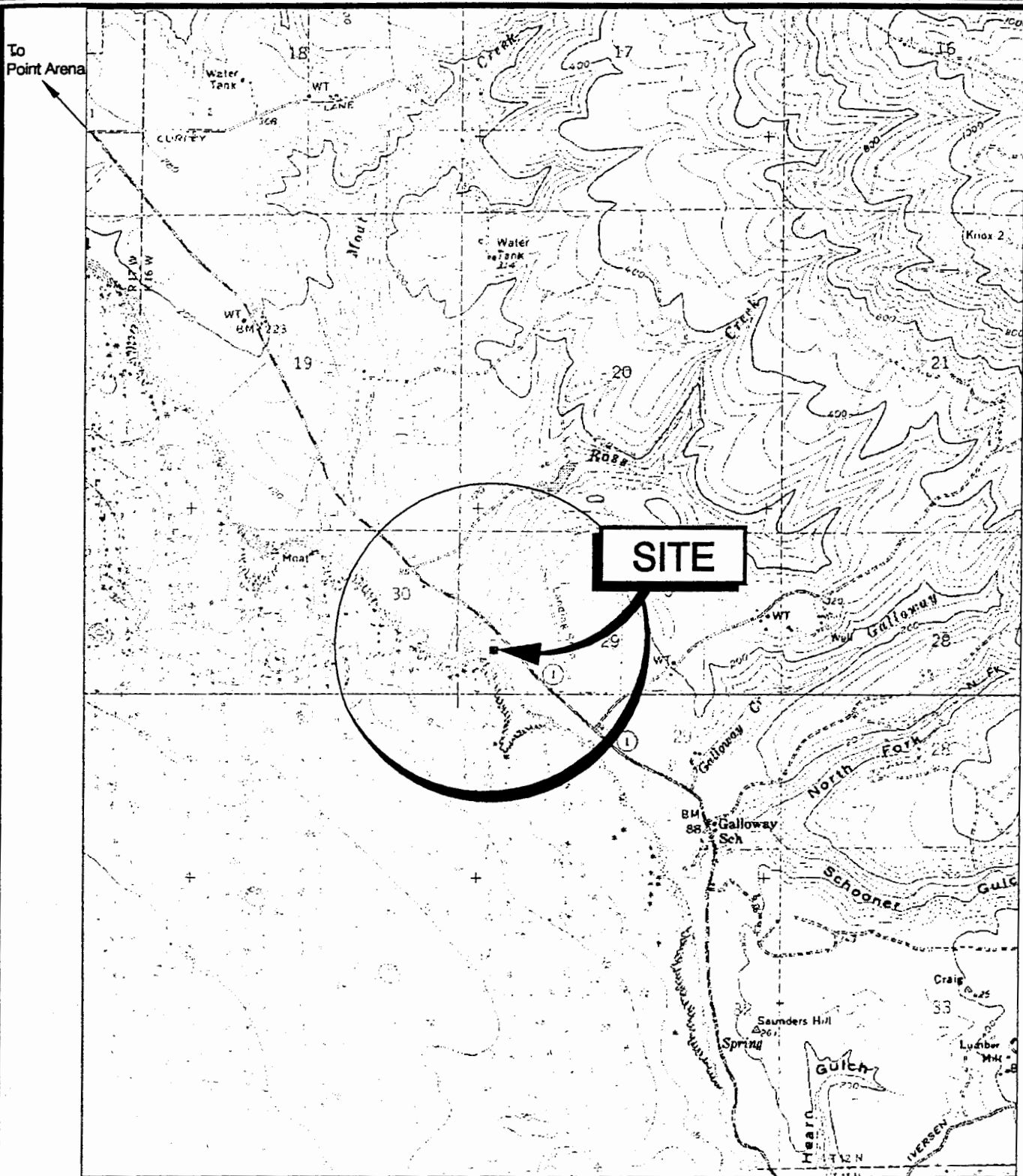
Changes in the conditions of a site can occur with the passage of time, whether they are due to natural events or to human activities on this or adjacent sites. In addition, changes in applicable or appropriate codes and standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, this report may become invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and revision as changed conditions are identified.

The recommendations contained in this report are based on certain specific project information regarding type of construction and building location which has been made available to us. If conceptual changes are undertaken during final project design, BACE should be allowed to review them in light of this report to determine if our recommendations are still applicable.



ILLUSTRATIONS





3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1:24,000 Detail: 13:0 Datum: NAD27



BACE Geotechnical
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(707) 838-0780

Job No.: 11509.1

Appr.: **EEO**

Date: 03/23/01

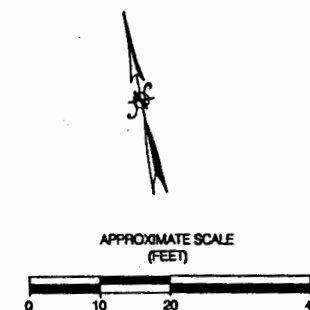
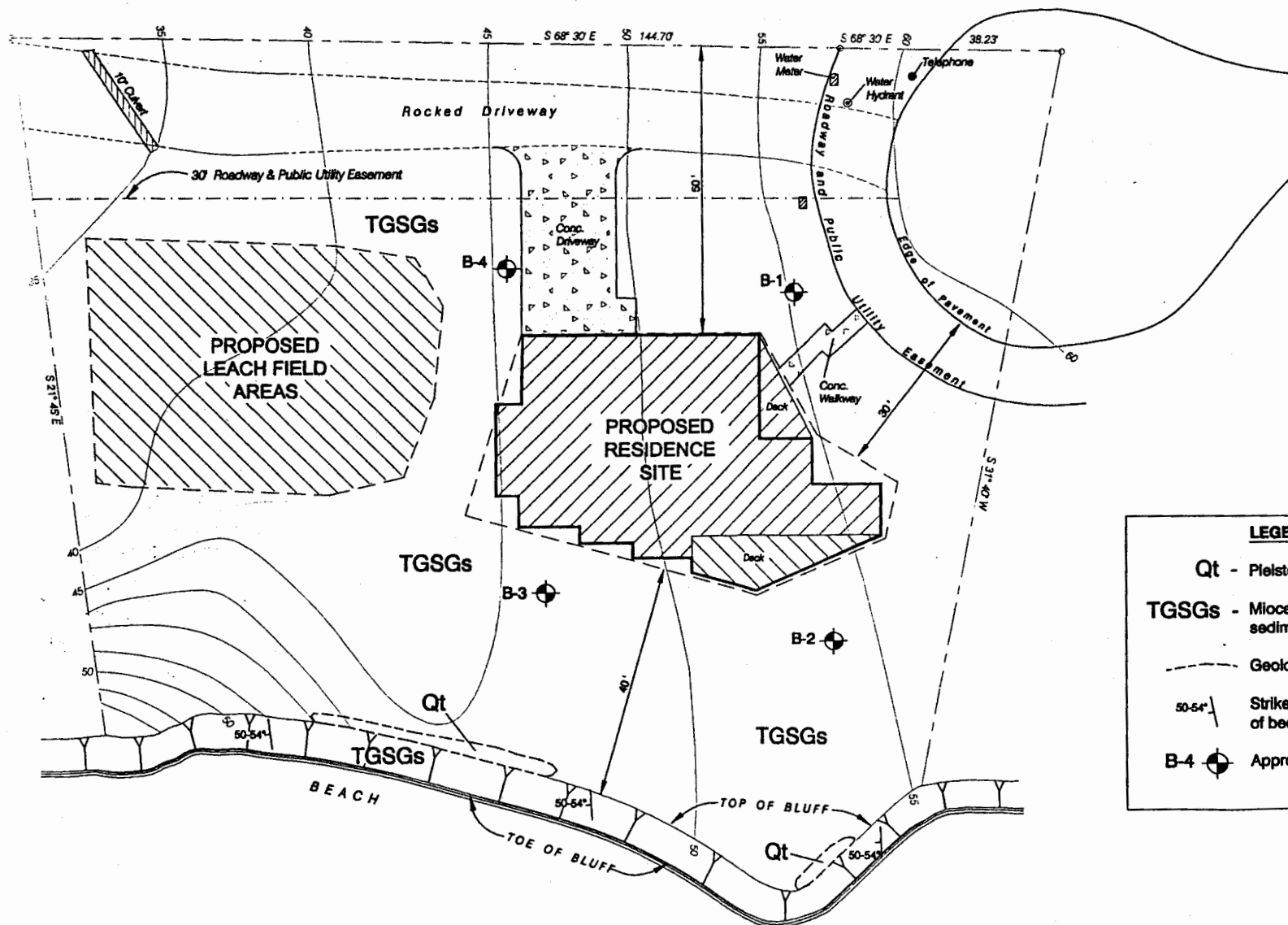
VICINITY MAP

WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

1

20 OF 31



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| LEGEND | |
|-----------------|------------------------------------------------------------|
| Qt | Pleistocene terrace deposits |
| TGSGs | Miocene Galloway-Skooner Gulch Formation sedimentary rocks |
| - - - | Geologic contact |
| $50-54^{\circ}$ | Strike and dip (degrees from horizontal) of bedding |
| B-4 | Approximate location of test boring |

PACIFIC OCEAN



BACE Geotechnical
a division of
Bruning Associates, Inc.
(707) 838-0780

Job No.: 11508.1
Appr.: EEO
Date: 03/23/01

SITE GEOLOGIC MAP
WILLIAMS RESIDENCE
27580 South Highway One
Mendocino County, California

PLATE
2

Log of Boring B-1

Equipment: Morooka "B-40" Drill rig

Date: 7/19/00

Logged By: WAS Elevation: 55.0' **

Laboratory Tests

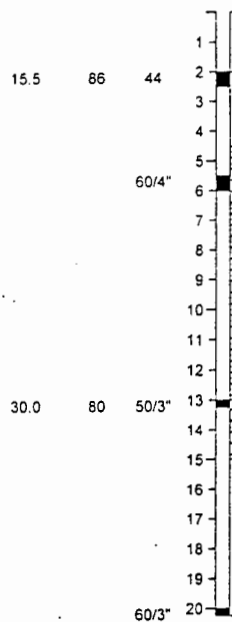
Moisture
Content (%)

Dry
Density (pcf)

Blows/foot*

Depth (ft.)

Sample



NOTES:

- (1) No Caving
- (2) No Free Water Encountered

22 OF 31

* Equivalent "Standard Penetration Blowcounts"

** Elevations interpolated from Topographic Site Map by R.A. Seale, L.S. 4455, dated December 1999.



BACE Geotechnical
a division of
Brunsing Associates, Inc.
(707) 838-0780

Job No.: 11509.1
Appr.: **EEO**
Date: 3/23/01

LOG OF BORING B-1
WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

3

Log of Boring B-2

Equipment: Morooka "B-40" Drill rig

Date: 7/19/00

Logged By: WAS Elevation: 54.5' **

Laboratory Tests

Tx 2635 (576)

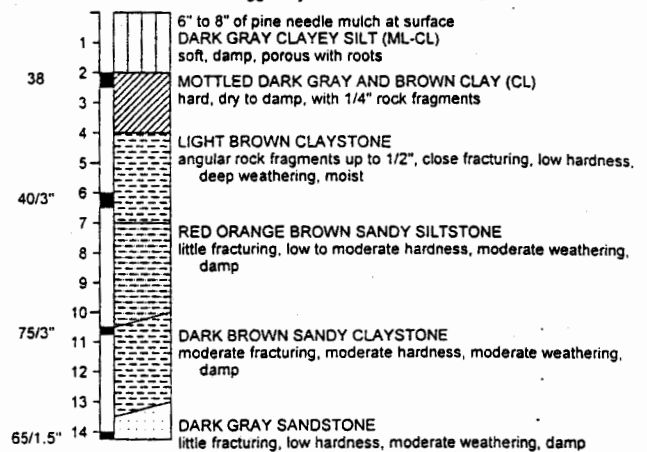
Moisture
Content (%)

Dry
Density (pcf)

Blows/foot*

Depth (ft.)

Sample



NOTES:

- (1) No Caving
- (2) No Free Water Encountered

* Equivalent "Standard Penetration Blowcounts"

** Elevations interpolated from Topographic Site Map by R.A. Seale, L.S.4455, dated December 1999.



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Job No.: 11509.1

Appr.: EEO

Date: 3/23/01

LOG OF BORING B-2
WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

4

BORING LOG 11509.1 CPJ BACE GDT 3/23/01

Log of Boring B-3

Equipment: Morooka "B-40" Drill rig

Date: 7/19/00

Logged By: WAS Elevation: 46.5' **

Laboratory Tests

Moisture
Content (%)

Dry
Density (pcf)

Blows/foot*

Depth (ft.)

Sample

17.8

101

45/3"

16.5

107

75/4.5"

Tx 5798 (1296)

93

6" to 8" of pine needle mulch
DARK GRAY-BROWN SILTY CLAY (CL)
soft to stiff, damp, upper 1 foot is porous with roots

DARK GRAY to BLACK SANDY CLAY (CL)
with 1/2" angular rock fragments, hard, damp to dry

DARK GRAY to BLACK SANDY CLAYSTONE
close fracturing, low hardness, deep weathering, damp

LIGHT BROWN to GRAY SANDSTONE
close fracturing, low to moderate hardness, moderate weathering,
damp

DARK RED-BROWN SHALE/SILTSTONE
close fracturing, low hardness, moderate weathering, damp

NOTES:

(1) No Caving

(2) No Free Water Encountered

* Equivalent "Standard Penetration Blowcounts"

** Elevations interpolated from Topographic Site Map by R.A. Seale, L.S. 4455, dated December 1999.



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LOG OF BORING B-3
WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

5

BORING LOG 115091 GPJ BACE GDT 3/23/01

240F31

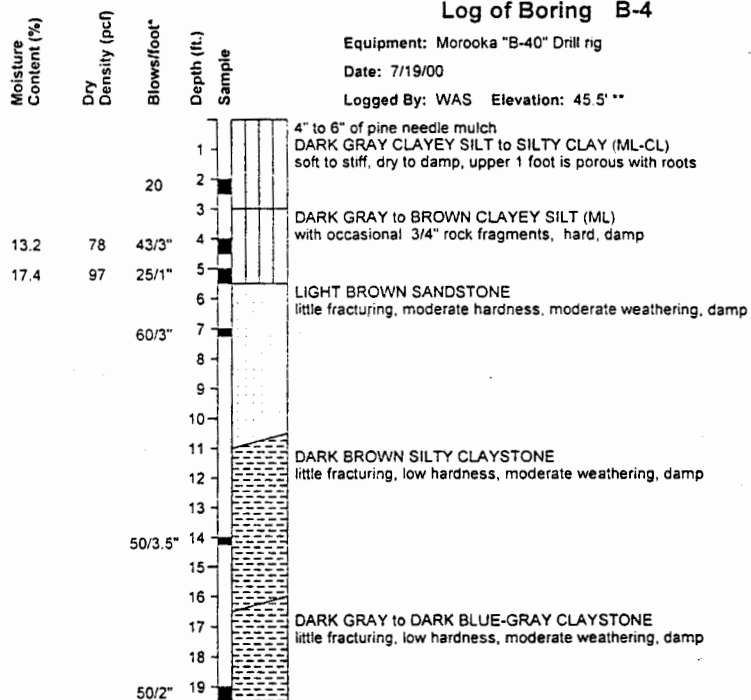
Log of Boring B-4

Equipment: Morooka "B-40" Drill rig

Date: 7/19/00

Logged By: WAS Elevation: 45.5' **

Laboratory Tests



NOTES:

- (1) No Caving
- (2) No Free Water Encountered

* Equivalent "Standard Penetration Blowcounts"

** Elevations interpolated from Topographic Site Map by R.A. Seale, L.S.4455, dated December 1999.

25 OF 31



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LOG OF BORING B-4
WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

6

UNIFIED SOIL CLASSIFICATION SYSTEM

| UNIFIED SOIL CLASSIFICATION SYSTEM | MAJOR DIVISIONS | | | SYMBOLS | | TYPICAL DESCRIPTIONS | |
|------------------------------------|----------------------|---------------------------|-----------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| | | | | GRAPH | LETTER | | |
| | COARSE GRAINED SOILS | GRAVEL AND GRAVELLY SOILS | CLEAN GRAVELS (LITTLE OR NO FINES) | | GW | WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES | |
| | | | MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE (APPRECIABLE AMOUNT OF FINES) | GRAVELS WITH FINES | | GP | POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES |
| | | | | SAND AND SANDY SOILS | CLEAN SANDS (LITTLE OR NO FINES) | | SW |
| | | | MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE (APPRECIABLE AMOUNT OF FINES) | | SANDS WITH FINES | | SM |
| | | FINE GRAINED SOILS | | SILTS AND CLAYS | LIQUID LIMIT LESS THAN 50 | | ML |
| | | | | | | CL | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS |
| | | | OL | | | ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY | |
| | SILTS AND CLAYS | | LIQUID LIMIT GREATER THAN 50 | | MH | INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS | |
| | | | | CH | INORGANIC CLAYS OF HIGH PLASTICITY | | |
| | | | | OH | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS | | |
| HIGHLY ORGANIC SOILS | | | | PT | PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS | | |

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

KEY TO TEST DATA

| | | |
|--------------------------------|---------------------|-------------------------------------|
| Consol - Consolidation | Shear Strength, psf | Confining Pressure, psf |
| LL - Liquid Limit | Tx 320 (2600) | - Unconsolidated Undrained Triaxial |
| PI - Plasticity Index | TxCU 320 (2600) | - Consolidated Undrained Triaxial |
| EI - Expansion Index | DS 2750 (2600) | - Consolidated Drained Direct Shear |
| SA - Sieve Analysis | FVS 470 | - Field Vane Shear |
| ■ - Retained, recovered Sample | UC 2000 | - Unconfined Compression |
| ⊗ - Retained, not recovered | PP 2000 | - Field Pocket Penetrometer |
| ⊠ - Bulk Sample | Sat | - Sample saturated prior to test |



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Appr.: EEO

Date: 03/23/01

SOIL CLASSIFICATION CHART

WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

7

26 OF 31

RELATIVE DENSITY OF COARSE-GRAINED SOILS

| Relative Density | Standard Penetration Test Blow Count (blows per foot) |
|------------------|----------------------------------------------------------|
| Very loose | Less than 4 |
| Loose | 5 to 10 |
| Medium dense | 11 to 30 |
| Dense | 31 to 50 |
| Very dense | More than 50 |

CONSISTENCY OF FINE-GRAINED SOILS

| Consistency | Identification Procedure | Approximate Shear Strength (psf) |
|--------------|------------------------------------------------------------------|-------------------------------------|
| Very soft | Easily penetrated several inches with fist | Less than 250 |
| Soft | Easily penetrated several inches with thumb | 250 to 500 |
| Medium stiff | Penetrated several inches by thumb with moderate effort | 500 to 1000 |
| Stiff | Readily indented by thumb, but penetrated only with great effort | 1000 to 2000 |
| Very stiff | Readily indented by thumb nail | 2000 to 4000 |
| Hard | Indented with difficulty by thumb nail | More than 4000 |

NATURAL MOISTURE CONTENT

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| Dry | No noticeable moisture content. Requires considerable moisture to obtain optimum moisture content* for compaction. |
| Damp | Contains some moisture, but is on the dry side of optimum. |
| Moist | Near optimum moisture content for compaction. |
| Wet | Requires drying to obtain optimum moisture content for compaction. |
| Saturated | Near or below the water table, from capillarity, or from perched or ponded water. All void spaces filled with water. |

* Optimum moisture content as determined in accordance with ASTM Test Method D1557-91.

Where laboratory test data are not available, the above field classifications provide a general indication of material properties; the classifications may require modification based upon laboratory tests.



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Appr.: *EEO*
Date: 03/23/01

**PHYSICAL PROPERTIES CRITERIA
for SOIL CLASSIFICATION**
Williams Residence
27560 South Highway One
Mendocino County, California

PLATE
8

Generalized Graphic Rock Symbols

| | | | | | |
|--|------------------------|--|------------------|--|--------------------------------------|
| | Siltstone or Claystone | | Limestone | | Tuff (Volcanic Ash) |
| | Shale | | Chert | | Deeply (Spheroidally) Weathered Lava |
| | Sandstone | | Serpentine | | Little Weathered Lava or Greenstone |
| | Conglomerate | | Metamorphic Rock | | Granite |

Stratification

Bedding of Sedimentary Rocks

Massive
Very thick bedded
Thick bedded
Thin bedded
Very thin bedded
Laminated
Thinly laminated

Thickness of Beds
No apparent bedding
Greater than 4 feet
2 feet to 4 feet
2 inches to 2 feet
0.5 inches to 2 inches
0.125 inches to 0.5 inch
less than 0.125 inch

Fracturing

Fracturing Intensity

Little
Occasional
Moderate
Close
Intense
Crushed

Thickness of Beds
Greater than 4 feet
1 foot to 4 feet
6 inches to 1 foot
1 inch to 6 inches
0.5 inches to 1 inch
less than 0.5 inches

Strength

Soft
Friable
Low hardness
Moderate hardness
Hard
Very hard

Plastic or very low strength.
Crumbles by hand.
Crumbles under light hammer blows.
Crumbles under a few heavy hammer blows.
Breaks into large pieces under heavy, ringing hammer blows.
Resists heavy, ringing hammer blows and will yield with difficulty only dust and small flying fragments.

Weathering

| | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deep | Moderate to complete mineral decomposition, extensive disintegration, deep and thorough discoloration, many extensively coated fractures. |
| Moderate | Slight decomposition of minerals, little disintegration, moderate discoloration, moderately coated fractures. |
| Little | No megascopic decomposition of minerals, slight to no effect on cementation, slight and intermittent, or localized discoloration, few stains on fracture surfaces. |
| Fresh | Unaffected by weathering agents, no disintegration or discoloration, fractures usually less numerous than joints. |



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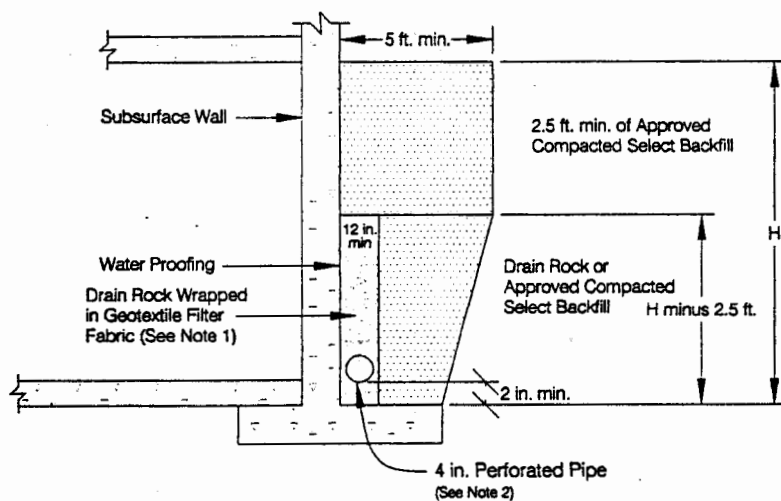
Job No.: 11509.1
Appr.: *EEO*
Date: 03/23/01

ROCK CHARACTERISTICS CHART

WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

9



SUBSURFACE WALL DRAINAGE DETAIL
(Not to Scale)

- (1) Drain rock should be clean, free-draining and meet the requirements for Class 1, Type B, Permeable Material, Section 68, State of California "Caltrans" Standard Specifications, latest edition, and should be wrapped in geotextile filter fabric (Mirafi 140 or equivalent).
- (2) Pipe should conform to the requirements of Section 68 of Standard Specifications, perforations should be placed down, sloped at 1% to drain to gravity outlet or sump with automatic pump.



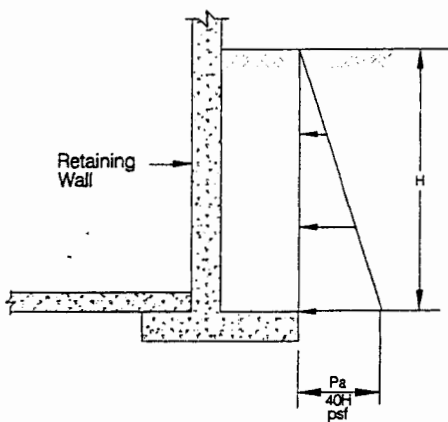
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Job No.: 11509.1
Appr.: *CEO*
Date: 03/23/01

RETAINING WALL DRAINAGE DETAIL
WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

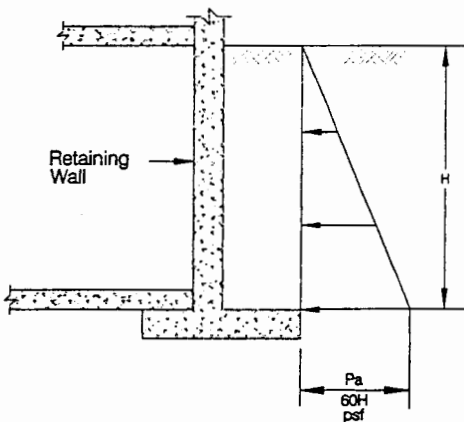
PLATE
10

29 OF 31



ACTIVE SOIL PRESSURE DIAGRAM

For walls that are free to yield slightly
(See Note 2)



AT-REST SOIL PRESSURE DIAGRAM

For braced walls of substantial rigidity
(See Note 2)

NOTES:

- (1) The above are soil pressures only and do not include lateral loads resulting from traffic, floor loads or other vertical loads.
- (2) If the wall, at surface of the backfill, cannot yield about 0.1% of its height, the wall should be considered as a braced wall and the at-rest soil pressures should be used.
- (3) The above pressures assume a fully drained condition: See Plate 10 for drainage and backfill details.
- (4) The above pressures should be used where backfill slope is flatter than 3 horizontal to 1 vertical (3H:1V).

30 OF 31



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Job No.: 11509.1
Appr.: EEO
Date: 03/23/01

LATERAL EARTH PRESSURES

WILLIAMS RESIDENCE
27560 South Highway One
Mendocino County, California

PLATE

11

DISTRIBUTION

| | |
|--------------|------------------------------------------------------------------------------------|
| One copy | Gale and Dorothy Williams 834 22 nd Street Santa Monica, CA 90403 |
| Two copies | Ed McKinley 237 Morrow Street Fort Bragg, CA 95437 |
| Three copies | Rosenthal Construction 703 North Main Street Fort Bragg, CA 95437 |



G R E G Z I E M E R L A N D S C A P I N G

P.O. Box 777 Albion, California 95410 • 707 964-5145
License No. 737317

Dec. 11, 2001

Landscaping Plan
AP 27-421-06
Williams Residence
27560 S. Hwy. 1
Pt. Arena, CA.

RECEIVED
DEC 18 2001
CALIFORNIA
COASTAL COMMISSION

EXHIBIT NO. 7

APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

LANDSCAPE PLAN (1 of 5)

Dear Sirs,

This is the landscape plan for the Williams residence. I have designed a landscape that will effectively screen the house from the public view corridors. The following is a description of the landscape plan.

Schooner Beach/Headlands View Corridor:

The view of the property from Schooner Beach and its publicly accessed headlands is very limited. I believe it will be impossible to see the proposed house from the headlands, as the headlands do not extend far enough to the SW(out into the ocean) to see the house. The neighboring house just to the SW screens the proposed house from any view I could find.

From Schooner Beach the topmost peak of the roof may be visible at low tide. Again the neighbors house and small outbuilding to the SW screens the proposed house.

However in order to satisfy any lingering concerns of the house being visible, I have added two groupings of English Holly. These plants will grow up to fill in between the existing trees thus blocking the house from any possible view.

In addition I recommend taking down any existing dead or dying Pines in this location, and replacing them with Bishop Pines as per the plan. These younger trees will insure that the stand of trees continues to provide screening in the future. Specific planting instructions for these trees follows.

Highway 1 Traveling North Corridor:

There is no view of the property along Highway 1 to the south, while traveling north.

Public Trail along Ross Creek and Traveling South on Hwy. 1 Corridor:

The house is most exposed to view from this direction. Screening will be achieved by planting a combination of lower growing Shore Pines and Leyland Cypressess along the north property line and backing these with taller growing White Firs as well as the existing Pines. As a person walks oceanward along the trail the house will be screened

by these trees until the neighboring houses to the north block it out.

Likewise, as a person drives south on Hwy. 1, these trees as well as the line of trees along the east property boundary screen the house. There is approximately 300 feet of roadway along which the house is visible. Tall Willows along Hwy. 1 block the view of the property up to the trailhead parking area. Then the hillside and its vegetation 300 feet down the road takes over blocking the view of the property.

To further screen the view from this direction I have included Wax Myrtles as understory along the east property line. These shrubbier plants will fill in the gaps between the tree trunks as the trees mature, thus creating a solid wall of vegetation.

Additional Notes:

There are some special concerns at this location for optimal plant survival and overall health.

The existing trees are largely Bishop and/or Monterey Pine of mostly mature age. These trees are in a harsh environment and are fairly fragile when there environment is changed as with proposed tree thinning and construction.

Soil compaction is the biggest killer in these situations. I recommend that construction fencing be placed around all trees that are to remain. The fencing should be placed out away from the tree trunk as far as the trees canopy extends. This will ensure that men and machinery will not be able to compact the soil during construction.

To reduce the risk of disease and pests all down branches, felled trees and resulting slash should be removed from the property. Any remaining wood over 3 inches in diameter is large enough to harbor several beetle pests and diseases. Trees to be removed should be felled in such a manner that they do not break branches off or scar the trunks of remaining trees.

When planting trees, all duff must be removed down to the soil from the area to be planted. After the trees are in the ground, a minimum of 3 inches of composted wood chips should be placed around the base of the trees.

Specifications:

All plants to be added will be healthy and established in 5 gallon containers. Please see the plant list included for more specific plant descriptions. When planting, the holes will be twice the diameter of the container, the subsoil will be amended with alfalfa pellets and a pelletized time release fertilizer such as Romeo Brand 10-10-10 will be spread around the plant at the soil's surface. In addition, a three inch layer of wood chips or mulch will be placed around each plant to keep weeds down and moisture in the soil. Each plant will be watered automatically with a drip irrigation system. Each tree and shrub will have 4 - 2 gallon per minute Agrifirm emitters. Half inch drip tubing will provide water to the plants. A Hardie Raindial timer or similar timer will automatically turn on a Rainbird Antisiphon valve which will release the water. The plants will be watered everyday during the dry season to ensure they grow as quickly as possible.

2 of 5

The plantings will be maintained twice monthly to ensure that the irrigation system is working properly and that the trees and shrubs remain healthy. Any plant loss will be replaced on a one to one or greater ratio immediately. All plants will be fertilized at least twice a year with a time release fertilizer so that every time the irrigation system turns on, or it rains the plants will be fed. Any needed pruning will be done to maximize screening of the house from the public.

Any questions or comments can be directed to me at the above address.
Thank you for your consideration.

Sincerely,

Greg Ziemer

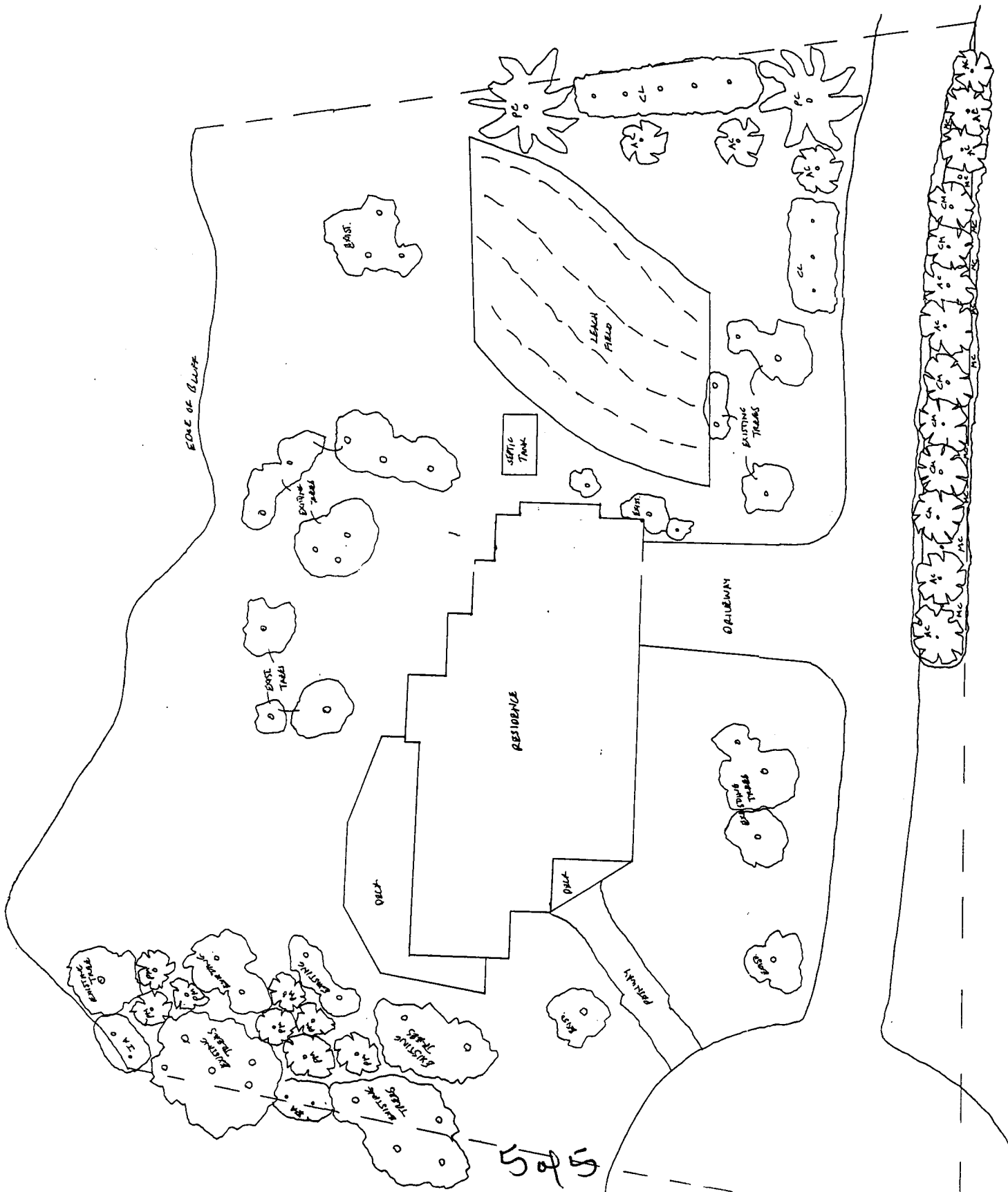
3 of 5

PLANT DESCRIPTIONS

All the plants listed below unless noted otherwise like coastal conditions and are perennial, evergreen, drought tolerant, deer proof or resistant and require low maintenance. All plant sizes given are their mature dimensions. Please match the abbreviations with those on landscape plan.

- CL - 8 *Cupressocyparis leylandii*(Leyland Cypress); loose pyramidal evergreen. Very fast growing eventually to 40 feet and 20 feet broad. Can easily be kept smaller as a hedge or shaped tree. Very wind tolerant, great for screening.
- PC - 2 *Pinus contorta*(Shore Pine); broad loosely branched, long needled pine. Grows to 30 feet tall and as broad. Very tolerant of ocean winds and spray.
- AC - 10 *Abies concolor*(White Fir); large symetrical tree to 120 feet tall and 15 - 20 feet wide. On the coast it remains shorter and denser with a pyramidal shape.
- IA - 4 *Ilex aquafloium*(English Holly); large shrub or small tree. Deep green, glossy leaves with spines. Brilliant red berries in winter. Plant shape is dependent on sun and wind. On coast low growing and spreading to 25 feet wide. More upright and rounded inland.. Easily pruned or shaped at any age.
- CM - 6 *Cupressus macrocarpa*(Monterey Cypress); loose pyramidal evergreen. Fast growing to 40 feet and sometimes much more and 20 wide, sometimes much more. Looses lower limbs with age, becoming very attractive wind sculpted tree.
- PM - 8 *Pinus muricata*(Bishop Pine); very fast growing tree to as much as 75 feet tall and 40 feet wide. Pyramidal in youth growing to be irregular with age. Takes salt air and wind. Grows much lower and narrower on coast.
- MC - 12 *Myrica californica*(Pacific Wax Myrtle); large evergreen shrub or tree. In windy locations the plant is low growing. With less wind it is a multibranching upright tree to 30 feet tall and as broad. Leaves are gloss dark green above and paler flat green below. Creamy colored branches provide nice contrast. Nice understory tree in taller forest setting.

16# 737317

$$w \rightarrow$$


**The Monterey Pine Trees
27560 South Highway One
Point Arena, CA**

Prepared for:
Ed McKinley
237 Marrow Street
Fort Bragg, CA 95437

Prepared by:
Rob Gross
Consulting Arborist
ISA Certified Arborist No. 501

DendroTech
PO Box 766
Calistoga, CA 94515
(707) 942 - 9139
grossfam@pacbell.net

RECEIVED

JUN 13 2003

CALIFORNIA
COASTAL COMMISSION

10 June 2003

| |
|------------------------------------------|
| EXHIBIT NO. 8 |
| APPLICATION NO. A-1-MEN-01-056 |
| WILLIAMS |
| ARBORIST'S REPORT (1 of 10) |

SUMMARY

Seventy-five (75) Monterey pines and two (2) Monterey cypress are growing at this bluff side property, north of Point Arena. The subject trees are mostly between six and 20 inches diameter and less than 40 years age, judging from the aero photos provided. A residence is planned for construction in the midst of the existing tree stand. Trees will need to be removed to accommodate the structure. Construction set backs require ten (10) feet of protected buffer area where existing plants are retained and protected from deleterious construction related activities. Trees require a sizable and effective root area for overall tree health and structural integrity. Replanting will aid visual influence. The site is environmentally hostile for young screening plants, which suggests added wind/sun protection and plentiful soil moisture for at least the first two dry seasons after they are planted for screening.

2010

Monterey Pines at 27560 South Highway One, Pt. Arena, CA
By **DendroTech**
10 June 2003

INTRODUCTION

At your request we met at the above noted ocean side location on 2 March 2003. I understand you are interested in obtaining technical input on the trees at this site and discover the potential management options under these conditions, in this setting. We viewed the site and the trees and walked together, discussing our concerns and ideas.

You provided an array of project information by mail, including letters and reports, four (4) aero-photos (dated 1964, 1981, and 2000). I was shown one corner pin, in the pavement, in the corner of the cul-de-sac at the approach side of this site. The bluff edge was used as the seaward boundary of concern. The site measurements are from, "SITE PLAN" 5-7-01. Setbacks were established per "CONSTRAINTS PLAN 8-22-01". Mid-line story poles estimated the proposed building location. The author visually identified trees. Each tree is tagged with a progressively numbered tag and nailed to the trunk at eye level on the least visible side (for aesthetics).

I was asked specifically, to address the second paragraph of the second page, of a 21 February 2003 letter, to Gail Williams (property owner), from the California Coastal commission:

"...Please submit an evaluation prepared by a licensed arborist that evaluates the existing forest stand composition, age, condition, and life expectancy, and how removal of additional trees to accommodate the proposed development would affect the remaining trees, taking into consideration such factors as disease, wind throw, root loss, and bluff retreat."

The author used calipers calibrated in inches and tenths to measure the trunk diameters at fifty-four inches (DBH) above average existing grade surface. Trunks greater than 24 inches diameter and distances were measured with a retractable "Logger's Tape" calibrated in diameter inches and tenths and also in feet and tenths.

3 of 10

FINDINGS

Tree Diameter and Conditional Evaluation

Trees condition was visually establish with ratings:

0 = dead (or mostly dead)

1 = poor condition (less than 20% crown, considerable dead materials or slow growing)

2 = okay condition (with a thick canopy, some dead materials)

3 = fine condition (no visible dead or missing foliage, vigorous)

| <u>Tree#</u> | <u>DBH (inches)</u> | <u>Condition</u> | <u>Location</u> |
|--------------|---------------------|------------------|--------------------------|
| 1 | 17.7 | 1 | northwest cliff |
| 2 | 24 | 1 | |
| 3 | 8, 6.7 | 1 | |
| 4 | 14 | 2 | |
| 5 | 14.7 | 1 | |
| 6 | 13 | 1 | |
| 7 | 14.2 | 1 | |
| 8 | 17.5 | 2 | |
| 9 | 9.2 | 1 | |
| 10 | 15.4 | 1 | |
| 11 | 14.8 | 1 | northeast corner at road |
| 12 | 25.1 | 2 | |
| 13 | 11.8 | 1 | |
| 14 | 13.4 | 1 | |
| 15 | 17.8, 18.7, 9.7 | 2 | |
| 16 | 19.2 | 1 | |
| 17 | 17.7 | 1 | |
| 18 | 13.7 | 1 | |
| 19 | 11 | 1 | |
| 20 | 10.1 | 0 | |
| 21 | 12.6 | 1 | Monterey cypress |
| 22 | 7.2 | 0 | |
| 23 | 16.4 | 1 | |
| 24 | 12.3 | 1 | |
| 25 | 11.7 | 1 | |
| 26 | 11.2 | 1 | |
| 27 | 26.1 | 2 | |
| 28 | 8.4 | 0 | |
| 29 | 17.4 | 2 | |
| 30 | 10.5 | 1 | |
| 31 | 21.9 | 2 | |
| 32 | 7 | 2 | |
| 33 | 16 | 2 | |
| 34 | 12.5 | 2 | |

40910

Monterey Pines at 27560 South Highway One, Pt. Arena, CA

By **DendroTech**

10 June 2003

| Tree# | DBH(inches) | Condition | Location |
|-------|-------------|-----------|--------------------------------|
| 35 | 12.7 | 2 | |
| 36 | 17.9 | 2 | 4 ft from edge |
| 37 | 7.9 | 1 | at edge |
| 38 | 11.3 | 1 | at edge |
| 39 | 9.8 | 1 | 6 ft from edge |
| 40 | 18.1 | 1 | |
| "B" | 16.5 | 1 | at edge, near #31, #32, #36 |
| 41 | 14.5 | 2 | |
| 42 | 23 | 2 | |
| 43 | 16.2 | 1 | |
| 44 | 20.3 | 1 | |
| 45 | 15.2 | 1 | by road |
| 46 | 14 | 1 | by road |
| 47 | 20.7 | 2 | by road |
| 48 | 20.7 | 2 | by road |
| 49 | 20.3 | 2 | |
| 50 | 12.8 | 1 | |
| 51 | 14.2 | 1 | leaner |
| 52 | 17 | 1 | |
| 53 | 19.8 | 1 | |
| 54 | 59 | 1 | |
| 55 | 16.5 | 1 | |
| "A" | 16.8 | 1 | by #52 |
| 56 | 16.3 | 1 | |
| 57 | 9.2, 8.6 | 2 | fill over root area; SE corner |
| 58 | 23.8 | 2 | near cul-de-sac |
| 59 | 25.2 | 1 | |
| 60 | 13, 14 | 1 | |
| 61 | 16.9 | 1 | bluff point edge |
| 62 | 20 | 3 | 5 feet to edge |
| 63 | 23.4 | 2 | off balance |
| 64 | 22.7 | 1 | lean to South |
| 65 | 18.9 | 1 | ten feet to edge |
| 66 | 16.8 | 1 | South most specimen |
| 67 | 22.2 | 2 | three feet to #66 |
| 68 | 16.8 | 1 | |
| 69 | 7.8 | 1 | Monterey cypress |
| 70 | 22.3 | 1 | South edge |
| 71 | 20.2 | 1 | South edge |
| 72 | 12.7 | 1 | |
| 73 | 18.4 | 1 | |
| 74 | 19.9 | 1 | |
| 75 | 20.5 | 1 | |

5910

77 total (includes trees #A and #B)

| Score | #of trees | |
|-------|-----------|--|
|-------|-----------|--|

| | | |
|---|---|------|
| 0 | 3 | Dead |
|---|---|------|

| | | | |
|---|----|------|------------------------------------------------|
| 1 | 52 | Poor | 55 (of 77) trees are dead or in poor condition |
|---|----|------|------------------------------------------------|

| | | | |
|---|----|------|---------------------------|
| 2 | 21 | Okay | 21 (of 77) trees are okay |
|---|----|------|---------------------------|

| | | |
|---|---|------|
| 3 | 1 | Fine |
|---|---|------|

| | | |
|-----|----|-------|
| All | 77 | Total |
|-----|----|-------|

Trees to be removed

A) All dead specimens

B) Septic system area (including setback):

Trees numbered 5, 6, 7, 8, 9, 10, 11, 14, 15, 20, 21, 22, 29 and the first two (of four) unnumbered along the west property line.

C) Driveway area:

17, 18, 19, 45

D) House footprint (including setback):

23, 24, 25, 26, 27, 28, 30, 42, 43, 44, 49, A, 52, 53, 54, 55, 56, 59, 60, 68, 72, 73, 74, 75.

Four aero photos with dates provided to the author

1964 exhibits no trees at this site.

1981 shows a dense planting, no homes at site.

2000 shows maturing canopy with homes on both sides of the site.

2003 color, five homes visible, site trees mostly yellow-green, other pine species up and down coast are blue gray color.

Tree species at this site

Monterey pine (*Pinus radiata*) is the dominant species at this stand. A few small specimens of Bishop pine are near the edges of the property. Two trees are Monterey cypress (*Cupressus macrocarpa*). The Bishop pine was native to the area in the past and while the site has few of this species they are small sized. There are many larger Bishop pines off site both up and down coast. The Bishop pines down coast, off site at the gated entry at mile marker 12.10 Highway One. The Monterey pines, which dominate the site, are all of similar size and age. As the name implies Monterey pine are common to the south in Monterey County. In prehistoric times the Monterey pine was common along this portion of the coast as indicated by fossil records. The current distribution and the prehistoric distribution differ. The interpretation of this information is a point of contention between some botanists.

6 of 10

Monterey Pines at 27560 South Highway One, Pt. Arena, CA

By DendroTech

10 June 2003

DISCUSSION

The aero photos described above clearly show no pines at this bluff side site in 1964. By 1981 they are growing densely at this site. Today they are still growing densely and the canopy only exists on the top of the trees with exceptions of some edge specimens, which tend to have more foliage on the sides exposed to more light.

The exact age of the Monterey pines here is not clear, but we do know, with certainty, that they are older than 22 years and younger than 39 years age judging from the photos. Monterey pines growing under favorable conditions can and do last almost a century. But, under adverse conditions, which they are not adapted to, they wane sooner. This stand is dense and only the upper reaches of the trees and a few edge trees sides are foliated, which is not an indication of good health. Some trees have died in the stand and I will expect a high mortality rate, as they grow larger, since the density drains limited soil resources (nutrients and water) sooner than a more natural, less dense stand. Vertical mulching would help the trees in this root-limited environment.

Where tree roots grow

Tree roots grow in the top three feet of soil where the soil atmosphere has adequate oxygen for root growth. The depth of the root penetration is commonly limited by soil oxygen. Coarser soils (like sand) tend to have deeper rooting than do soils like silt and clays where roots are shallower. Roots are opportunistic and persist where conditions are most desirable. If the conditions become unbearable the root perishes. The small diameter tree roots which are called white roots or absorbing roots commonly grow and die and grow and die several times each year and is known as root "turn-over". This allows trees to adapt to changes both natural and man induced, such as construction related root damage.

Root spread varies dramatically from species, site, and conditions. In valley oak for example the roots are still two inches in diameter at the outer edge of the foliage canopy! Thinner soils, routine shallow irrigation, higher tree-to-tree competition and larger tree size all lead to extended root reach. The opposite can also hold if the site soil is well aerated and moisture is available. In that event the roots don't need to reach far, but the requirements are still the same.

Site tree screening of wind and views

The entire stand does block wind and views. In this setting it requires all of the tree foliage to provide much of the screening. The winds here are intense and all the trees must bend to accommodate the wind. The trees would snap off if they didn't bend. In this stand the trees screen wind in parts, not all at once or with one tree – it requires the stand or a progressively denser screen, like the tree trunks and foliage, not a wall.

Thinning limited stems from this stand would reduce tree-to-tree competition for limited soil water and nutrients.

Stand conditions

This stand is artificially dense and the trees are a consistent size. All of the trees are between about twenty and forty years of age. The stand density will be a problem for the trees in the long run, the trees can live much longer if they are cultivated and well maintained. If left to their own, in this unnatural setting the tree roots will eventually overwhelm the limited resources of this stand especially since the trees are so constrained. The stand will continue to grow as water is available and become water stressed each summer as typically higher summer temperatures consume greater amounts of water. The soil water is limited to what is there and how recently seasonal rains and fog-drip replenished it. As the trees grow bigger they demand more water. Only so much water is available. Eventually the trees will need more water than is available. This situation leads to premature water stress in the trees, which then become more susceptible to insect and pathogen invasion. As the stand trees continue to grow some succumb to insects and others to disease(s). Weakened trees become more likely to damage and failure.

Foundations

A building foundation can decimate tree roots. When a trench is excavated for the footing roots are commonly encountered and usually cut – damaging the tree. If a pier and grade beam design is used the only roots cut are in the pier holes. This is much more desirable than other foundation designs. Of course, when soil is excavated roots will be encountered and lost. So the foundation design may not be beneficial if the entire design requires soil excavation and associated root removal.

Site tree response to select tree removal

The stand will respond to almost any tree removal. Fewer trees interpret in to more (limited) soil resources for those which remain. Since the trees have all grown together as a group for years any tree removal will expose what are known as “new edge trees”. Trees which receive less protection from neighboring trees (ones dying, dead or removed) are subject to an increase in failure rate, especially in a high wind area such as this site. If a structure is built in the existing grove this structure itself will provide some wind diminution, focus or redirection. Roots are likely in serious competition at this site due to the root constraints such as the bluff and a roadway and stand density. Root environment can be altered, improved and result in greater root development and improved tree growth.

Irrigation will most likely be recommended during construction to reduce tree internal water stress. The author can study internal tree water status using midday stem water potential (Shackel and Gross 2002). Each reading takes about 10 to 15 minutes.

8 04 10

Monterey Pines at 27560 South Highway One, Pt. Arena, CA

By **DendroTech**

10 June 2003

Root loss reduces tree ability to assimilate water and soil nutrients and it may also influence tree structure. Root impacts will need to be considered in residence design and construction.

Roots can be excavated by hand or faster and easier with less root damage when air jets are used. This method accelerates an air stream to twice the speed of sound. As the rushing air is inserted into the soil the pores fill and fail outwardly in a sudden fashion. The non-porous soil components such as pipes, roots and rocks and wires are left intact as they are (See – attached, Gross and Julene, 2002). The porous soil explodes away from the non-porous items, which remain. This loud technique requires moist soils and personal safety equipment. This technique is impressive, but it is not an answer to all root problems – this tool just lets us look at the roots, enabling accurate interpretations and management actions. This method cannot save roots per say. This method cannot change roots conditions or grow roots where they do not exist. Rather this insightful method allows discovery of actual existing conditions rapidly and with minimal damage to the roots. What is done with that information about the exposed roots may be another concern.

The trunk diameters, for the most part occurred from about one half-foot diameter to over two-feet diameter. Over fifty (50) per cent of all trees were 12 to 17 inches diameter. These trees did not exist forty years ago. By 1981 (22 years ago) the site is planted and has grown in densely. The stand is about 30 years of age, judging from what the photos indicate directly about occurrence and how fast this species grows. Today the canopy is closed from one side to the other. Only edge trees have foliage along the side of the trunks. These trees with lower foliage diffuse the winds more so than the others, which only offer tree trunks to reduce wind moving through the stand. The lower trunk will not re-foliate with this tree species. New landscape plants are indicated to specifically foliate the understory, which currently has little live foliage.

Stand composition, age, condition and life expectancy

A dense stand of even aged Monterey pine trees dominant this site. The trees are between twenty and forty years of age. They are unnaturally close together. Under natural conditions this stand would thin by naturally occurring mortality factors such as fire, disease, and/or insect impacts. Over time fewer and few trees would survive due to tree-to-tree competition for critical soil moisture and limited nutrients. This uncommonly dense planting has led to the characteristic skinny trees here. These trees all compete for sun so much that all the foliage is at the treetops, with the exception of some of the edge trees, which have foliage on the sides. This growth form is weak, due to top-heavy weight distribution and poor stem taper both of which are structural flaws and both of which can individually or together lead to tree failure. The Monterey pine, while not a long lived species, it should be able to live for decades more if the trees are maintained which would require stand thinning to reduce tree to tree competition.

9010

Protecting site trees during construction: *Complete prior to site work start-up*

- 1) Wrap trunk and lower limbs w/ 2x4 and 2x6's below 15 feet above ground. Use crimp lock steel bands or plumber's tape to hold the boards together.
- 2) **Root area**, EXCLUDE all traffic. Protection is critical here; to wait and allow damage to occur will only reduce landscape performance and longevity.
 - Mulch 12 inches deep over potential root area of all save trees.
 - Cover mulch layer with one-inch plywood. All plywood attached at each corners with flexible material such as fire hose sections or ¾ inch holes tied with ½ inch Dacron or nylon rope. Some areas may not require soil protection.
 - Temporary Protective Fencing At two times the dripline (using 4 foot tall with 6 foot-long pounded "T" stakes on 10 foot centers).
 - Maintain this protective fence, without compromise, for the duration of the project.
- 3) Using florescent orange or florescent green tape; mark all limbs and trunks near travel ways in effort to avoid machinery impacts.
- 4) Monitor

Screening

The visual screening of this site should look to diversity with several plants species as noted in the site landscape plan (Ziemer, 11 December 2001). The benefit of several species of screening plants improves likelihood of planting success and performance. Varied plant species arraigned in layers will reduce the view from the highway. This site is windy and therefore harsh. Plants, especially recent transplants, dry-out under windy conditions. "Transplant shock" is actually dehydration brought on by increased moisture loss (wind exposure and surrounding dry soil wicking away the moisture). Plant damage and loss can be avoided with accurate soil moisture management (e.g., Tensiometers, or, stem water potential (See attached, "Stem water potential...", by Shackel and Gross, 2002)). Protect the plants from the wind and sun exposure using burlap or shade cloth wrapped on stakes to fully protect foliage. Increase plant canopy humidity with misters if plant dehydration becomes a problem. Avoid fertilizer upon planting. Fertilize early in spring of the year following planting and from then on. Protect new landscape plant foliage with fabric and a wax based anti-transpirant for maximum protection.

10 & 10

Friends of Schooner Gulch

A Watershed Organization

P. O. Box 4, Point Arena, California 95468
(707) 882-2001, Fax (707) 882-2011

EXHIBIT NO. 9

APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

APPELLANT'S

CORRESPONDENCE

(1 of 16)

Executive Committee:

Lucie Marshall
Charles Peterson
Peter Reimuller

March 5, 2002

RECEIVED

MAR 07 2002

CALIFORNIA
COASTAL COMMISSION

Commissioners and Executive Director
California Coastal Commission
Box 4908
Eureka, CA 95502

RE: Williams (A-1-MEN-01-056)

Dear Commissioners and Executive Director:

The Staff Report for the Substantial Issue case states on p. 22: "...the appellants have not presented any contrary geological evidence indicating that a different bluff retreat rate should be used other than the one developed by the geotechnical consultants for the project..." This letter provides the necessary geological evidence to require the applicant to apply an accelerated rate of bluff retreat to the project.

You have previously received our January 7 comments on the bluff retreat rate. This letter will elaborate on that information, and modify it.

The Sea Level has Been
Relatively Stable for 5,000 Years

The present cycle of sea-cliff erosion started about 5,000 years ago, when sea level reached its approximate present position (see charts B and C). This cycle of erosion is not yet complete, as evidenced by the fact that the sea cliffs are still eroding. Any rise in sea level will create an acceleration in the historic rate of cliff retreat.

Cliff Retreat During the
Relatively Stable Sea Level Period

Based on the uplifted ancient (100,000 years old) wave-cut terrace slope (on top of the bluff), which we have measured in the field to be a 1% slope, an approximate

From the Coastal Ridge to the Pacific Ocean, since 1986.

calculation may be made for the total sea-cliff retreat over the past 5,000 years (see chart D).

When the 1% slope on top of the ancient bluff-top terrace is projected seaward until it intersects the present sea level which has been relatively stable for 5,000 years, we obtain a figure for the lateral recession of the cliffs over that time span.

It is necessary to subtract the 6m of tectonic land rise over the 5,000 year span before making the calculation. When the 6m are subtracted from the 30m tall cliffs, we see a net cliff erosion of 24m (about 79') in 5,000 years. At a 1% slope, that represents about 7,900' of cliff recession [1' of height per 100' of lateral direction x 79' = 7,900']. Or, 1.58' per year average cliff recession over the last 5,000 years.

The clean, steep face of the present sea cliff clearly shows that the recent cycle of sea-cliff erosion is not yet over. In effect, the cliff is not yet at equilibrium with the erosion processes that formed it. If the cliff were at equilibrium, its faces would have gentle slopes, there would be a broad talus apron at its base, and there would be long-lived vegetation growing on it and the talus apron.

The continuing sea-cliff erosion can be attributed to two factors, a) the sea-level is already beginning to rise again, and b) the present wave-cut platform is continuing to be lowered by wave abrasion and biological activity such as clam boring and kelp holdfasts tearing up the rocks.

With further upwards changes in sea levels, we will see an accelerating rate of the current cliff recession.

Rising sea level

Historical tide-gauge records show that sea level rose 8" during the last century (see chart E). Any rise in sea level will contribute to continued sea-cliff erosion by providing more wave access to the base of the sea cliff.

In fact, there is an accumulated "pressure," or backlog, of sea-level rise already actively working to accelerate the cliff recession along California coast, due to this measured and known rise during the last century. We see this accelerated rate in many places along the coast. It is an important component of current cliff recession, and consequently for the increasing number of applications for

2 of 16

sea walls, cliff armoring, and beach protection and rehabilitation projects.

The Rise in Sea-Level is
Accelerating and Will Accelerate Cliff Retreat

The rate of sea-level rise will increase in the next century, due mainly to global warming (see chart A). Sea level will rise because more water will return to the oceans from melting glaciers, and because the water in the oceans will expand as it becomes warmer. For the reasons outlined above, this rise in sea level will accelerate the rate of sea-cliff erosion.

We note that the Commission has informally adopted a working rate of sea level rise over the next 100 years to be approximately 1.6'. That rate represents an approximate doubling of the previous century's rate. This estimate is supported by data from 3 nationally recognized and responsible governmental organizations.

See chart A, a summary of "Global Sea-Level-Rise Predictions," showing:

1. the Environmental Protection Agency's prediction of 1.6' to 11' [sic],
2. the Polar Research Board's prediction of 1.3' to 6.1', and,
3. the National Research Council's prediction of over 2'.

An article in EOS, points out that the sea-level rise is accelerating and in 2050 it will be almost 1' higher than today's level. [Leatherman, Zhang and Douglas, "Sea level rise shown to drive coastal erosion," EOS Transactions, American Geophysical Union, v.81:6, p.55, February 2000]

Clearly, 1.6' (over the next 100 years) is a conservative absolute minimum based on the best available science. And the estimated rise has accelerated in the 15 years since these predictions. Global warming is continuing unabated, and every month the news contains new articles with higher predictions over the next century. Many of those predictions speak of considerable rising over only the next 50 years as well. This acceleration in the rate of the sea level rise will accelerate the rate of the cliff retreat.

3916

Cliff Retreat Calculated
from Wave-Cut Terrace Slope

The bluff is inherently unstable with a steep angle of uplift. It is comprised of a very soft stone. The distance the waves have traveled over the top of the wave-cut terrace to erode the cliffs is currently at an approximate equilibrium with the current relatively stable and slowly-rising sea level. When the sea level rises only as much again as it has in the past century, it will more rapidly and with less hesitation than in the past further erode the cliffs to arrive at a new equilibrium with the slope of the wave-cut terrace.

In our letter of January 7, 2002 we reported a specific angle of slope for the wave-cut terrace. We have more accurately re-surveyed the existing slopes of the wave-cut basaltic terraces in front of the properties to be a .87% slope [this could also be stated as 1' in 115'] (see chart D). This measurement was an average of over 50 average surface slope measurements made January 14, 2002, in the late afternoon, using a very accurate level and tape. We plotted the data in 3 dimensions and arrived at that the figure with very little deviation from a pure plane surface.

To calculate the rate of bluff retreat based on the rising seas, we project the .87% rate of slope of the wave-cut terrace eastwardly into the bluff face. If the seas rise the minimum of 1.6' during the 21st century, then we will see a minimum of 184' of cliff recession in this location [160% of $115' = 184'$], or a minimum of 138 feet in 75 years.

For anyone who does not accept that the rise in average sea-level will accelerate in this century: If the seas rise a minimum of only 8" in this 21st century (same as the current rate), then for each 8" of continuing sea level rise we will see a minimum of 77' of cliff recession at this location [$8/12 \times 115' = 77'$] in 100 years, or a minimum of 57 feet in 75 years at this location.

Wave Action Accelerating in Height and Force

Most sea-cliff retreat occurs episodically and unevenly along the coast during infrequent severe storm events, many of which are associated with El Nino climatic events. Two of the largest recent sea-cliff erosion events along the California coast occurred during the large El Nino climatic events of 1982-83 and 1997-98. El Nino events effect coastal erosion in several ways:

4 of 16

A. Increased precipitation saturates the ground, weakens rocks and triggers more slope failures such as landslides and rock falls along unstable sea cliffs. The weakened rocks are also more susceptible to increased wave erosion at the base of cliff.

B. Increased tide levels allow high swells and storm waves to attack the base of the sea cliff. During the 1997-98 El Nino, measured high tides were as much as 30" higher than the predicted tides along the central California coast (see chart G). Of that 30", onshore winds accounted for 12", low barometric pressures accounted for 8", and warmer-than-normal water temperatures accounted for 10".

C. Increased storm activity in the Pacific Ocean during El Nino events produces larger swells along the California coast.

D. Local storms are more severe during El Nino events, producing higher local storm waves. The effectiveness of these increased waves and increased swells to erode the sea cliffs is enhanced by the abnormally high tides and weakened rocks that are common during severe El Nino climatic events.

What would have been a 79" high tide turned into a 109" high tide. This higher tide amplified the effect of the high swells from storms offshore and of local storm waves. If El Nino events remain larger and more frequent in the future, this amplification effect will have profound impact on the acceleration of coastal bluff retreat along the coast, and must be considered in future coastal plans.

Wave height maximums on the California coastline has accelerated since the 1950's because of increased winds over the Pacific. Extreme wave heights have steadily increased to a figure of 20% to 30% over prior magnitudes. [Graham and Diaz, Scripps Institution of Oceanography, "Evidence for intensification of north Pacific winter cyclones since 1948," Bulletin of the American Meteorological Society, 82:9, p. 1889, September 2001.)

Increased wave magnitude will accelerate cliff recession.

5 of 12

Sea-Level Rise is 20 Times
Faster Than The Tectonic Rise

The existing "first terrace" or top of the bluffs which we see today is approximately 30 meters high. 100,000 years ago, sea level was 6m higher than it is now, and at that time it created the existing "first terrace, (on which the applicant wishes to build). Subtract the 6m of sea level change from the 30m cliffs, and we have 24m of net tectonic plate uplift during the last 100,000 years.

Divide that 24m of net tectonic plate uplift by those 100,000 years, and we get .24mm of uplift per year. So, in the next 75 years, we can reasonably expect a total of 18mm of uplift from tectonic forces, or .06'. This is a negligible amount of change in face of the estimated 1.2' [1.6' x .75] of sea level rise in the next 75 years: only 1/20th as much.

Therefore the potential for tectonic rise to offset sea level rise is a non-issue. The seas are gaining on the cliffs and this is creating an acceleration in the rate of cliff recession.

Setback Suggested in the
Geotechnical Report is Insufficient

Any consideration of setbacks along the coastal cliffs of California should incorporate the increased hazards as described above.

The Williams geotechnical report calls for a setback of 40', a number the applicant's geologist has arbitrarily selected. Since the bluff face will accelerate its retreat in the 75 year life, and since that retreat will be more than the 40 foot setback, the geotechnical report does not provide for the required 75 year economic lifespan of the development.

Summary

The current rate of recession of the cliffs in this area will accelerate:

- *Prior sea-level has been relatively stable for 5,000 years. *Charts B and C*
- *Cliff retreat rate has stabilized slowly. *Chart D*
- *Recent rate of sea-level rise is .8' per 100 years.

Chart E

- *Official estimates show rising seas. *Chart A*

EPA: 1.6' to 11' [!]

Polar Research Board: 1.3' to 6.1'

6 of 16

National Research Council: 2' or more

- *Sea-level rise is 20 times faster than tectonic rise.
- *El Nino events more frequent. *Chart F*
- *Wave action is getting stronger. *Chart G and Graham*
- *Wave-cut terrace will continue into the cliffs.

Chart D

Therefore, the geotechnical report is scientifically incomplete and is not reliable as a basis for the long-term safety of the proposed developments. The geotechnical analysis of the rate of cliff recession is too conservative, in light of sea-level rise. Even with no change in the rate of sea-level rise, cliff recession will accelerate.

The Commission's analysis of the rate of cliff recession should err on the side of a conservative judgment of the rate.

The coastal resources at stake are significant, this property is next to a popular State Beach.

The precedent this permit would create is great because there are many lots in the neighborhood which are yet undeveloped.

These issues are regional and statewide, because sea level change has already become a problem all along our 1000-mile-long California coast, and will continue to present an economic and planning disaster if not reconciled immediately.

Other data in the geotechnical report which do not provide accurate scientific conclusions include: the 36 year span of aerial information used is still insufficient, the scale of the maps used still do not meet industry standards, the "historical observations" and reference points used for measurement are not cited, and the "buildings" used for reference do not exist and never did exist.

704116

Request

Friends of Schooner Gulch respectfully requests that
the Commission deny the permit.

Sincerely,

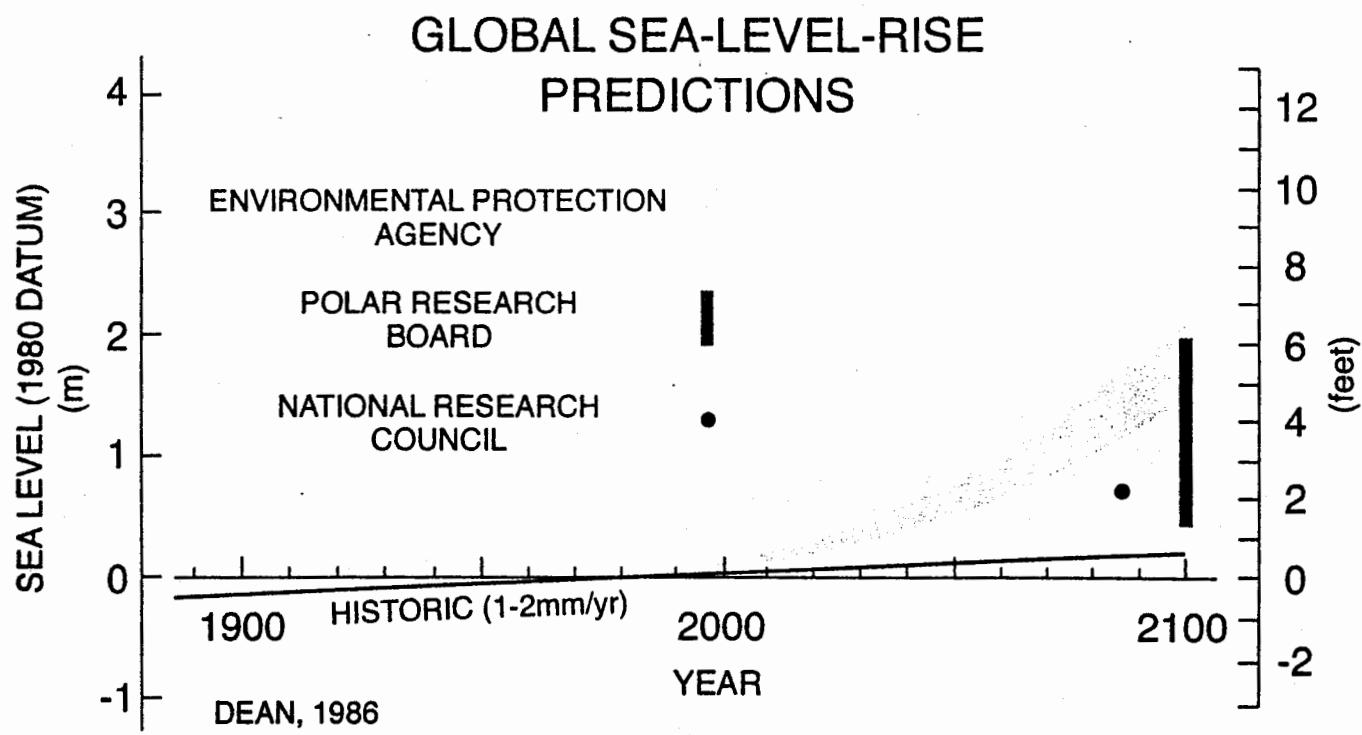
A handwritten signature in cursive script, appearing to read "Peter Reimuller".

Peter Reimuller
Secretary

attached: 7 charts
and an artist's opinion

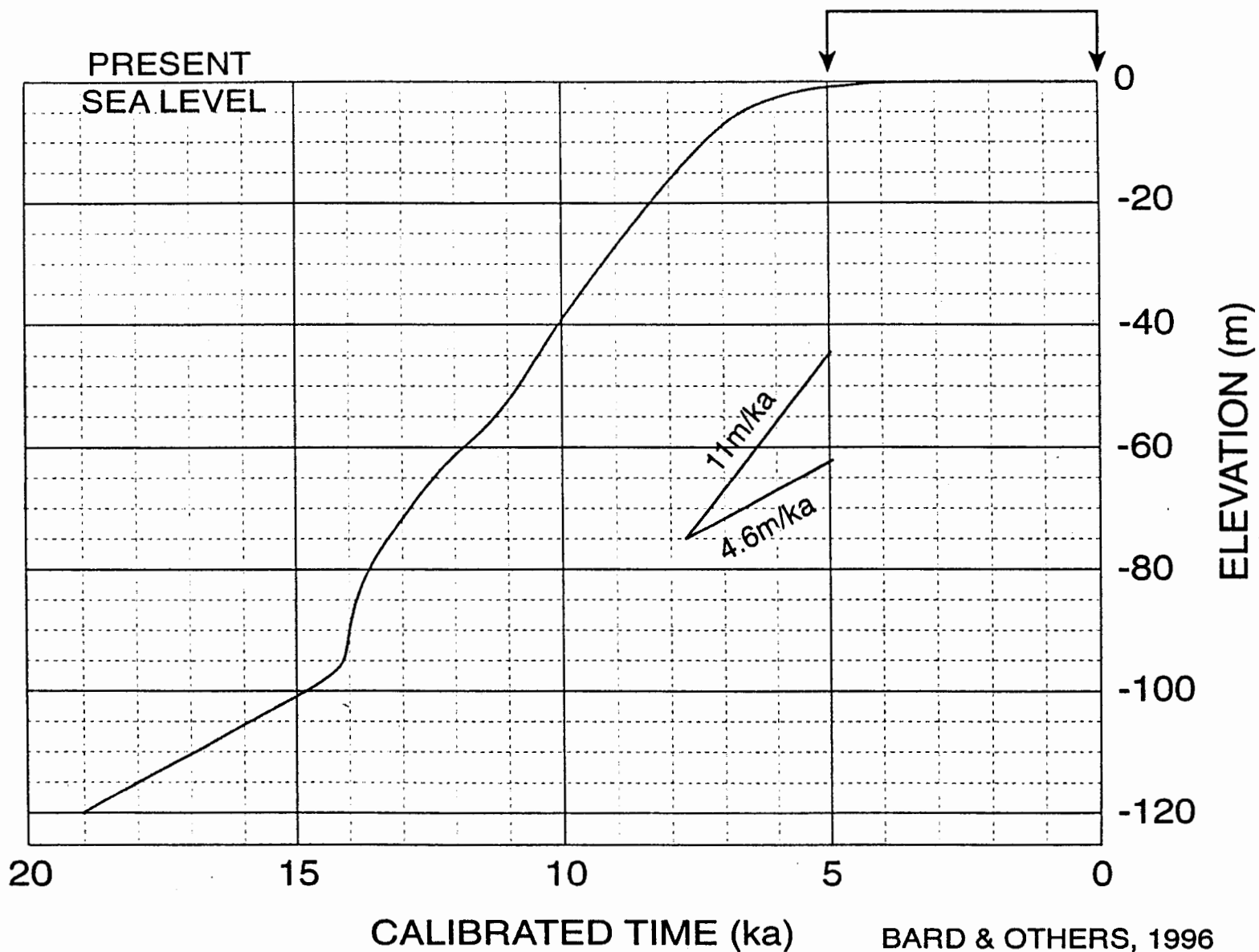
8 of 16

21816



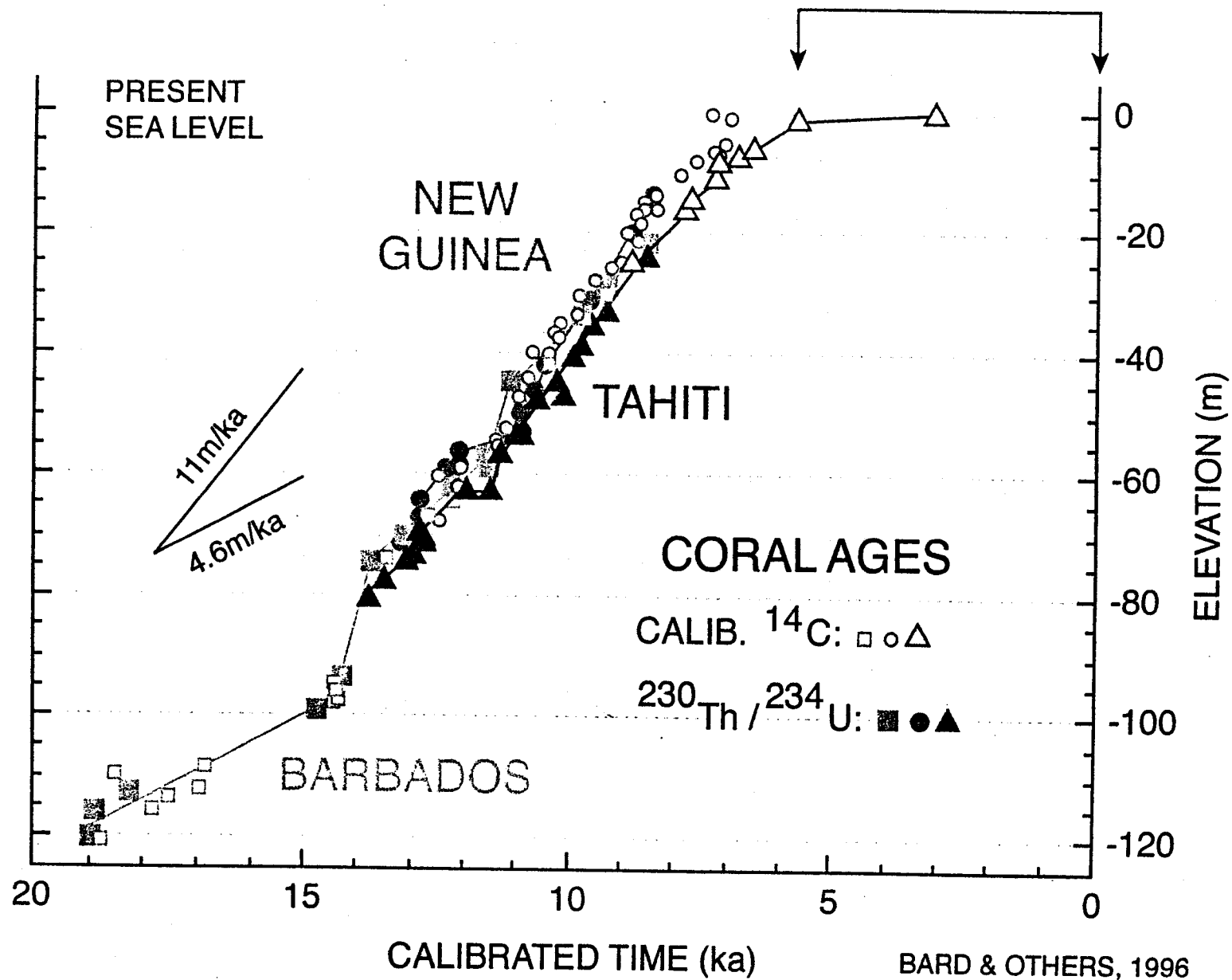
POST-GLACIAL SEA-LEVEL RISE

PRESENT
COASTLINES



POST-GLACIAL SEA-LEVEL RISE

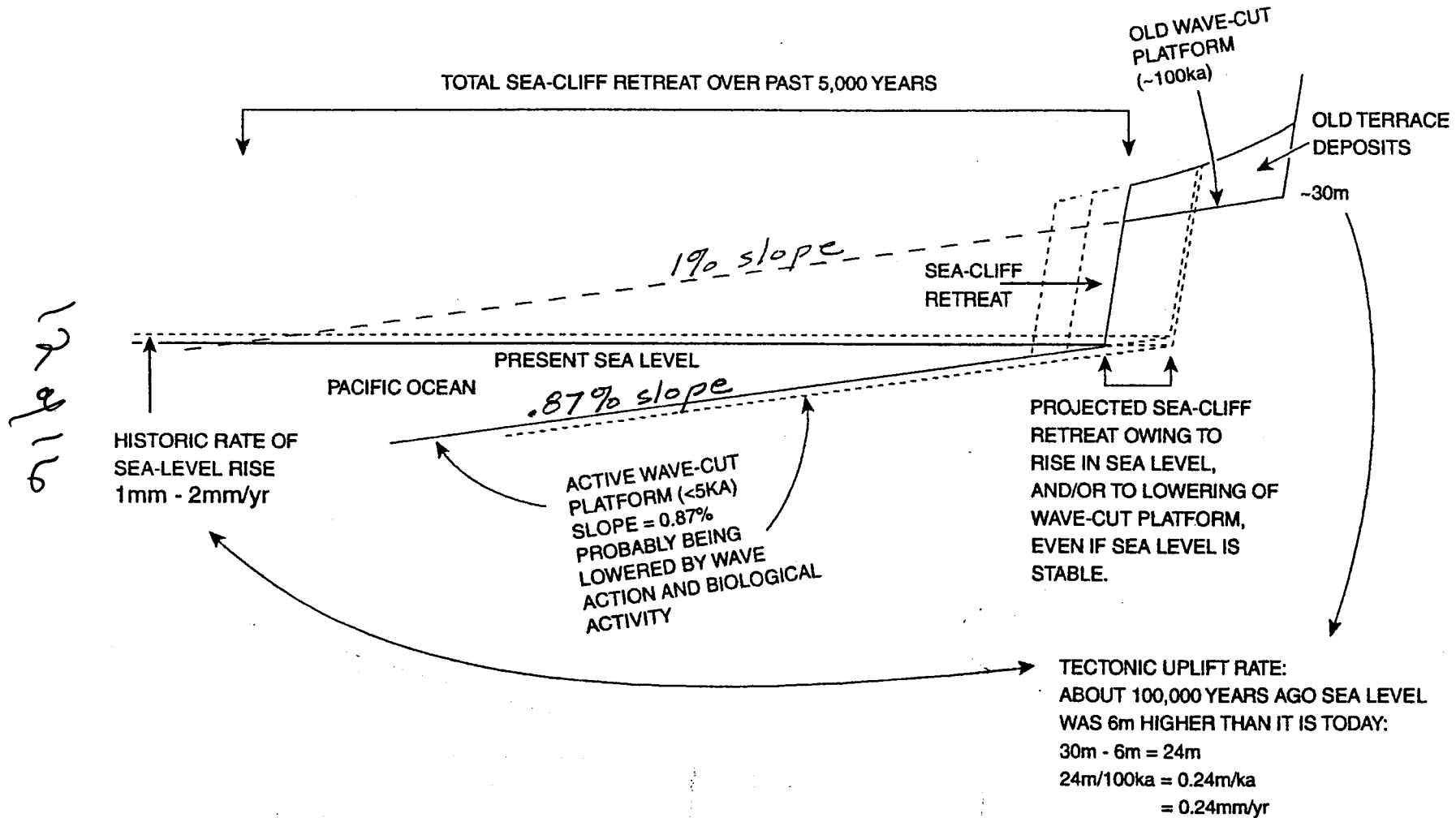
PRESENT
COASTLINES



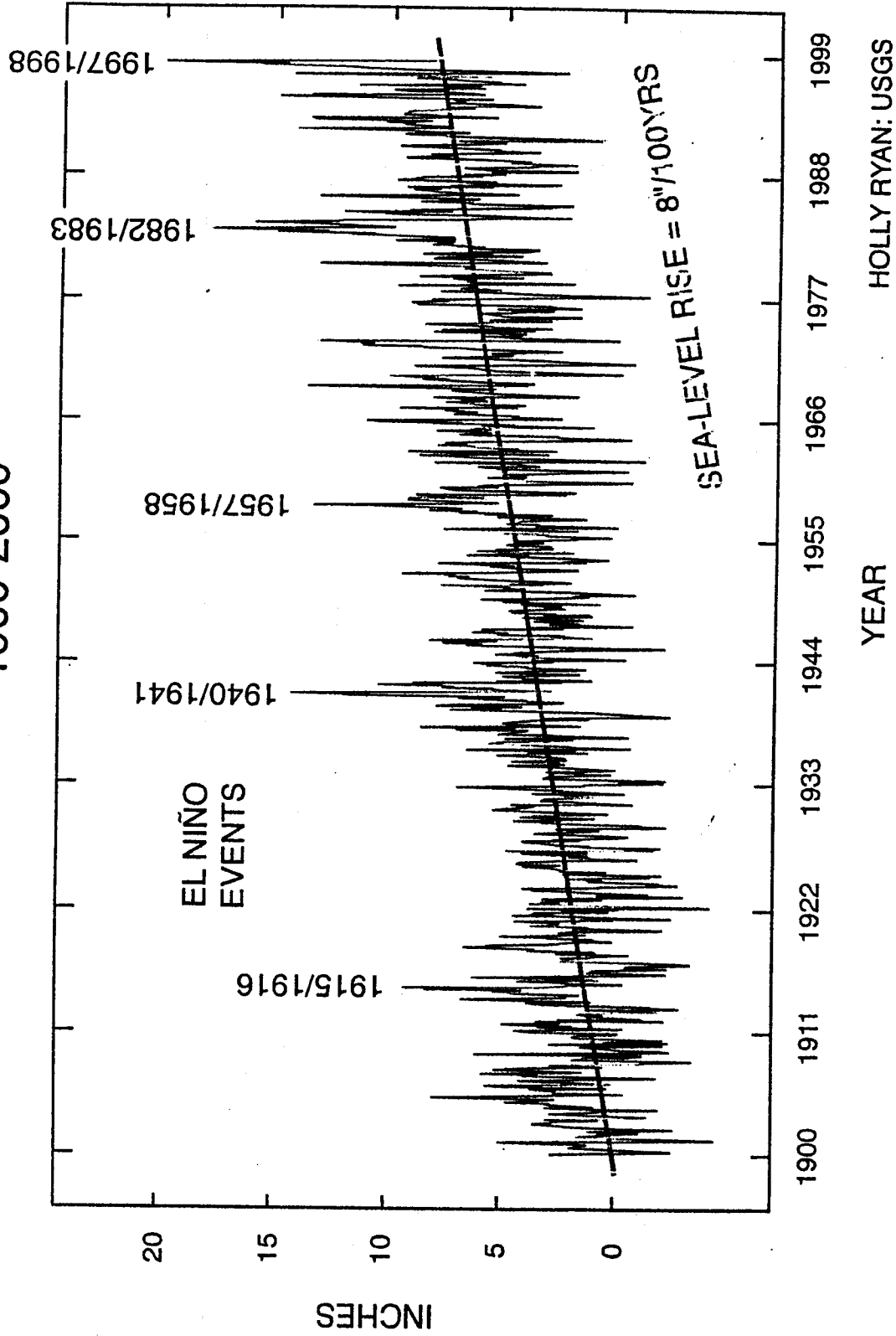
21/10/11

C.

CROSS SECTION OF POINT ARENA AREA SHOWING SEA LEVEL RISE, TECTONIC UPLIFT AND SEA-CLIFF RETREAT



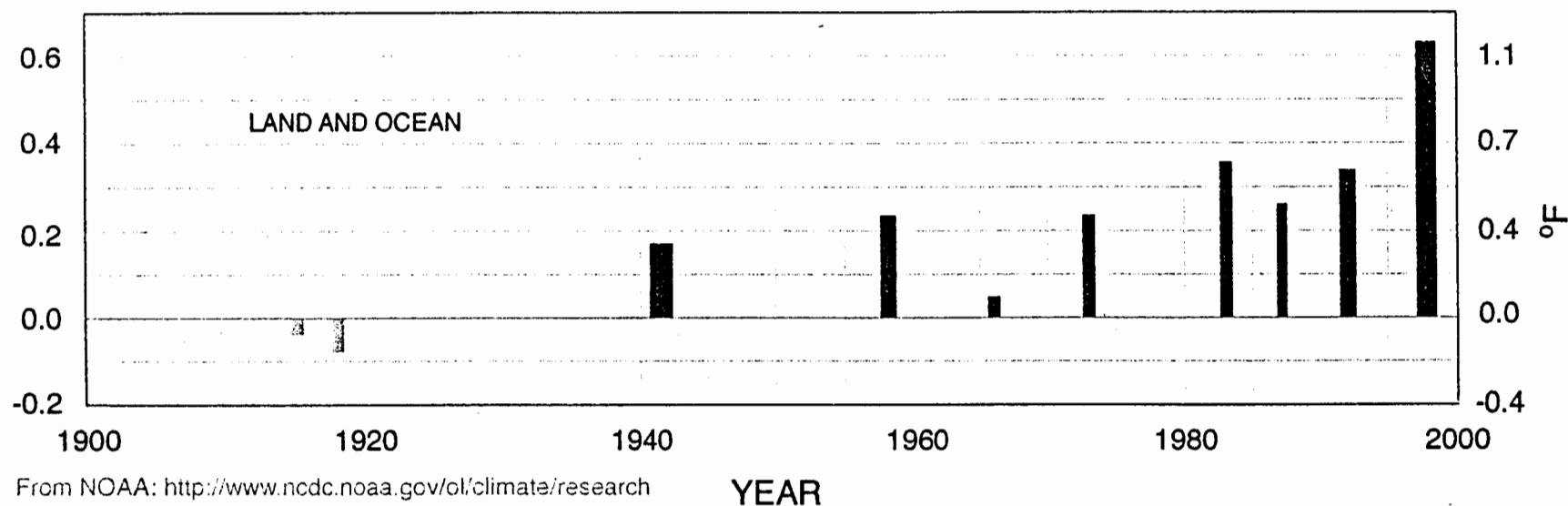
FORT POINT TIDE-GAUGE RECORD 1900-2000



21291

FI

GLOBAL SURFACE MEAN TEMPERATURE ANOMALIES TEN STRONGEST EL NINO EVENTS 20TH CENTURY



STRONG EL NINO EVENTS ARE BECOMING
MORE FREQUENT AND MORE SEVERE

7

G.

COMPONENTS OF SEA-LEVEL ELEVATION

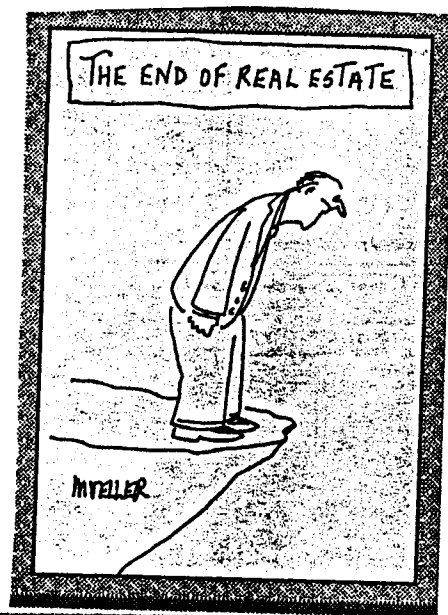
| | | |
|---------------|------------|------|
| | MEASURED | 140% |
| TEMPERATURE | 25cm (10") | |
| AIR PRESSURE | 20cm (8") | |
| WIND TO NORTH | 30cm (12") | |
| | | 100% |

ASTRONOMICAL 200cm (79")

MODIFIED FROM
HOLLY RYAN USGS

MEAN LOWER LOW TIDE

15 of 16



16 of 16

July 23, 2003

Coastal Commission
North Coast Staff
Attn: Robert Merrill
710 East E Street, Suite 200
Eureka, CA 95501

RE Hearing item: TH8A
Case# A-1-MEN-01-56

RECEIVED

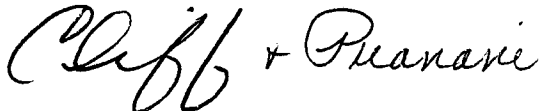
JUL 25 2003

CALIFORNIA
COASTAL COMMISSION

Dear Coastal Commission,

We are writing this letter in support of the final application of the Williams home near Point Arena. We are long time residents (28 years) of the north coast area and are naturally concerned about the quality of the various building projects as they come along. From our observation the quality and design features incorporating a balanced blending with the environment and less obtrusiveness seems to be improving. We feel this is due to the high standards set by the Coastal Commission. The Williams project while nearly invisible from the public highway or the beach seems to more than fit this positive pattern. It is obvious to us the Williams's have reworked their design to both satisfy the very legitimate concerns some may have regarding visual blight and to afford them the opportunity to construct a wonderful home.

Sincerely,



Cliff and Puanani Putnam
32300 Annapolis Road
Annapolis, CA 95412
707/886-5142

EXHIBIT NO. 10

APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

CORRESPONDENCE



EXHIBIT NO. 11

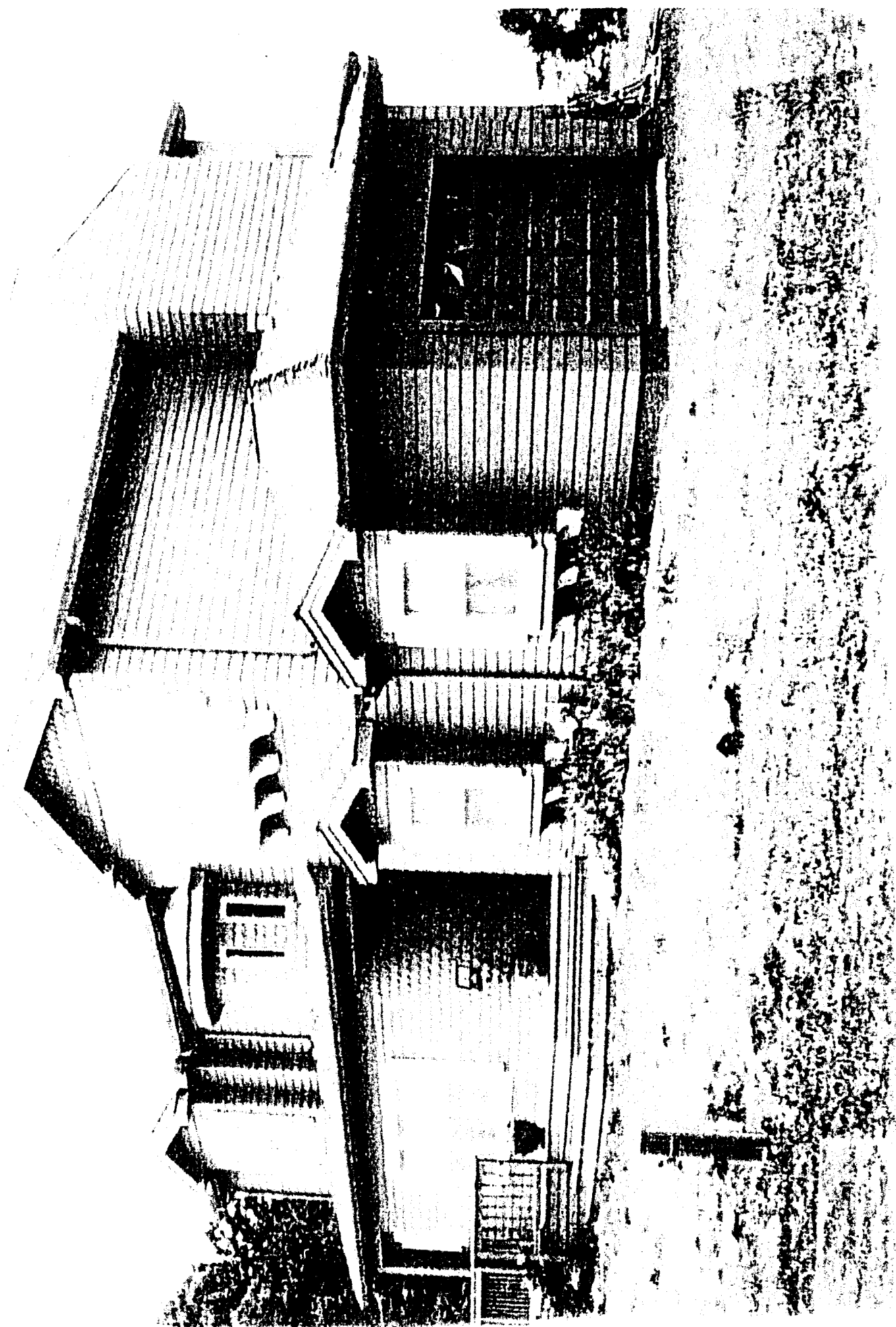
APPLICATION NO.

A-1-MEN-01-056

WILLIAMS

PHOTOGRAPHS OF
NEIGHBORING HOUSES

(1 of 2)



2022