



## Staff Report to the Zoning Administrator

Application Number: **07-0014**

**Applicant:** Jimmy Fox, Architect  
**Owner:** William Wilson  
**APN:** 043-105-05

**Agenda Date:** October 17, 2008  
**Agenda Item #:** **2**  
**Time:** After 10:00 a.m.

**Project Description:** Proposal to demolish an existing single family dwelling, construct a new three story single family dwelling with a non-habitable lower level (to comply with Federal Emergency Management Agency flood elevation requirements) and reinforce two existing retaining walls.

**Location:** Property located on the bluff side of Beach Drive, about ½ mile south of Rio Del Mar Esplanade (409 Beach Drive)

**Supervisory District:** Second District (District Supervisor: Ellen Pirie)

**Permits Required:** Coastal Development Permit and Variances to increase the number of stories from a maximum of two to three within the Urban Services Line, to reduce the required 20 foot front yard setback to about 13 feet, to reduce a required 5 foot side yard setback to about 1/2 foot, to increase the maximum 28 foot height limitation to about 32'6", and to exceed the maximum 50 % area allowed for parking and driveway access.

**Technical Reviews:** Geologic and Geotechnical Reports

### Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 07-0014, based on the attached findings and conditions.

### Exhibits

A.	Project plans	I.	Printout, Discretionary application comments, dated 09/12/08
B.	Findings	J.	Urban Designer comments, dated 3/25/08
C.	Conditions	K.	Geologic Hazard Assessment, dated 4/13/07
D.	Categorical Exemption (CEQA determination)	L.	Geotechnical and Engineering Geology Report review letter, dated 4/8/08
E.	Assessor's parcel map		
F.	Zoning & General Plan map		
G.	Location Map		
H.	Photos-simulation		

County of Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor, Santa Cruz CA 95060

- M. Excerpt of Recommendations from Engineering Geologic Investigation prepared by Rogers E. Johnson, dated January 7, 2008 (report on file)      Geotechnical Investigation prepared by Haro, Kasunich and Associates, Inc., dated January 2008 (report on file)
- N. Excerpts of Discussion, Conclusions and Recommendation from      O. Comments & Correspondence

### Parcel Information

Parcel Size: 5,900 square feet  
Existing Land Use - Parcel: Residential  
Existing Land Use - Surrounding: Residential  
Project Access: Beach Drive  
Planning Area: Aptos  
Land Use Designation: R-UL (Urban Low Density Residential)  
Zone District: R-1-8 (Single family residential - 8,000 square feet per unit)  
Coastal Zone: ☒ Inside      ☐ Outside  
Appealable to Calif. Coastal Comm. ☒ Yes      ☐ No

### Environmental Information

Geologic Hazards: Federal Emergency Management Agency (FEMA) Zone VE (wave run-up, landsliding(base of coastal bluff))  
Soils: 109 (Purisima Formation)  
Fire Hazard: Not a mapped constraint  
Slopes: 0% to over 50%  
Env. Sen. Habitat: Not mapped/no physical evidence on site  
Grading: No grading proposed  
Tree Removal: No trees proposed to be removed  
Scenic: Located across the street from a public beach  
Drainage: Existing drainage adequate  
Archeology: Not mapped/no physical evidence on site

### Services Information

Urban/Rural Services Line: ☒ Inside      ☐ Outside  
Water Supply: Soquel Creek Water District  
Sewage Disposal: Santa Cruz County Sanitation District  
Fire District: Aptos/La Selva Fire Protection District  
Drainage District: Zone 6

### History

The existing single family dwelling was constructed in 1952. It was damaged by a landslide in the winter of 2006 and subsequently approved for a remodel and addition under Coastal Development Permit 06-0009.

### Project Setting

The property is located on the bluff side of Beach Drive in Aptos at 409 Beach Drive. The property is essentially flat towards the front third of the property and remainder is steeply sloped, in excess of 50% slopes. A line of mostly two and three story homes already exists on either side of the existing residence. A public beach is located directly across Beach Drive.

### Zoning & General Plan Consistency

The subject property is a 5,900 square foot lot, located in the R-1-8 (Single family residential - 8,000 square feet per unit) zone district, a designation which allows residential uses. The proposed Single Family Dwelling is a principal permitted use within the zone district and the project is consistent with the site's (R-UL) Urban Low Density Residential General Plan designation.

	<b>R-1-8 Standards</b>	<b>Existing Residence</b>	<b>Proposed Residence</b>
<b>Front yard setback</b>	20 feet	10 feet (non-conforming)	8 feet* (non-conforming)
<b>Rear yard setback</b>	15 feet	100+/-	100+/-
<b>Side yard setback</b>	5 feet & 5 feet**	0 feet and 0 feet (non-conforming)	5 feet and 1/2 foot* (non-conforming)
<b>Building Height</b>	28 feet	22 feet	32'6"*** (non-conforming)
<b>Number of Stories</b>	2	2	3* (non-conforming)
<b>Lot Coverage</b>	30%	----	22%
<b>Floor Area Ratio</b>	50 %	----	48%
<b>Parking</b>	3 bedrooms-3 spaces	-----	3 spaces-over 50% front yard*

\*Variances required

\*\* Parcels less than 60 feet wide (County Code 13.10.323)

### Local Coastal Program Consistency

The General Plan/Local Coastal Program Land Use Designation of the parcel is R-UL (Urban Low Density Residential), implemented by the R-1-8 (8,000 square foot minimum-single family residence) zone district. The proposed single-family dwelling complies with the purposes of this Land Use Designation, as the primary use of the site will be residential.

### Geologic and Coastal Hazard Issues

General Plan policy 6.2.10 requires all development to be sited and designed to avoid or minimize hazards as determined by geologic or engineering investigations. The subject property

is located within the V zone, a Federal Emergency Management Agency (FEMA) designated flood hazard area and at the base of a coastal bluff that is subject to landslides. The V zone designates that the area is subject to inundation resulting from wave run-up. FEMA regulations and the County Geologic Hazards ordinance (Chapter 16.10) requires flood elevation of all new residential structures. General Plan policy 6.2.15 allows for new development on existing lots of record in areas subject to storm wave inundation or coastal bluff erosion where a technical report demonstrates that potential hazards can be mitigated over the 100-year lifetime of the structure. Geologic and Geotechnical Reports were required as a result of the Geologic Hazard Assessment (Exhibit K) to specifically address the coastal and slope stability hazards that are documented for this area. The reports which were reviewed and accepted by the County Geologist (Exhibit L), required that the lowest habitable floor must be elevated above 21' mean sea level to comply with the FEMA regulations and above the potential landslide mass due to slope instability. In addition, the proposed storage area and fence must function as "break-away" walls.

Due to the location of the residence at the base of a coastal bluff and a potential for landslide impact, mitigations have been incorporated which include, but are not limited to, elevation of the structure a minimum of 8 feet above the ground surface or above the Base Flood Elevation (BFE), which ever is greater. In this case, the BFE requirement is greater and therefore the structure will be elevated approximately 11 feet above the existing ground surface. In addition the engineered foundation and structure must be anchored to prevent floatation, collapse and lateral movement due to the effects of wind and water. The proposed replacement home will be setback a minimum of 14 feet from the toe of the lowest retaining wall and shall use hurricane impact windows in the rear of the structure (which are also recommended to be used on the sides) (see Exhibit L).

#### Public Access

The proposal complies with Policy 7.7.10 of the General Plan/LCP (Protecting Existing Beach Access) in that pedestrian and emergency vehicle access will not be impeded by the proposed dwelling and construction, and no public access easements exist across the subject property. Furthermore, the site is not designated for Primary Public Access in Policy 7.7.15 of the General Plan/LCP, and is not suitable for access due to the steep topography of the site.

#### Variances

##### Front and Side Yard Setbacks

The site is a narrow parcel (35 feet wide) and is constrained by wave run up hazards on the south side, and slope instability on the north side. The 5,900 square foot parcel is less than eighty (80) percent of the minimum site area required for the R-1-8 zone district (County Code 13.10.323(d)2A) and is allowed to have setbacks equal to those in the zone district that has the minimum site area or dimensions which most closely correspond. In addition, the useable, relatively flat portion is approximately 2,200 square feet. Therefore, in order to meet the R-1-8 zone district site standards and slope stability setbacks, the property owner would be limited to a home with an approximately 750 square foot footprint.

In order to build a home of similar size to the existing dwelling and those on neighboring parcels, the applicant is requesting a variance to the front and one side yard setback. The size and narrow

width of the parcel is similar to those within the nearby RB (Residential Beach) zone district, which allow zero and five foot side yard setbacks and 10 foot front yard setback (County Code 13.10.323). Many existing residences along Beach Drive, including the existing home, are built to the property lines. For this reason, the granting of a variance to the front yard and one side yard setback to ½ foot would not be a granting of special privilege. In addition, the flood and slope stability constraints are special circumstances that would deny the property owner a reasonably sized dwelling as enjoyed by residents on the bluff side of Beach Drive.

#### Stories and Height

Inside the Urban Services Line, the County Code prohibits single-family dwellings greater than two stories absent a variance approval. The area available to build is constrained by steep slopes on the north side and FEMA regulations that require a non-habitable lower floor. To compensate for FEMA flood elevation requirements, constructing within the constraints of the site, and minimizing grading, the applicant has requested a variance to construct a three-story single-family dwelling with approximately 2,000 habitable square feet. Without the variance for number of stories the home would be limited to approximately 750 habitable square feet, as the first floor must be non-habitable due to FEMA regulations. The steep topography of the site (with slopes greater than 50%) and the FEMA flood elevation requirements are special circumstances inherent to the property that would deny the property owner a reasonably sized dwelling as enjoyed by other owners with property in the R-1-8 zone district and along Beach Drive, if the home were limited to two stories.

Many homes along the bluff side of Beach Drive already have three stories, including newer homes at 383 and 385 Beach Drive. For this reason, the granting of a variance to allow three stories will not constitute the granting of a special privilege. In addition, the FEMA elevation requirement and Geologic and Geotechnical report recommendations places the habitable floors 11 feet above the non-habitable first floor and therefore it is not possible to build three stories within 28 feet. The structure will be 30 feet tall with a 2 ½ foot parapet to comply with the firewall requirements California Building Code for fire protection due to it's proximity to the property line. The parapet is only necessary on the west portion of the structure but has been included on the east portion for design purposes, which is supported by the Urban Designer.

#### Parking and Access

The proposed home is three bedrooms and requires three parking spaces (County Code 13.10.552). The property is located at the base of a coastal bluff and is within the wave run up hazard zone. In order to mitigate for these hazards the structure must be elevated to comply with FEMA regulations and the Geologic Hazard Ordinance. Newer homes along Beach Drive known as "bunker homes" have mitigated for these hazards by building retaining walls. Placing part of the residence into the bluff and elevating the structure so the first floor is non-habitable and made of "breakaway walls". The applicant does not propose to build a "bunker house", and proposes to elevate the structure to mitigate for the flood and slope stability hazards, where the bottom level will be non-habitable and will be used for storage and parking only. In addition, any walls will be "breakaway" to comply with FEMA and the Geologic Ordinance.

Parking areas, aisles, and access drives are not allowed to occupy more than fifty percent of the

front yard without a variance (County Code 13.10.554(d)). The applicant is requesting a variance as the area under the structure will be used as a carport and storage with the entrance to the home setback beyond the front yard setback. The proposed design uses more than fifty percent of the front yard for parking and driveway access. Older homes in the vicinity also exceed the fifty percent allowed and therefore staff believes the granting of a variance to parking and driveway access is not a granting of special privilege. County Code requires that each parking space be a minimum of 8.5' by 18' and three spaces are required for the proposed home. It is not possible to locate all parking spaces on site without the required variance since the dwelling must be located near the front of the parcel to avoid slope instability in the rear portion.

### **Design Review**

The project is boxy three story single family residence with a flat roof that is elevated to minimize wave run up and landslide hazards. The residence includes two deck areas and the first floor is non-habitable. The proposed materials of the home include stucco to be painted earth tone colors that blend with the bluff, and wood trim doors and windows in a blue that is commonly found in homes along Beach Drive. The project is located within a mapped scenic resource area, and therefore must comply with General Plan Policy 5.10b (New Development within Visual Resource Areas), which states that new development should be designed and constructed to have minimal to no adverse impact on visual resources. General Plan/LCP policies 5.10.2 and 5.10.3 also require that development be evaluated against the context of the environment, utilize natural materials, blend with the area and integrate with landforms. General Plan/LCP policy 5.10.7 allows structures to be visible from a public beach where compatible with the pattern of existing development.

Generally, impacts to existing public views occur when development extends into areas that are currently natural and are visible from the beach. In this case, the project site is located within a line of existing two and three-story homes on the bluff side of Beach Drive constructed in the late 1960's with a public state beach located across the street.

The proposed dwelling will be visible from the open beach (See photo-simulations in Exhibit H). However, the design of the structure will be integrated into the Beach Drive neighborhood in terms of height, bulk, mass, scale, architectural style, color, and materials. The size of the proposed residence will be similar to older homes and proportioned to the size of the lot, as the residence will comply with County standards for Floor Area Ratio and lot coverage. The mass of the residence will be broken up by stepping back floors and including decks.

General Plan/LCP policies 8.6.5 and 8.6.6 require that development be complementary with the natural environment and that the colors and materials be chosen blend with the natural landforms. To comply with this policy, the proposed dwelling will incorporate earth-tone colored stucco, and wood doors and trims that are commonly found in homes along the coastal bluff, minimizing the visual impact of the residence.

The County's Urban Designer evaluated the project for conformance with the County's Coastal Zone Design Criteria (Section 13.20.130) and the County's Site, Landscape, and Architectural Design Review Ordinance (Section 13.11) (Exhibit J). The Urban Designer determined the proposed single-family dwelling to be in conformance with all applicable provisions of these ordinances, including criteria regarding protection of the public viewshed and compatibility with

the existing neighborhood and coastal setting. Although the project will be visible from the beach, the design, materials, and colors minimize the visual impact of the dwelling to the greatest extent possible while maintaining a similar bulk, mass, and scale to existing and proposed houses on the bluff side of Beach Drive.

### **Conclusion**

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

### **Staff Recommendation**

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **07-0014**, based on the attached findings and conditions.

**Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.**

**The County Code and General Plan, as well as hearing agendas and additional information are available online at: [www.co.santa-cruz.ca.us](http://www.co.santa-cruz.ca.us)**

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## Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

This finding can be made, in that the property is zoned R-1-8 (Single family residential - 8,000 square feet per unit), a designation which allows residential uses. The proposed Single Family Dwelling is a principal permitted use within the zone district, consistent with the site's (R-UL) Urban Low Density Residential General Plan designation.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that the proposal does not conflict with any existing easement or development restriction such as public access, utility, or open space easements in that no such easements or restrictions are known to encumber the project site.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

This finding can be made, in that the development is consistent with the surrounding neighborhood in terms of architectural style, where newer and older homes are boxy, with flat roofs, have multiple decks and many windows facing the beach. The home does not propose any grading and includes mitigations such as elevation of the structure, an engineered foundation, and hurricane impact windows in the rear and side of the structure for the coastal hazards and slope stability hazards which may occur within its' 100 year lifespan (landslides, seismic events and coastal inundation). The project is not on a ridgeline, and does not obstruct any public views to the shoreline. The design and siting of the proposed residence will minimize impacts on the site and the surrounding neighborhood. The house will incorporate stucco in earth tone colors that are consistent with the existing development. The height, although not consistent with the existing older development immediately adjacent, it is not out of character with existing homes along Beach Drive most of which are three stories similar to the proposed dwelling. In addition, newer homes that are not built stepped back into the hillside will also be over height in order to mitigate for the hazards along the bluff of side of Beach Drive.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.

This finding can be made, in that the project site is not located between the shoreline and the first public road. Consequently, the Single Family Dwelling will not interfere with public access to the beach, ocean, or any nearby body of water as it is located on the bluff side of Beach Drive. Further, the project site is not identified as a priority acquisition site in the County Local Coastal



Program.

5. That the proposed development is in conformity with the certified local coastal program.

This finding can be made, in that the replacement structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Additionally, residential uses are allowed uses in the R-1-8 (Single family residential - 8,000 square feet per unit) zone district of the area, as well as the General Plan and Local Coastal Program land use designation. Developed parcels in the area contain single family dwellings. Sizes vary in the area, and the design submitted is not inconsistent with the existing range of boxy, three story homes, with decks on multiple levels and a bottom floor that is primarily used for parking and storage.

### **Development Permit Findings**

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, as the proposed project complies with all development regulations applicable to the site with the exception of the limitation on the maximum number of stories, height, front and side yard setback and parking and driveway in excess of 50% of the front yard for which Variances are sought. The parcel is located at the base of a coastal bluff within a coastal hazard area and is expected to be subject to wave inundation, landslides and seismic shaking hazards. Engineering Geologic and geotechnical reports have been completed for this project analyzing these hazards and recommending measures to mitigate them. The habitable portions of the dwelling will be constructed above 21 feet mean sea level (msl), which is the expected height of wave inundation predicted for a 100-year storm event. The proposed storage area will incorporate break away walls and non-structural walls on the lower level to minimize structural damage from wave action.

Construction will comply with prevailing building technology, the Uniform Building Code, the County Building ordinance, and the recommendations of the Engineering Geologic and Geotechnical report to insure the optimum in safety and the conservation of energy and resources. The structure will be engineered to withstand landslide impacts by being elevated to provide freeboard under the structure and piers that will be designed to withstand the impact load as specified by the accepted Geotechnical and Geologic Reports (Exhibits M& N). The project is specifically designed to accommodate natural coastal erosion processes of the bluff face by reinforcing two existing retaining walls at the base of the bluff, elevating the structure, and requiring that the dwelling will be setback a minimum of 14 feet from the toe of the lowest retaining wall. Additionally, an engineered foundation is required in order to anchor the dwelling to prevent floatation, collapse and lateral movement due to the effect of wind and water loads (Exhibit L). Adherence to the recommendations of the soils engineer and geologist in the house design and construction will provide an acceptable margin of safety for the occupants of the proposed home. The project design will not change the

existing pattern debris flow and will not adversely affect the adjacent dwellings. The reinforcement of existing retaining walls will provide some stability to the toe of the cliff, but will not affect the stability of the upper cliff.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the Single Family Dwelling and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-1-8 (Single family residential - 8,000 square feet per unit) zone district in that the primary use of the property will be one Single Family Dwelling that meets all current site standards for the zone district except for number of stories, height, front and side yard setback, and exceeding the maximum 50 % front yard area allowed for parking and driveway access for which variances are being sought.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the Urban Low Density Residential (R-UL) land use designation in the County General Plan.

The proposed Single Family Dwelling will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the Single Family Dwelling will not adversely shade adjacent properties, and will meet current setbacks for the zone district with the exception of number of stories, height, front and side yard setback, and exceeding the maximum 50 % front yard area allowed for parking and driveway access for which variances are being sought. However, the use and density will ensure access to light, air, and open space in the neighborhood.

The proposed Single Family Dwelling will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed Single Family Dwelling will comply with the site standards for the R-1-8 zone district with the exception of number of stories, height, front and side yard setback, and exceeding the maximum 50 % front yard area allowed for parking and driveway access for which variances are being sought. However, this will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed is a replacement Single Family Dwelling and

there is no anticipated increase in the level of traffic that will adversely impact existing roads and intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed replacement structure is located in a neighborhood containing homes of similar architectural style that are large boxy, with flat roofs, decks on multiple levels and lots of windows facing the beach, and the proposed replacement Single Family Dwelling is consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed replacement Single Family Dwelling will be of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area.

### **Variance Findings**

1. That because of special circumstances applicable to the property, including size, shape, topography, location, and surrounding existing structures, the strict application of the Zoning Ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

This finding can be made, in that subject parcel contains very steep slopes (slopes in excess of 50%) on an unstable coastal bluff, with the only suitable area for development near the base of the bluff within the coastal flood hazard area (Flood Zone-V). Due to the topography and location within a flood hazard area, the structure must be elevated above the expected 100-year coastal inundation level at 21 feet above mean sea level in accordance with the regulations set forth by the Federal Emergency Management Agency (FEMA) and Chapter 16.10 (Geologic Hazards Ordinance) of the County Code. The lower floor area cannot be used as habitable space due to potential flood hazards from wave run-up and the structure cannot be moved back to be next to the unstable slope, so variances have been requested to increase the number of stories from a maximum of two to three within the Urban Services Line, to reduce the required 20 foot front yard setback to about 8 feet, to reduce one required 5 foot side yard setbacks to about 1/2 foot, to increase the maximum 28 foot height limitation to about 32' 6", and to exceed the maximum 50% area allowed for parking and driveway access in the front yard setback to about 71% in order to construct a home comparable to existing and recently approved homes in the vicinity and accommodate parking on site as required by County Code section 13.10.551.

There are homes in the vicinity along the bluff side of Beach Drive that are three stories, so a variance to height requirements would not constitute the granting of a special privilege as existing dwellings in the neighborhood already have three stories. In addition, to number of stories the height of the structure will be increased beyond the 28 foot height allowed to 32' 6",

which includes a 2 1/2' foot parapet for fire protection that is required per California Building Code that will not be continuous around the top of the structure. The increase in height and number of stories is driven by the required elevation of the non-habitable first floor that has to be elevated above the 21 base flood elevation which places it at 11 feet above existing grade to comply with FEMA regulations, therefore it is not possible to construct two habitable floors within 28 feet. The strict application of the zoning ordinance would restrict this property to a home of approximately 750 square feet of habitable space.

The narrow width of the parcel at 35 feet is less than eighty percent of the required 60 foot width (13.10.323(d)2A) for the zone district and setbacks for this parcel corresponded more closely with the nearby RB (Residential Beach) zone district which allows for zero and five yard setbacks, and a ten foot front yard setback. Existing development along Beach Drive is built to zero setback and granting reduced side yard setback to 1/2 foot would not constitute a granting of special privilege. In addition, the structure cannot be pushed back to the base of the bluff as the Geologic and Geotechnical report review acceptance letter (Exhibit L) requires the proposed habitable structure be located 14 feet away from the toe of the lowest retaining wall. Therefore, the required twenty foot front yard setback would reduce the home to a size of approximately 750 square feet of habitable space per floor with no outdoor useable space and no habitable space on the ground floor. The granting of a variance to the front yard setback is not a granting of special privilege as existing homes, including this property are already built within the required twenty foot front yard setback to about 8-10 feet. In addition, the proposed living space will be set back 15 to 18 feet from the edge of the property line and approximately 2 feet of deck on the second story is proposed to be closer to the property line than the existing dwelling.

The location of the property requires elevation of the structure and precludes it from using the first floor for just about anything but storage and parking, as it is to be non-habitable and any structures constructed within the wave run up zone must be "breakaway" to comply with FEMA regulations. Therefore, because the area under the structure will be used as a carport and storage with the entrance to the home setback beyond the front yard setback, more than fifty percent of the front yard will be used for parking and driveway access. Older homes in the vicinity also exceed the fifty percent allowed and therefore the granting of a variance to parking and driveway access is not a granting of special privilege.

2. That the granting of the variance will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental to public health, safety, or welfare or injurious to property or improvements in the vicinity.

This finding can be made, in that compliance with the recommendations and construction methods required by the Engineering Geologic and Geotechnical reports accepted by the Planning Department will insure that granting the variance to construct the proposed three-story single family dwelling will not be materially detrimental to the public health, safety and welfare or be materially injurious to property or improvements in the vicinity. The residence is required to be elevated above 21 feet mean sea level with no habitable features on the ground floor and constructed with break-away walls (except those used as support structures). No mechanical, electrical or plumbing equipment shall be installed below the base flood elevation. The dwelling will be engineered to withstand landslide impacts by elevating the structure so the mass slides under the dwelling and will be setback a minimum of 14 feet from the toe of the lowest retaining

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wall. Additionally, an engineered foundation is required in order to anchor the dwelling to prevent floatation, collapse and lateral movement due to the effect of wind and water loads (Exhibit L).

3. That the granting of such variances shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such is situated.

This finding can be made, in that the granting of variances to increase the maximum number of stories from two to three will not constitute a grant of special privilege, as similar variances have been granted for houses of similar construction on the bluff side of Beach Drive due to FEMA flood elevation requirements. Variances to increase the number of stories from two to three are frequently granted along Beach Drive. Variances to reduce the required 20 foot front yard setback to about 8 feet, to reduce one required 5 foot side yard setbacks to about 1/2 foot, to increase the maximum 28 foot height limitation to about 32' 6", and to exceed the maximum 50% area allowed for parking and driveway access in the front yard setback to about 71% will allow the property owners to construct a home comparable to existing and recently approved homes in the vicinity

## Conditions of Approval

Exhibit A: Project plans, three sheets, prepared by Jimmy Fox, Architect, dated 5/15/08.

- I. This permit authorizes the construction of a replacement Single Family Dwelling. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
  - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
  - B. Obtain a Demolition Permit from the Santa Cruz County Building Official.
  - C. Obtain a Building Permit from the Santa Cruz County Building Official.
    1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
  - D. Obtain a Grading Permit from the Santa Cruz County Building Official.
  - E. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).
  - B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
    1. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material board in 8 1/2" x 11" format for Planning Department review

and approval

2. Engineered grading, drainage, and erosion control plans. The plan must show all drainage improvements including the existing direction of surface drainage.
3. The project engineer or architect shall indicate on the plans that the project will comply with all FEMA regulations.
4. The lowest structural member of the lowest floor and all elements that function as part of the structure must be elevated above the base flood elevation.
5. The foundation and structure attached thereto shall be anchored to prevent flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year.
6. The space below the lowest floor shall either be free of obstructions or constructed with non-supporting breakaway walls intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.
7. The use of fill for structural support of buildings, including the parking slab, is prohibited. Plans shall show no fill to be placed beneath the slab per Coastal Construction Manual section 6.4.3.3 and County Code section 16.10.070(h)5.(vii).
8. Site grading shall not result in ponding or diversion of drainage toward other homes.
9. Utilities shall not be located within breakaway walls. All utilities below the base flood elevation shall be mounted on structural components only.
10. The parking slab shall be a maximum of 4 inches thick and shall be non-structural. Concrete slab shall be designed to break apart upon impact from storm surges.
10. The building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. This requirement is in addition to the standard requirement of detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of

the proposed structure. Maximum height is 32'6"-feet.

11. Remove the proposed flood lights from the parapet.
  12. Details showing compliance with fire department requirements.
- C. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal.
  - D. Meet all requirements of and pay Zone 6 drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.
  - E. Meet all requirements and pay any applicable plan check fee of the Aptos/La Selva Fire Protection District.
  - F. The project architect or engineer shall sign a certification prepared by the County Planning Department that indicates that the plans comply with all FEMA regulations.
  - G. Plan review letters shall be required from the soils engineer and project geologist stating that the plans conform to the recommendations in the accepted reports.
  - H. Provide required off-street parking for three cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.
  - I. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.
  - J. Complete and record a Declaration of Geologic Hazards. **You may not alter the wording of this declaration.** Follow the instructions to record and return the form to the Planning Department.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
  - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
  - C. Final letters shall be submitted from the soils engineer and project geologist



stating that the completed project conforms to their recommendations.

- D. The architect or engineer shall sign a certification form prepared by the County Planning Department stating that the completed project meets all requirements of FEMA for development within the V zone.
- E. A completed Elevation Certificate shall be prepared by the architect or engineer and submitted to Environmental Planning.
- F. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

#### IV. Operational Conditions

- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

#### V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
  - 1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

- C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
- D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

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Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

**Please note: This permit expires two years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.**

Approval Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Don Bussey  
Deputy Zoning Administrator

\_\_\_\_\_  
Maria Perez  
Project Planner

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Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

## NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 07-0014  
Assessor Parcel Number: 043-105-05  
Project Location: 745 Oakhill Road

**Project Description:** Proposal to demolish an existing single family dwelling, construct a new three-story single family dwelling with a non-habitable lower level (to comply with Federal Emergency Management Agency flood elevation requirements) and reinforce two existing retain

**Person or Agency Proposing Project:** Jimmy Fox, Architect

**Contact Phone Number:** 831-662-3426

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.  
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).  
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.  
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:


E. ☒ **Categorical Exemption**

Specify type: Class 1 - Existing Facilities (Section 15301)

F. **Reasons why the project is exempt:**

Proposal to construct improvements to protect an existing single family dwelling.

In addition, none of the conditions described in Section 15300.2 apply to this project.

  
\_\_\_\_\_  
Maria Perez, Project Planner

Date: 9/30/08

**FOR TAX PURPOSES ONLY**

THE ASSessor MAKES NO GUARANTEE AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE ASSessor MAKES NO GUARANTEE AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE ASSessor MAKES NO GUARANTEE AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

**POR. APTOS RANCHO**

S.E. 1/4 SEC. 18, & N.E. 1/4 SEC. 19, T.11S., R.1E., M.D.B. & M.

Tax Area Code

69-273

43-10

APTOS BEACH COUNTRY CLUB.

SUB. NO. 6

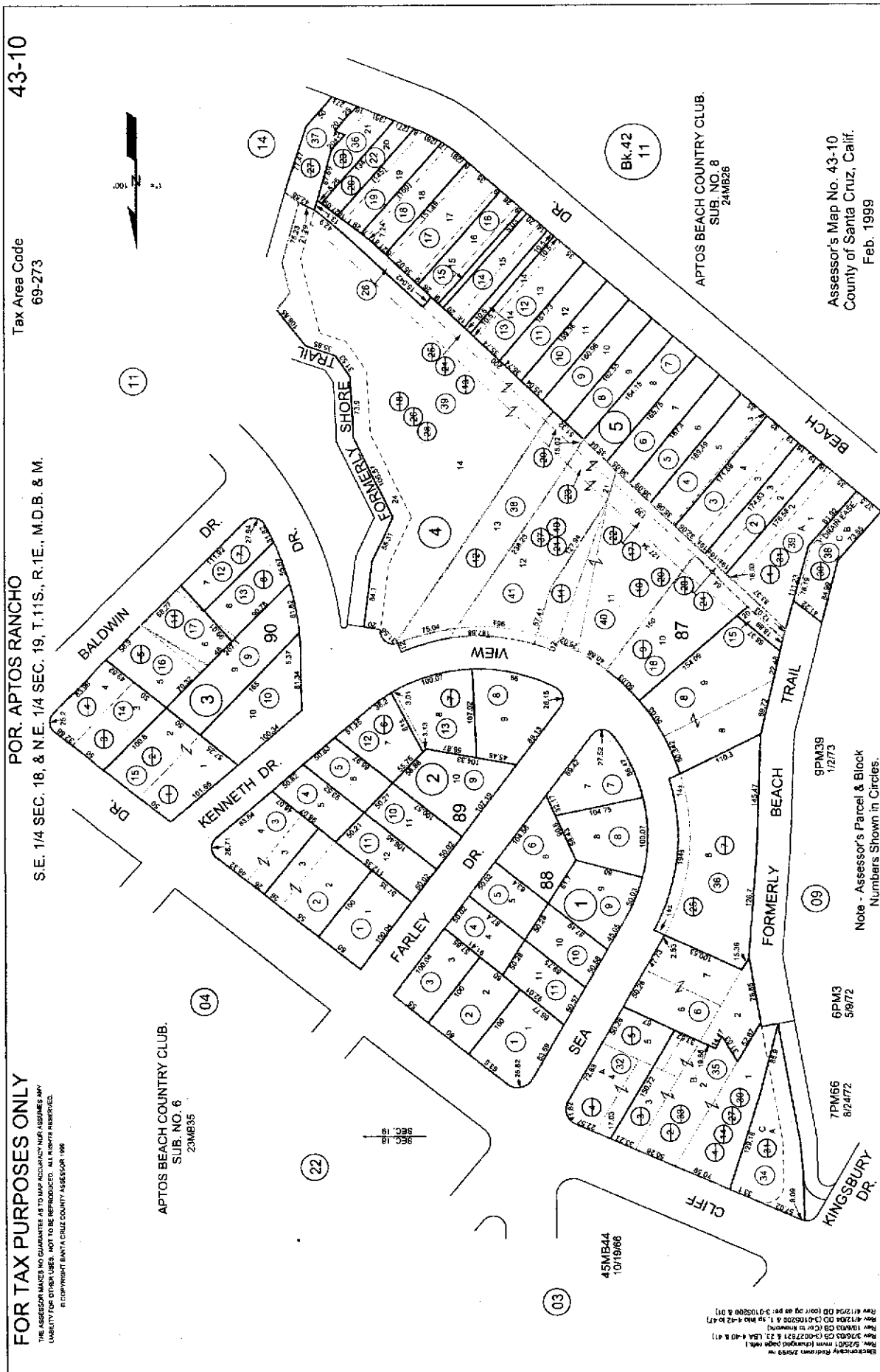
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APTOS BEACH COUNTRY CLUB.  
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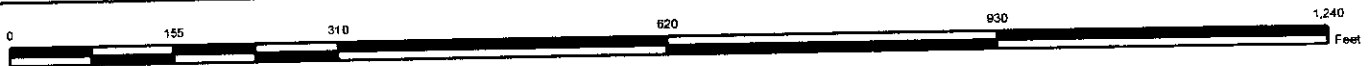
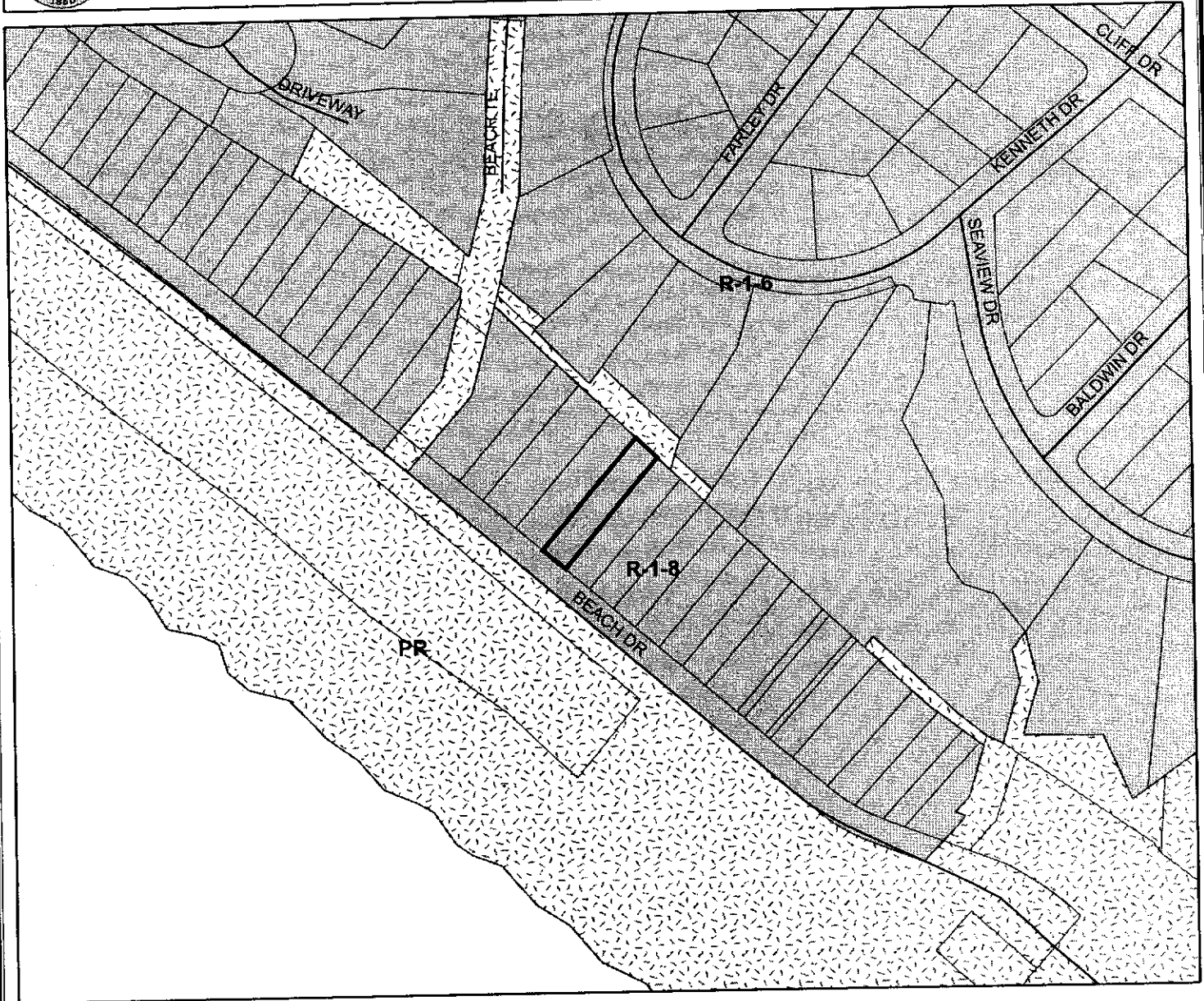
Assessor's Map No. 43-10  
County of Santa Cruz, Calif.  
Feb. 1999

Note - Assessor's Parcel & Block  
Numbers Shown in Circles.








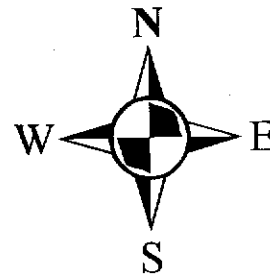


# Zoning Map



## Legend

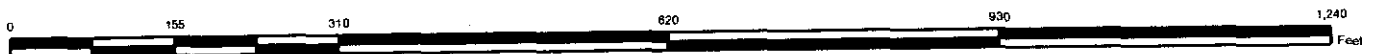
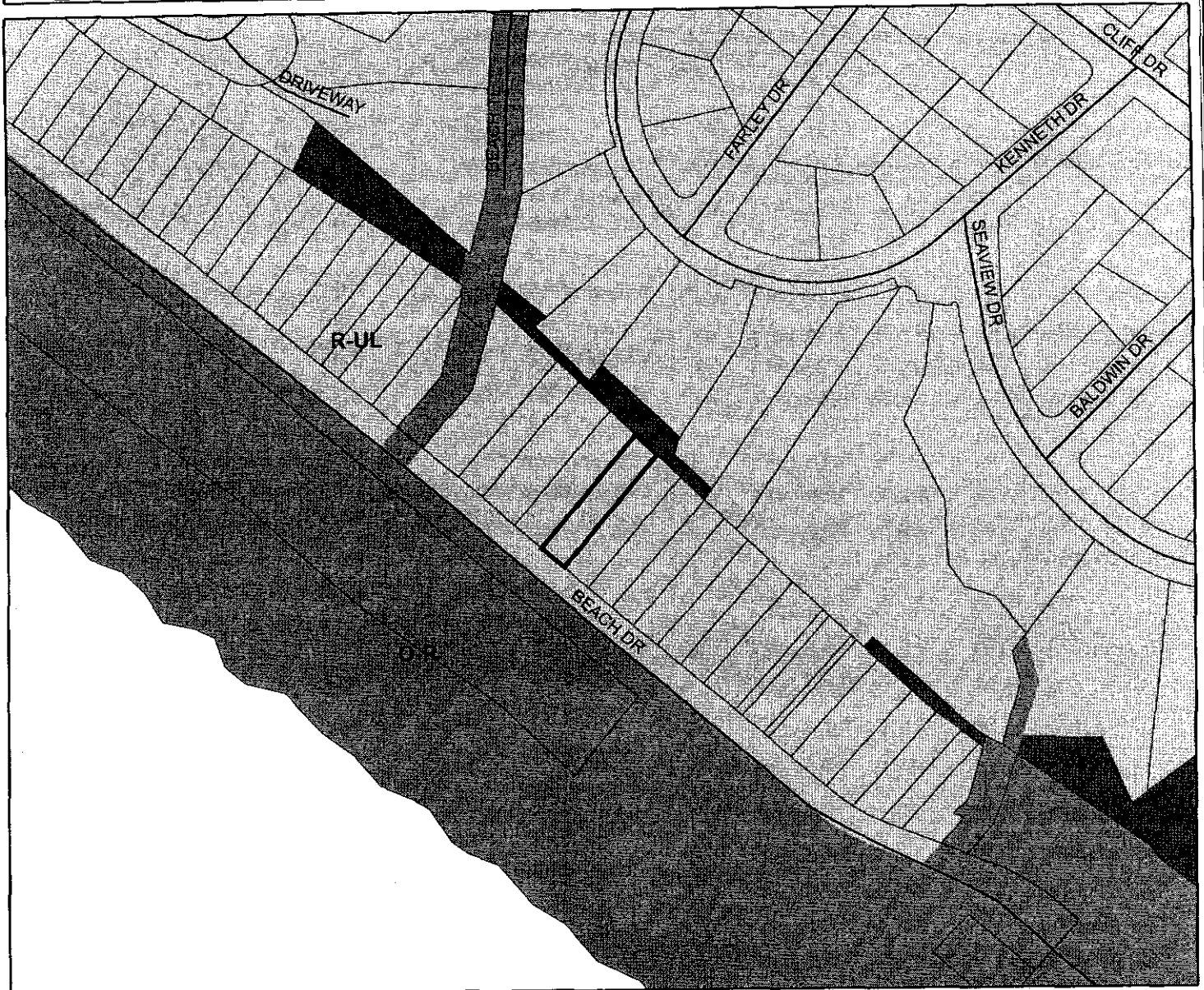
-  APN 043-105-05
-  Assessors Parcels
-  Streets
-  RESIDENTIAL-SINGLE FAMILY (R-1)
-  PARK (PR)



Map Created by  
County of Santa Cruz  
Planning Department  
January 2007

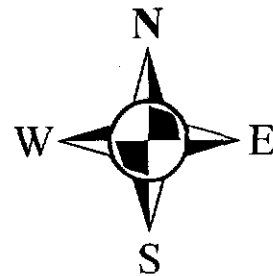


# General Plan Designation Map



## Legend

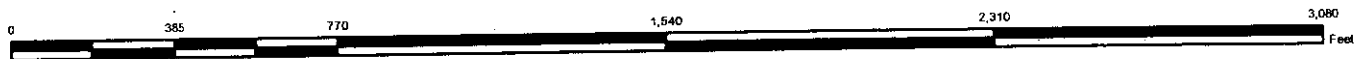
- APN 043-105-05
- Assessors Parcels
- Streets
- Residential - Urban Low Density (R-UL)
- Parks and Recreation (O-R)
- Urban Open Space (O-U)






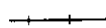

Map Created by  
County of Santa Cruz  
Planning Department  
January 2007

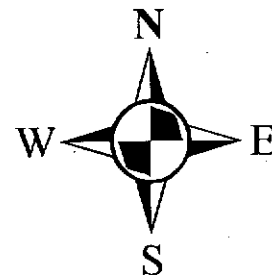


# Location Map



## Legend

-  APN 043-105-05
-  Assessors Parcels
-  Streets
-  Railroads
-  County Boundary



Map Created by  
County of Santa Cruz  
Planning Department  
January 2007



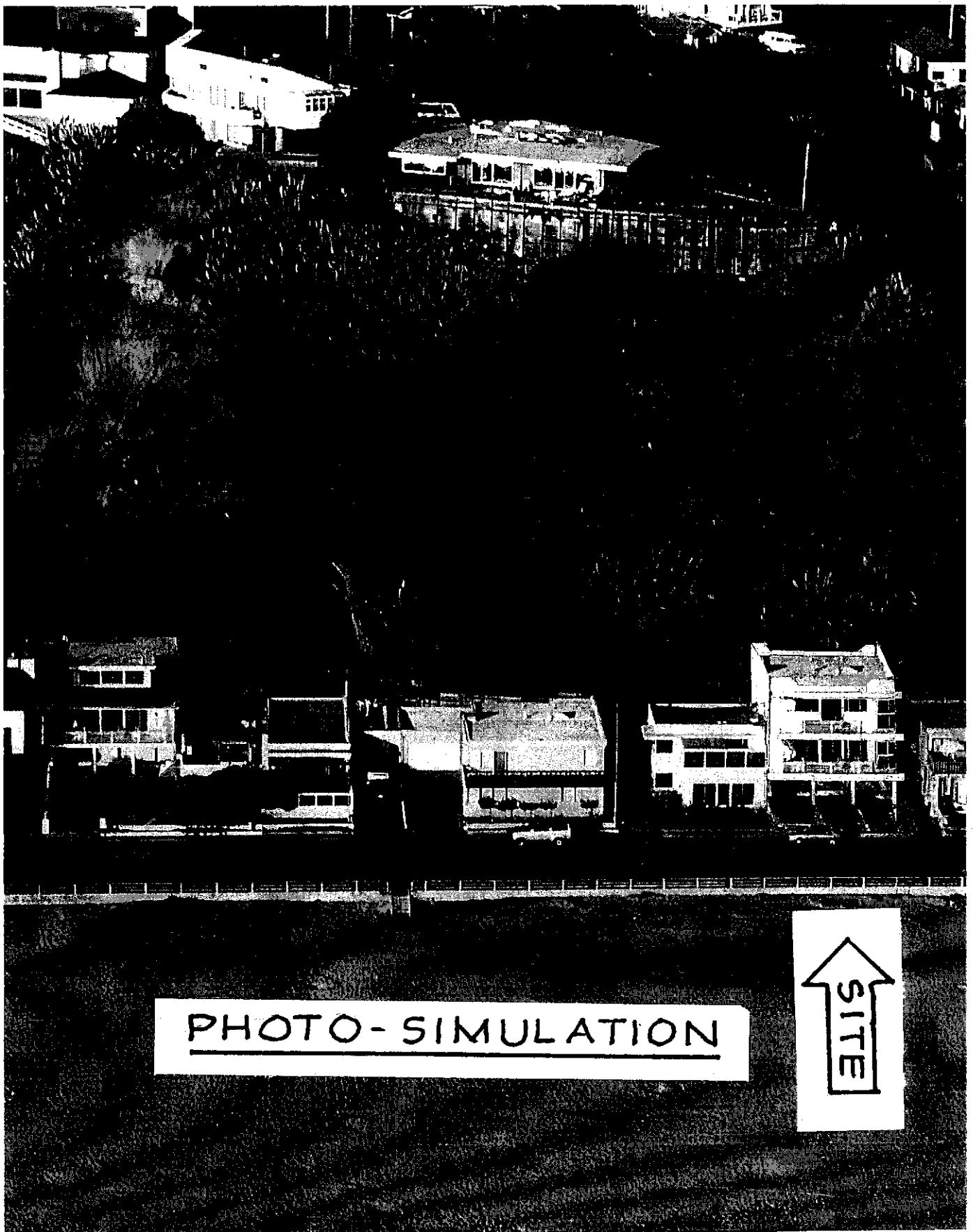


PHOTO-SIMULATION



PROPOSED  
SINGLE FAMILY RESIDENCE  
409 BEACH DRIVE, APTOS, CA.  
A.P.N. 43-105-05

PREPARED FOR A  
DEVELOPMENT PERMIT  
APPLICATION: 07-0014  
(PRELIMINARY)  
- 24 -

Jimmy W. Fox  
ARCHITECT  
1848 Redwood Dr.  
Aptos, CA. 95003  
831 662-3426

EXHIBIT H



**C O U N T Y   O F   S A N T A   C R U Z**  
**DISCRETIONARY APPLICATION COMMENTS**

**Project Planner:** Maria Perez  
**Application No.:** 07-0014  
**APN:** 043-105-05

**Date:** September 12, 2008  
**Time:** 10:22:36  
**Page:** 1

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**Environmental Planning Completeness Comments**

===== REVIEW ON JANUARY 9, 2007 BY JOSEPH L HANNA =====

A Geologic Hazards Assessment is required for the project. No further review will occur until this GHAs application is submitted. ===== UPDATED ON JANUARY 30, 2007 BY ANDREA M KOCH =====

1) More completeness comments may follow preparation of the GHAs.

2) Please submit a landscape plan showing the use of drought-tolerant plants suitable for survival on the coast.

===== UPDATED ON APRIL 3, 2008 BY JOSEPH L HANNA ===== The geotechnical engineer and engineering geology reports are acceptable. The report indicates that the retaining walls at the toe of the bluff must be reviewed by a structural engineer to determine if these walls need to be replaced. The applicant must determine if these walls will require replacing and if they do, the project description must be changed to include the walls' replacement.

===== UPDATED ON APRIL 4, 2008 BY ANTONELLA GENTILE =====

1. Show all grading necessary for proper drainage of the site and include estimated grading quantities. Please note that placement of fill in the flood hazard zone is prohibited.

2. Provide a surveyed topographical map showing existing contours and spot elevations.

3. Show existing and proposed contours on the site plan, extending beyond both upper and lower retaining walls.

4. Provide a cross-section through the proposed new home, retaining walls, and bluff. Show existing and proposed contours.

5. Once plans have been accepted by all reviewing agencies, provide plan review letters from the geotechnical engineer and engineering geologist referencing the final revised set of plans and stating that they conform to the recommendations in the soils report.

===== UPDATED ON JULY 1, 2008 BY ANTONELLA GENTILE =====

As stated above, please submit plan review letters from the soils engineer and the project geologist stating that the plans conform to the recommendations made in the soils and geology reports. The letters must reference the final revised set of plans.

Show all required grading for the modification and/or repair of the retaining walls. Include grading volume estimates. ===== UPDATED ON AUGUST 27, 2008 BY ANTONELLA GENTILE =====

Application is complete per Environmental Planning requirements.

**Environmental Planning Miscellaneous Comments**

===== REVIEW ON JANUARY 9, 2007 BY JOSEPH L HANNA =====

Full drainage and grading plans are required for the project. ===== UPDATED ON

Discretionary Comments - Continued

Project Planner: Maria Perez  
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JANUARY 30, 2007 BY ANDREA M KOCH =====

1) Show on the building permit application plans that the proposed construction will comply with FEMA flood regulations. The plans must show:

i) Elevation of all structures on pilings and columns so that the bottom of the lowest portion of the lowest structural member of the lower floor (excluding the pilings or columns) and elements that function as part of the structure, such as furnace, hot water heater, etc., are elevated to or above the base flood level. (Here, the base flood level is 21 feet, according to the FEMA Flood Insurance Rate Map, Panel 359.)

ii) Anchoring of the pile or column foundation and structure attached thereto to prevent floatation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

iii) The space below the lowest floor shall either be free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. A breakaway wall shall be of non-masonry construction and shall have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Such enclosed space shall be useable only for vehicle parking, building access or storage, and shall not be a finished area or habitable area.

iv) Fill shall not be used for structural support of buildings.

v) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall provide a completed V-Zone Certificate for the project. This certification form shall be provided to the applicant during the building permit application process.

2) Prior to permit final, the owner shall submit an elevation certificate verifying that the lowest floor is elevated to or above the base flood level of 21 feet.

3) Prior to permit final, the owner shall record a Declaration of Geologic Hazards. (The form is provided by Environmental Planning.) ===== UPDATED ON APRIL 4, 2008 BY ANTONELLA GENTILE =====

Compliance comments:

All walls below the base flood elevation must be of breakaway construction.

The lowest structural member of the first habitable floor must be a minimum of 8 feet above existing grade.

The northernmost edge of the habitable floor walls must be a minimum of 14 feet from the face of the lower retaining wall.

Placement of fill in the flood hazard zone is prohibited. ===== UPDATED ON JULY

Discretionary Comments - Continued

Project Planner: Maria Perez  
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1, 2008 BY ANTONELLA GENTILE =====  
Compliance comments:

1. Per the technical report acceptance letter from Joe Hanna dated 4/8/08, the home shall be setback 14 feet from the toe of the lowest retaining wall. Plans show the second and third floors of the home extending into this setback area.
2. A fireproof stairway shaft will be required by the building official for this structure.

Conditions of Approval

1. Project shall comply with all requirements set forth in the technical report acceptance letter from Joe Hanna, County Geologist, dated 4/8/08.
2. Project shall comply with all recommendations provided by the geotechnical engineer and engineering geologist.
3. The project engineer or architect shall indicate on the plans that the project will comply with all FEMA regulations.
4. The lowest structural member of the lowest floor and all elements that function as part of the structure must be elevated above the base flood elevation.
5. The foundation and structure attached thereto shall be anchored to prevent flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year.
6. The space below the lowest floor shall either be free of obstructions or constructed with non-supporting breakaway walls intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.
7. The use of fill for structural support of buildings, including the parking slab, is prohibited. Plans shall show no fill to be placed beneath the slab per Coastal Construction Manual section 6.4.3.3 and County Code section 16.10.070(h)5.(vii).
8. Site grading shall not result in ponding or diversion of drainage toward other homes.
9. Provide an engineered grading plan with the building permit application. The plan must show all drainage improvements including the existing direction of surface drainage. The plan must be approved by the engineering geologist, geotechnical engineer, and architect before submittal to County.
10. Utilities shall not be located within breakaway walls. All utilities below the base flood elevation shall be mounted on structural components only.
11. The parking slab shall be a maximum of 4 inches thick and shall be non-structural. Concrete slab shall be designed to break apart upon impact from storm surges.

## Discretionary Comments - Continued

Project Planner: Maria Perez  
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Prior to building permit issuance:

12. The project architect or engineer shall sign a certification prepared by the County Planning Department that indicates that the plans comply with all FEMA regulations.

13. Plan review letters shall be required from the soils engineer and project geologist stating that the plans conform to the recommendations in the accepted reports.

14. A Declaration of Geologic Hazards shall be recorded, and a copy of the recorded document shall be submitted to Environmental Planning.

Prior to building permit final:

15. Final letters shall be submitted from the soils engineer and project geologist stating that the completed project conforms to their recommendations.

16. The architect or engineer shall sign a certification form prepared by the County Planning Department stating that the completed project meets all requirements of FEMA for development within the V zone.

17. A completed Elevation Certificate shall be prepared by the architect or engineer and submitted to Environmental Planning.

### Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON JANUARY 29, 2007 BY CARISA R DURAN ===== Discretionary stage application review is complete for this division.

This application is for development in Zone 6. For increases in impervious area, a drainage fee will be assessed. The fees are currently \$0.95 per square foot.

Please call or visit the Dept. of Public Works, Stormwater Management Division, from 8:00 am to 12:00 pm if you have any questions.

===== UPDATED ON APRIL 2, 2008 BY TRAVIS RIEBER =====

1. Provide the following from a licensed civil engineer.

a. A tributary drainage area map showing all the areas onsite and offsite contributing runoff to the proposed drainage system.

b. Calculations quantifying the amount of runoff onsite and offsite being directed to the proposed drainage system.

c. Hydraulic calculations demonstrating that the proposed pipe sizes are adequate.

2. Other agencies may need to review for the installation of the storm drain through the sea wall.

Discretionary Comments - Continued

Project Planner: Maria Perez  
Application No.: 07-0014  
APN: 043-105-05

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3. This project is being converted to an at cost review. Submit \$585.00 to supplement the previously deposited \$415.00.

Please call the Dept. of Public Works, Storm Water Management Section, from 8:00 am to 12:00 noon if you have questions. ===== UPDATED ON APRIL 2, 2008 BY TRAVIS RIEBER =====

===== UPDATED ON JULY 8, 2008 BY TRAVIS RIEBER =====

The plans dated 5/15/08 have been received and are approved for the discretionary application stage. See miscellaneous comments for issues to be addressed at the building application stage.

**Dpw Drainage Miscellaneous Comments**

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON JANUARY 29, 2007 BY CARISA R DURAN ===== Please address the following items on the plans for building application submittal:

- 1) Specify amount of impervious area resulting from this project.
- 2) Specify method to be used for conveying on-site runoff resulting from this project to the existing off-site drainage system and describe the off-site system including path of flow to the ocean. Impervious areas include roofed structures, driveways, parking areas, turnarounds, walkways, patios, etc.
- 3) Quantify and show method for collecting and conveying runoff from sloped areas upstream of developed area within this parcel and runoff from upstream offsite areas to existing off-site drainage system.

===== UPDATED ON APRIL 2, 2008 BY TRAVIS RIEBER =====

No new comments at this time

===== UPDATED ON APRIL 2, 2008 BY TRAVIS RIEBER =====

===== UPDATED ON JULY 8, 2008 BY TRAVIS RIEBER =====

1. The submitted plans are not clear. All drainage features existing and proposed should be clearly shown on the plans.
2. Specify method to be used for conveying on-site runoff resulting from this project to the existing off-site drainage system and describe the off-site system including path of flow to the ocean.
3. Quantify and show method for collecting and conveying runoff from sloped areas upstream of developed area within this parcel and runoff from upstream offsite areas to existing off-site drainage system.
4. For fee calculations please provide tabulation of existing impervious areas and new impervious areas resulting from the proposed project. Make clear on the plans by shading or hatching the limits of both the existing and new impervious areas. To receive credit for the existing impervious surfaces to be removed please provide documentation such as assessor-s records, survey records, aerial photos or other official records that will help establish and determine the dates they were built.

## Discretionary Comments - Continued

**Project Planner:** Maria Perez  
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Note: A drainage fee will be assessed on the net increase in impervious area. Reduced fees are assessed for semi-pervious surfacing to offset costs and encourage more extensive use of these materials.

5. Please include these comments along with your responses in the building permit submittal. Also make clear on the plans where changes have been made on the plans to respond to each comment.

Please call the Dept. of Public Works, Storm Water Management Section, from 8:00 am to 12:00 noon if you have questions.

### Dpw Driveway/Encroachment Completeness Comments

===== REVIEW ON JANUARY 12, 2007 BY RUTH L ZADESKY =====

### Dpw Driveway/Encroachment Miscellaneous Comments

===== REVIEW ON JANUARY 12, 2007 BY RUTH L ZADESKY =====

Encroachment permit required for all off-site work in the County road right-of-way.

### Dpw Road Engineering Completeness Comments

===== REVIEW ON JANUARY 30, 2007 BY TIM N NYUGEN =====

NO COMMENT

### Dpw Road Engineering Miscellaneous Comments

===== REVIEW ON JANUARY 30, 2007 BY TIM N NYUGEN =====

NO COMMENT

### Dpw Sanitation Completeness Comments

===== REVIEW ON APRIL 9, 2008 BY BEATRIZ - BARRANCO =====

Sewer service is available for the subject development upon completion of an approved preliminary sewer design submitted as part of a tentative map, development or other discretionary permit approval process. Please note that this notice does not reserve sewer service availability. Only upon completion of an approved preliminary sewer design submitted as part of a tentative map, development or other discretionary permit approval process shall the District reserve sewer service availability.

Proposed location of on-site sewer lateral(s), clean-out(s), and connections(s) to existing public sewer must be shown on the plot plan. Other: The plan shall show the existing sewer forcemain located in Beach Drive. The plan shall show all existing and proposed plumbing fixtures on floor plans of building application. Completely describe all plumbing fixtures according to table 7-3 of the Uniform Plumbing Code. A backflow prevention device may be required on the sewer lateral

Discretionary Comments - Continued

Project Planner: Maria Perez  
Application No.: 07-0014  
APN: 043-105-05

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Time: 10:22:36  
Page: 7

===== UPDATED ON APRIL 9, 2008 BY BEATRIZ - BARRANCO =====

**Dpw Sanitation Miscellaneous Comments**

===== REVIEW ON APRIL 9, 2008 BY BEATRIZ - BARRANCO =====

Department of Public Works and District approval shall be obtained for an engineered sewer improvement plan, showing on-site and off-site sewers needed to provide service to each lot or unit proposed, before sewer connection permits can be issued. The improvement plan shall conform to the County's "Design Criteria" and shall also show any roads and easements. Such easements shall require proof of recordation or all existing and proposed easements shall also be delineated on the Final Map.

**Aptos-La Selva Beach Fire Prot Dist Completeness C**

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON FEBRUARY 9, 2007 BY ERIN K STOW =====

DEPARTMENT NAME: Aptos/La Selva Fire Dept. APPROVED

All Fire Department building requirements and fees will be addressed in the Building Permit phase.

Plan check is based upon plans submitted to this office. Any changes or alterations shall be re-submitted for review prior to construction.

**Aptos-La Selva Beach Fire Prot Dist Miscellaneous**

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON FEBRUARY 9, 2007 BY ERIN K STOW =====

NO COMMENT

# INTEROFFICE MEMO

APPLICATION NO: 07-0014

Date: March 25, 2008

To: Maria Porcila Perez, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Residential addition at 409 Beach Drive, Aptos

## Design Review Authority

**13.20.130** The Coastal Zone Design Criteria are applicable to any development requiring a Coastal Zone Approval.

## Design Review Standards

**13.20.130** Design criteria for coastal zone developments

Evaluation Criteria	Meets criteria In code ( ✓ )	Does not meet criteria ( ✓ )	Urban Designer's Evaluation
<b>Visual Compatibility</b>			
All new development shall be sited, designed and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas	✓		
<b>Minimum Site Disturbance</b>			
Grading, earth moving, and removal of major vegetation shall be minimized.			N/A
Developers shall be encouraged to maintain all mature trees over 6 inches in diameter except where circumstances require their removal, such as obstruction of the building site, dead or diseased trees, or nuisance species.			N/A
Special landscape features (rock outcroppings, prominent natural landforms, tree groupings) shall be retained.			N/A



<b>Landscaping</b>			
New or replacement vegetation shall be compatible with surrounding vegetation and shall be suitable to the climate, soil, and ecological characteristics of the area			N/A
<b>Rural Scenic Resources</b>			
<b>Location of development</b>			
Development shall be located, if possible, on parts of the site not visible or least visible from the public view.			N/A
Development shall not block views of the shoreline from scenic road turnouts, rest stops or vista points			N/A
<b>Site Planning</b>			
Development shall be sited and designed to fit the physical setting carefully so that its presence is subordinate to the natural character of the site, maintaining the natural features (streams, major drainage, mature trees, dominant vegetative communities)			N/A
Screening and landscaping suitable to the site shall be used to soften the visual impact of development in the viewshed			N/A
<b>Building design</b>			
Structures shall be designed to fit the topography of the site with minimal cutting, grading, or filling for construction			N/A
Pitched, rather than flat roofs, which are surfaced with non-reflective materials except for solar energy devices shall be encouraged			N/A
Natural materials and colors which blend with the vegetative cover of the site shall be used, or if the structure is located in an existing cluster of buildings, colors and materials shall repeat or harmonize with those in the cluster			N/A
<b>Beach Viewsheds</b>			
Blufftop development and landscaping (e.g., decks, patios, structures, trees, shrubs, etc.) in rural areas shall be set back from the bluff edge a sufficient distance to be out of sight from the shoreline, or if infeasible, not visually intrusive			N/A

No new permanent structures on open beaches shall be allowed, except where permitted pursuant to Chapter 16.10 (Geologic Hazards) or Chapter 16.20 (Grading Regulations)			N/A
The design of permitted structures shall minimize visual intrusion, and shall incorporate materials and finishes which harmonize with the character of the area. Natural materials are preferred.	✓		

**Design Review Authority****13.11.040** Projects requiring design review.

- (a) Single home construction, and associated additions involving 500 square feet or more, within coastal special communities and sensitive sites as defined in this Chapter.

**13.11.030** Definitions

- (u) "Sensitive Site" shall mean any property located adjacent to a scenic road or within the viewshed of a scenic road as recognized in the General Plan; or ***located on a coastal bluff***, or on a ridgeline.

**Design Review Standards****13.11.072** Site design.

Evaluation Criteria	Meets criteria In code ( ✓ )	Does not meet criteria ( ✓ )	Urban Designer's Evaluation
<b>Compatible Site Design</b>			
Location and type of access to the site	✓		
Building siting in terms of its location and orientation	✓		
Building bulk, massing and scale	✓		
Parking location and layout	✓		
Relationship to natural site features and environmental influences			N/A
Landscaping	✓		
Streetscape relationship	✓		
Street design and transit facilities			N/A
Relationship to existing structures	✓		
<b>Natural Site Amenities and Features</b>			
Relate to surrounding topography	✓		
Retention of natural amenities	✓		

Siting and orientation which takes advantage of natural amenities	✓		
Ridgeline protection			N/A
<b>Views</b>			
Protection of public viewshed	✓		
Minimize impact on private views	✓		
<b>Safe and Functional Circulation</b>			
Accessible to the disabled, pedestrians, bicycles and vehicles			N/A
<b>Solar Design and Access</b>			
Reasonable protection for adjacent properties	✓		
Reasonable protection for currently occupied buildings using a solar energy system	✓		
<b>Noise</b>			
Reasonable protection for adjacent properties	✓		

**13.11.073 Building design.**

Evaluation Criteria	Meets criteria In code ( ✓ )	Does not meet criteria ( ✓ )	Urban Designer's Evaluation
<b>Compatible Building Design</b>			
Massing of building form	✓		
Building silhouette	✓		
Spacing between buildings	✓		
Street face setbacks	✓		
Character of architecture	✓		
Building scale	✓		
Proportion and composition of projections and recesses, doors and windows, and other features	✓		
Location and treatment of entryways	✓		
Finish material, texture and color	✓		
<b>Scale</b>			
Scale is addressed on appropriate levels	✓		
Design elements create a sense of human scale and pedestrian interest	✓		
<b>Building Articulation</b>			
Variation in wall plane, roof line, detailing, materials and siting	✓		

Solar Design			
Building design provides solar access that is reasonably protected for adjacent properties	✓		
Building walls and major window areas are oriented for passive solar and natural lighting	✓		



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, SUITE 310, SANTA CRUZ, CA 95060  
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123  
TOM BURNS, DIRECTOR

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April 13, 2007

Jim Fox  
1848 Redwood Drive  
Aptos, CA 95003

Subject: GEOLOGIC HAZARDS ASSESSMENT, APN 043-105-05  
LOCATION: 409 Beach Drive  
PERMIT APPLICATION NUMBER: 07-0014  
OWNER: William Wilson

Dear Mr. Fox,

I performed a site reconnaissance of the parcel referenced above, where a new replacement single-family dwelling is proposed. The parcel was evaluated for possible geologic hazards due to its location within a coastal hazard zone and below an actively eroding beach bluff (figures 1,2 and 3). This letter briefly discusses my site observations, outlines permit conditions and any requirements for further technical investigation, and completes the hazard assessment for this property.

Completion of this hazards assessment included a site reconnaissance, a review of maps and other pertinent documents on file with the Planning Department, and an evaluation of aerial photographs. The scope of this assessment is not intended to be as detailed as a full geologic or geotechnical report completed by a state registered consultant.

### COASTAL FLOOD HAZARDS

This parcel is located adjacent to the beach, and published maps on file with the Planning Department indicate that the parcel is within a federally-designated coastal flood hazard area. FEMA has mapped this location as an area of 100-year coastal flood with high velocity (wave action) floodwaters. The subject parcel may be subject to coastal storm waves or tsunami inundation.

Enclosed copies of the federal flood maps indicate the flood hazard boundaries in this area and the approximate parcel location (figure 6). The flood hazard maps delineate the extent of flooding which is anticipated during a 100-year flood, an event with a one percent chance of occurring in any given year. Flooding to an approximate level of 21 feet above mean sea level is anticipated to occur once every hundred years on the basis of this mapping, also known as the base flood elevation (BFE). However, this does not preclude flooding from occurring due to events smaller in magnitude than the

100-year flood or for the "100-year flood" from occurring two years in a row. For your information, no historic flooding event, including the record events of 1955, 1982 and 1998 has resulted in 100-year flood levels.

The flood hazard maps for the County were recently revised by the federal government due to the County's participation in the National Flood Insurance Program. This program enables property owners to obtain insurance coverage for flood damage to residential and commercial structures and their contents. In return for making flood insurance available, the federal government requires that the County's land use regulations be consistent with federal standards for construction activities in areas where potential flood hazards are identified on the maps.

Therefore, in order to comply with federal floodplain management requirements as well as section 16.10 of the County Code (Geologic Hazards Ordinance), the following conditions must be met:

1. The structure shall be elevated on pilings and columns so that the lowest finished floor, including the furnace or hot water heater, above the level of flooding anticipated during the 100-year flood event. At this site, elevation of at least 22 feet above mean sea level must occur.
2. The pile or column foundation shall be anchored and the structure attached thereto to prevent flotation, collapse and lateral movement due to the effect of wind and water loads, acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year.
3. For all new construction and substantial improvements, the space below the lowest floor that are subject to flooding shall be free of obstruction or constructed with non-supporting breakaway walls, open wood lattice or insect screen intended to collapse. Designs for meeting this requirement must be certified by a registered professional engineer or architect. Breakaway walls and the garage door shall meet the following:
  - a. Breakaway walls and garage door collapse shall result from a water load less than that which would occur during the base flood, and
  - b. The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.
4. Any walls on the ground floor not designated as breakaway shall be demonstrated to be structural support and approved by Environmental Planning.
5. After the building plans are approved, an Elevation Certificate will be mailed to the property owner. A state-registered engineer or licensed architect must complete this certificate by indicating the elevation to which floodproofing was achieved before a final building inspection of the structure can occur.

6. No mechanical, electrical or plumbing equipment shall be installed below the base flood elevation.
7. The placement of fill is prohibited.

The foundations must also compensate for liquefaction and be founded deep within in bedrock that will not be washed away during an intense episode of wave attack.

#### SEISMIC HAZARDS

This property is located in a seismically active region of northern California, as the October 17, 1989 earthquake amply demonstrated. The subject parcel is located approximately 7.8 miles southwest of the San Andreas Fault zone and 4.1 miles southwest of the Zayante Fault zone.

Although the subject property is situated outside of any mapped fault zones, very strong ground shaking is likely to occur on the parcel during the anticipated lifetime of the proposed dwelling and, therefore, proper structural and foundation design is imperative. In addition to the San Andreas, other nearby fault systems capable of producing intense seismic shaking on this property include the San Gregorio, Zayante, Sargent, Hayward, Butano, and Calaveras faults, and the Monterey and Corralitos fault complexes. In addition to intense ground shaking hazard, development on this parcel could be subject to the effects of seismically-induced landsliding during a large magnitude earthquake occurring along one of the above-mentioned faults.

#### SLOPE STABILITY HAZARDS

A "Preliminary Map of Landslide Deposits in Santa Cruz County" was prepared in 1975 as part of the County's General Plan. This interpretive map was prepared from aerial photographs and was designed only for "regional land use evaluations." The map indicates areas where questionable, probable, or definite past instability is suspected. While not a susceptibility map indicating potential site-specific stability problems, when utilized in conjunction with other published data and documents the map is a useful planning resource (figure 5).

A survey of aerial photographs and observations noted during my site visit suggest this parcel is subject to bluff failure above the homesite (figure 3). The approximate average gradient of the designated homesite is >5%, with the maximum gradient above the homesite to the northeast about 122%, and is approximately 50 feet distant. Slopes in excess of 80% are within 10 feet of the proposed development. Published geologic reports for adjacent properties document landsliding above the homes along Beach Drive.<sup>1</sup>

<sup>1</sup> Geologic Investigation prepared by Foxx, Nielsen and Associates for APN 043-105-07, job# SCr-792-G, dated 6/16/97, Geotechnical Investigation by Haro, Kasunich and Associates for APN 043-105-07, job # SC5519, dated 6/23/97

These landslides are complex and typically originate upslope within loose Terrace Deposits on top of the Purisima Formation; a light gray, fine grained sand stone, with cobble and pebble beds. This formation is highly susceptible to erosion and landsliding. The Purisima Formation is unusually uncemented at this location<sup>2</sup> and prone to failure during heavy rainfall events and/or seismic activity. These landslides are typically less than 5 feet deep, are highly fluidized and travel rapidly down the hillside (Foxy, Nielsen, 1997). Shallow landsliding has occurred in the recent past (1982 and 2006) adjacent to the subject property. These failures were mitigated with large retaining structures, as well as in the design of the structure to compensate for landslide material to build up behind the residence. These failures, also shown in the attached photographs, affect portions of adjacent properties (figure 3). In addition to slope failures on adjacent lots, this parcel has been subject to failure of the upper portions of the bluff, where a large retaining wall is under review for County approval and if the home will be constructed before the installation of this wall the home's design will need to consider the crest of the slope as un-augmented. Recent erosion of the slope at the base of the retaining wall has exposed a drain pipe, which may be the source of cause for the 2006 landslide.

The potential risk associated with slope failure at this location can be maintained at a reasonable level if appropriate setback is achieved based on the results of quantitative slope stability analysis performed by a geotechnical engineer, an engineered drainage plan is developed, and the retaining wall upslope is addressed. The geotechnical engineer shall use a cross-section developed by the project engineering geologist for the slope stability analysis. The stability analysis must follow county policy.<sup>1</sup> The geotechnical engineer and geologist must provide recommendations and conclusions regarding the stability of the existing retaining structures onsite.

**Please note that the home is located immediately below a steep potentially unstable coastal bluff, and in an area of coastal wave action. Unless additional measures are taken to protect the home from these hazards, the home will likely be damaged within the next 50 to 100 years.**

#### REPORT REQUIREMENTS

The Geologic Hazards Ordinance requires that "all development activities shall be located away from potentially unstable areas....". Therefore, based on my site visit and review of maps and air photos, a full engineering geologic and geotechnical reports are required to evaluate any homesite on this parcel with respect to slope stability, seismic and flooding issues. The geologic report must analyze the geologic conditions along the crest of the slope including an assessment of previous slope failures, man made alterations of the slope and their influence on project design, and a complete characterization of the engineering characteristics of the earth material present on the slope. A complete geologic map and cross-section(s) are required based upon the exploration of the site.

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<sup>2</sup> Please note the some geologists classify the bedrock as different formations other than Purisima Formation. Even so, the issues with this site are to clarify the engineering characteristics of the material as regards to slope stability and other issues that may influence the development of the home.



The geotechnical engineering (soils engineering) report must provide foundation recommendations that consider the potential for liquefaction and scour of the foundations as well as determining the design parameters for the foundation support of the structure.

The soils engineer will need to assist the project-engineering geologist in evaluating the potential slope stability hazards affecting the development envelope, included with this letter is a list of consultants and County guidelines for engineering geologic reports. The guidelines must be strictly adhered to. Please contact us if you have any questions before beginning work so that the County's concerns will be clearly understood and properly addressed in an acceptable report.

When completed, please submit two copies of the investigation to the Zoning Counter at the Planning Department, and pay the \$1811 fee for Geologic and Geotechnical Report Reviews (plus additional intake and records fees).

### PERMIT CONDITIONS

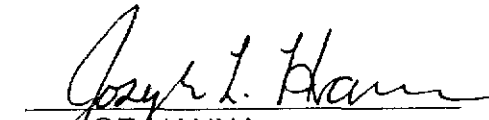
Permit conditions will be developed for your proposal after the technical reports have been reviewed. At a minimum, however, you can expect to be required to follow all the recommendations contained in the reports in addition to the following items:

1. A topographic map of the site must be developed that shows site drainage and any proposed retaining wall construction. This map must have a scale of approximately 1"=40' and should have a minimum of 2-foot contour intervals on slopes less than 30% and 5-foot contour interval on slopes over 30%. The map should extend from midway through the street to the Seaview Drive, beyond the crest of the hill.
2. A precise and accurate surveyed plan prepared by an engineer must be submitted as part of the application. This survey should have the same base topographic representation as does the engineering geologist map requested in item one.
3. Grading activities must be kept to a minimum.
4. Drainage from impermeable surfaces (such as the proposed roof and driveway) must be collected and properly disposed of. Runoff must not be allowed to sheet off these areas in an uncontrolled manner. An engineered drainage plan formulated by the project engineer, and reflecting the findings of the geologic report is required for any development on the parcel.
5. All development must meet FEMA regulations (as outlined above).

6. A Declaration of Geologic Hazards form acknowledging a possible geologic hazard to the parcel and completion of technical studies must be completed prior to permit issuance, and will be forwarded to you when your technical studies have been reviewed and accepted by the Planning Department.

Final building plans submitted to the Planning Department will be checked to verify that the project is consistent with the conditions outlined above prior to issuance of a building permit. If you have any questions concerning these conditions, the hazards assessment, or geologic issues in general, please contact me at 454-3162. It should be noted that other planning issues not related specifically to geology may alter or modify your development proposal and/or its specific location.

Sincerely,

  
\_\_\_\_\_  
JESSICA DEGRASSI  
Resource Planner  
Environmental Planning  
\_\_\_\_\_  
JOE HANNA  
County Geologist  
CEG #1313

Aerial Photo  
409 Beach Drive



Legend

- 043-105-05
- Assessors Parcels

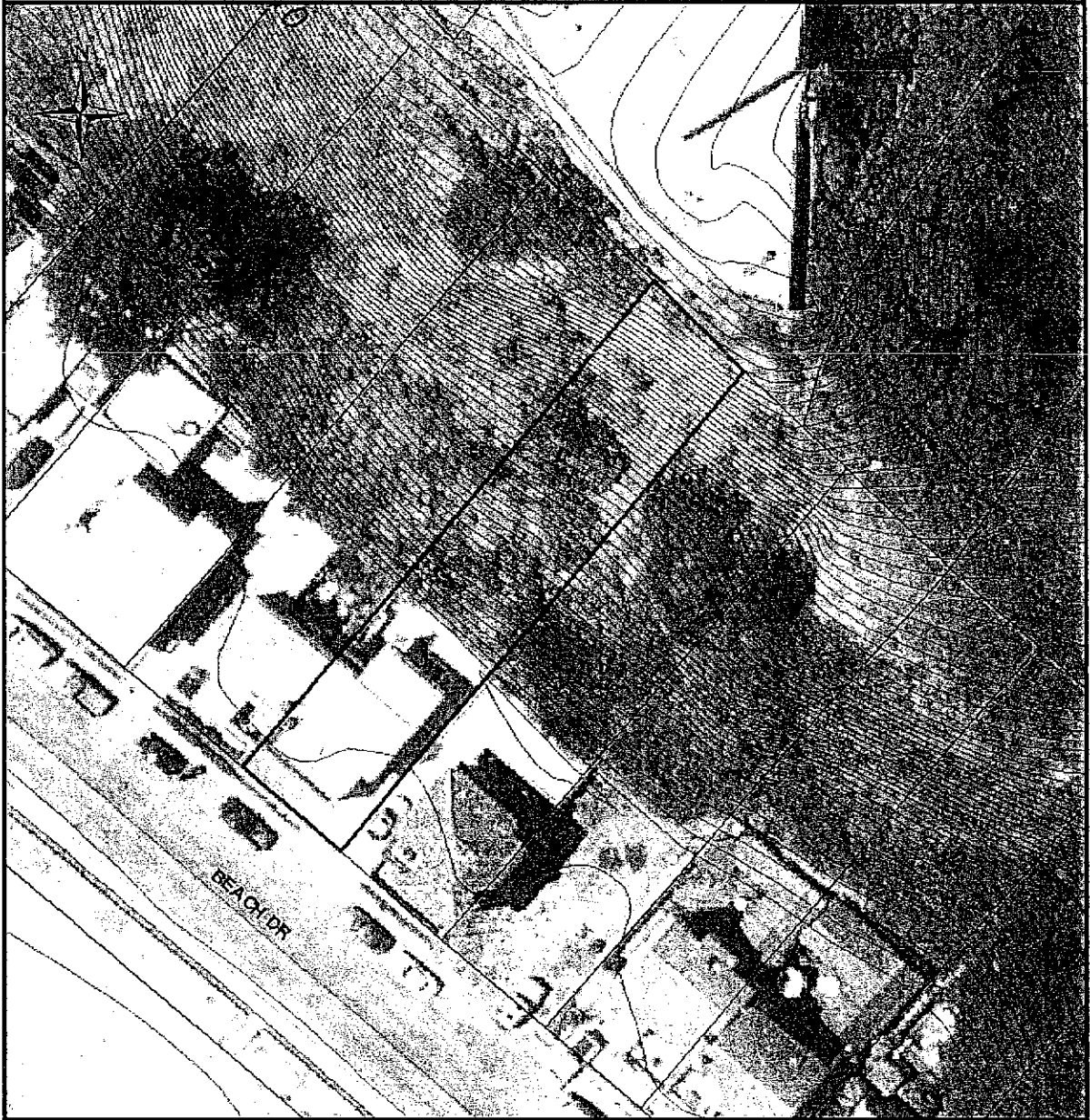
0 5 10 20 30 40 Feet

Figure #



1

Map created by JLD  
March 2007

Aerial Photo with Topography  
409 Beach Drive



Legend

-  043-105-05
-  Assessors Parcels

0 5 10 20 30 40 Feet

Figure #

2

Map created by JLD  
March 2007

Aerial Photo with Topography  
409 Beach Drive



Legend

- 043-105-05
- Assessors Parcels

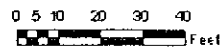
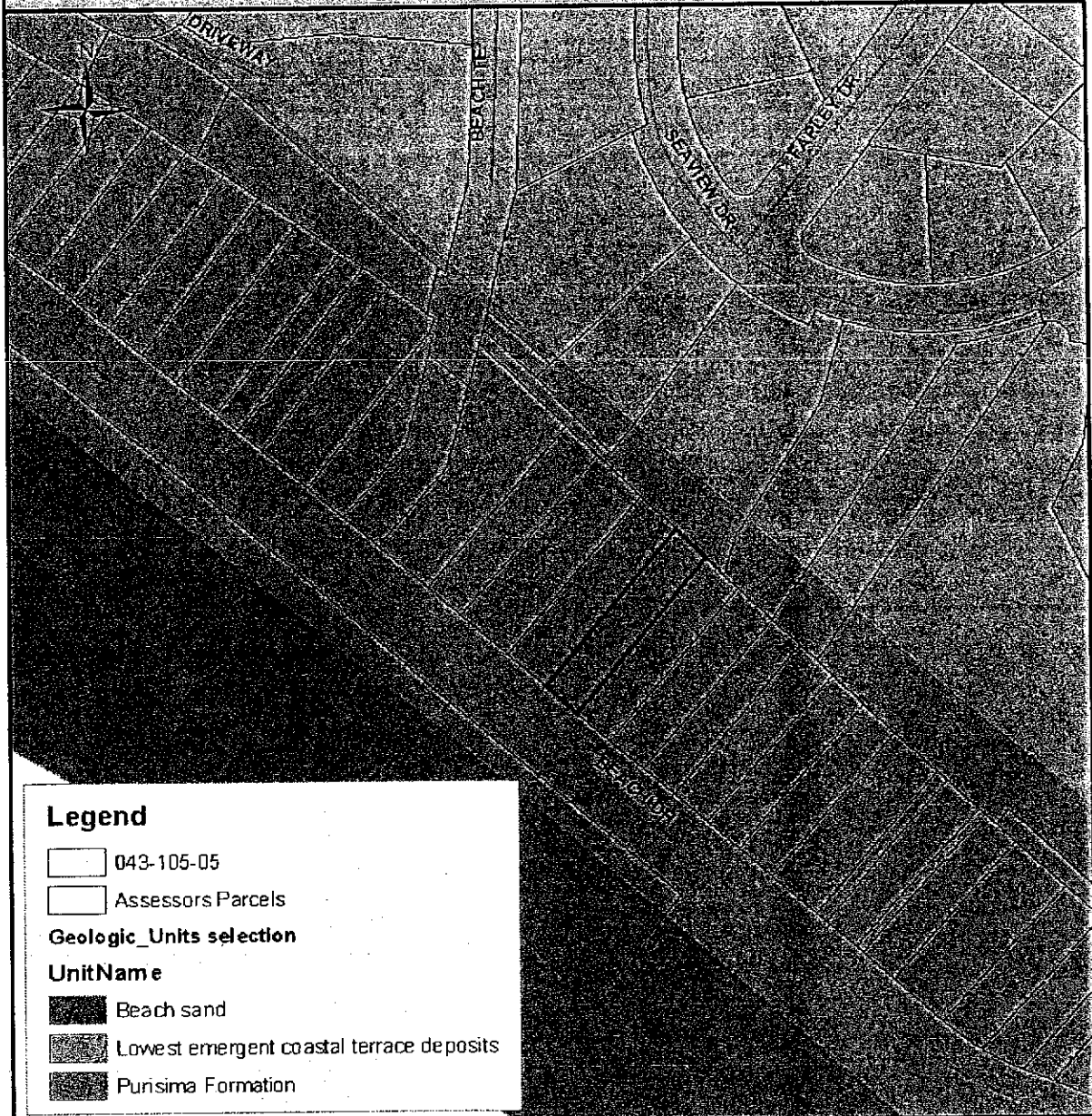


Figure #

3

Map created by JLD  
March 2007

# Geologic Map Beach Drive



## Legend

043-105-05

Assessors Parcels

Geologic\_Units selection

UnitName

Beach sand

Lowest emergent coastal terrace deposits

Purisima Formation



0 35 70 140 210 280  
Feet

Figure #

4

Map created by JLD  
March 2007



# Geologic Hazards Map Beach Drive

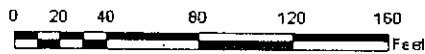
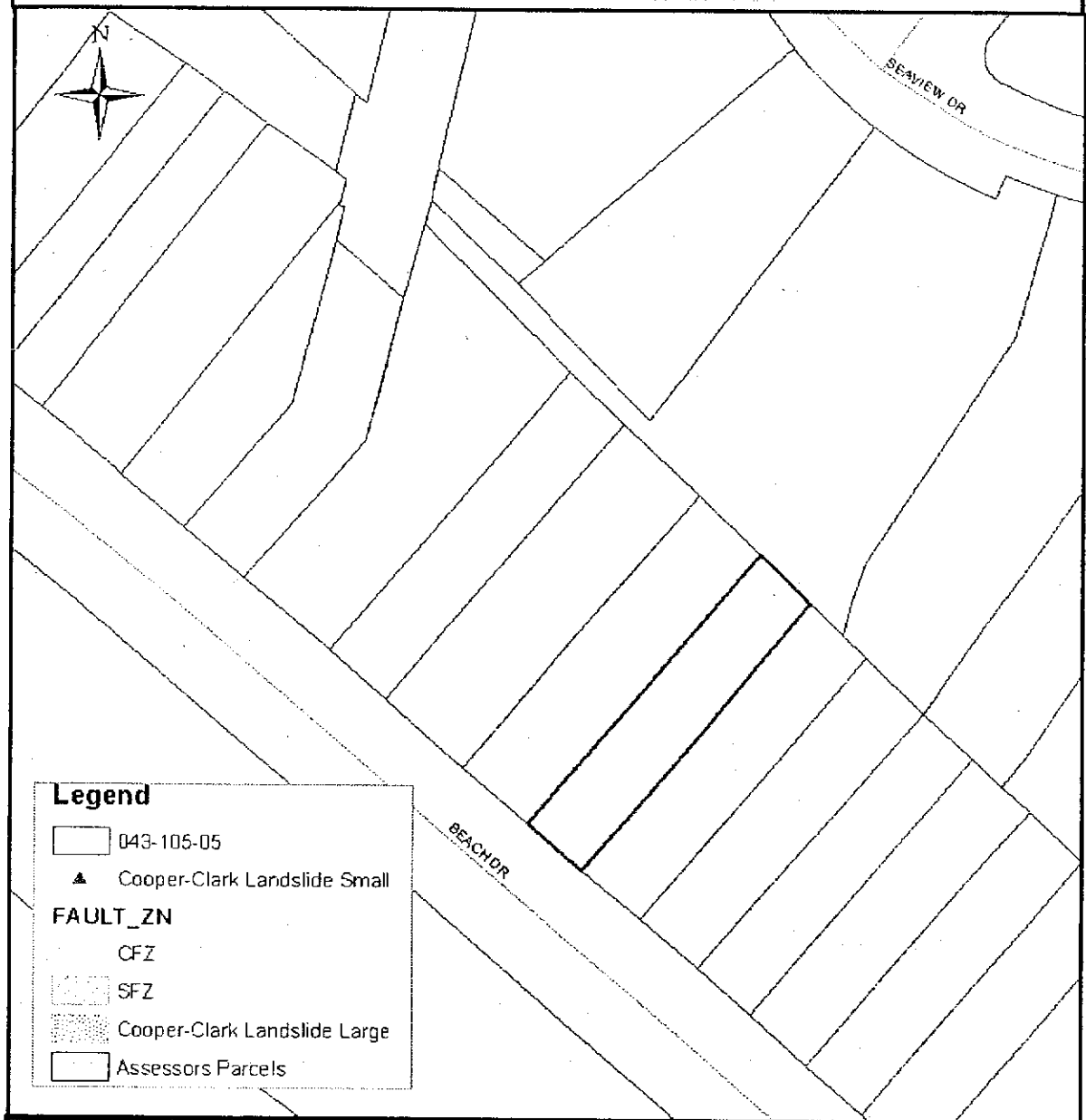
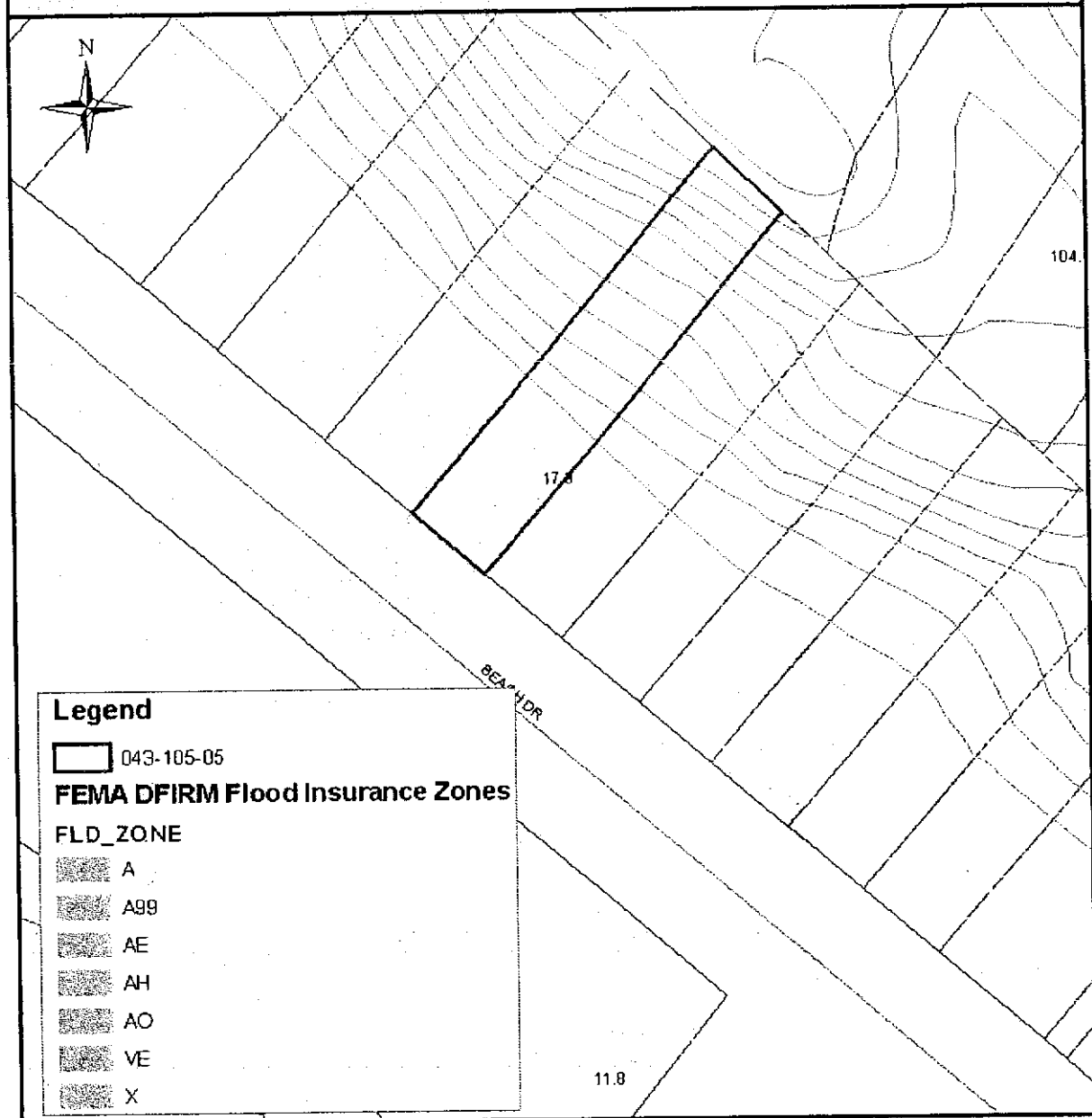


Figure #

5

Map created by JLD  
March 2007

# 2006 FEMA Map



0 15 30 60 90 120 Feet

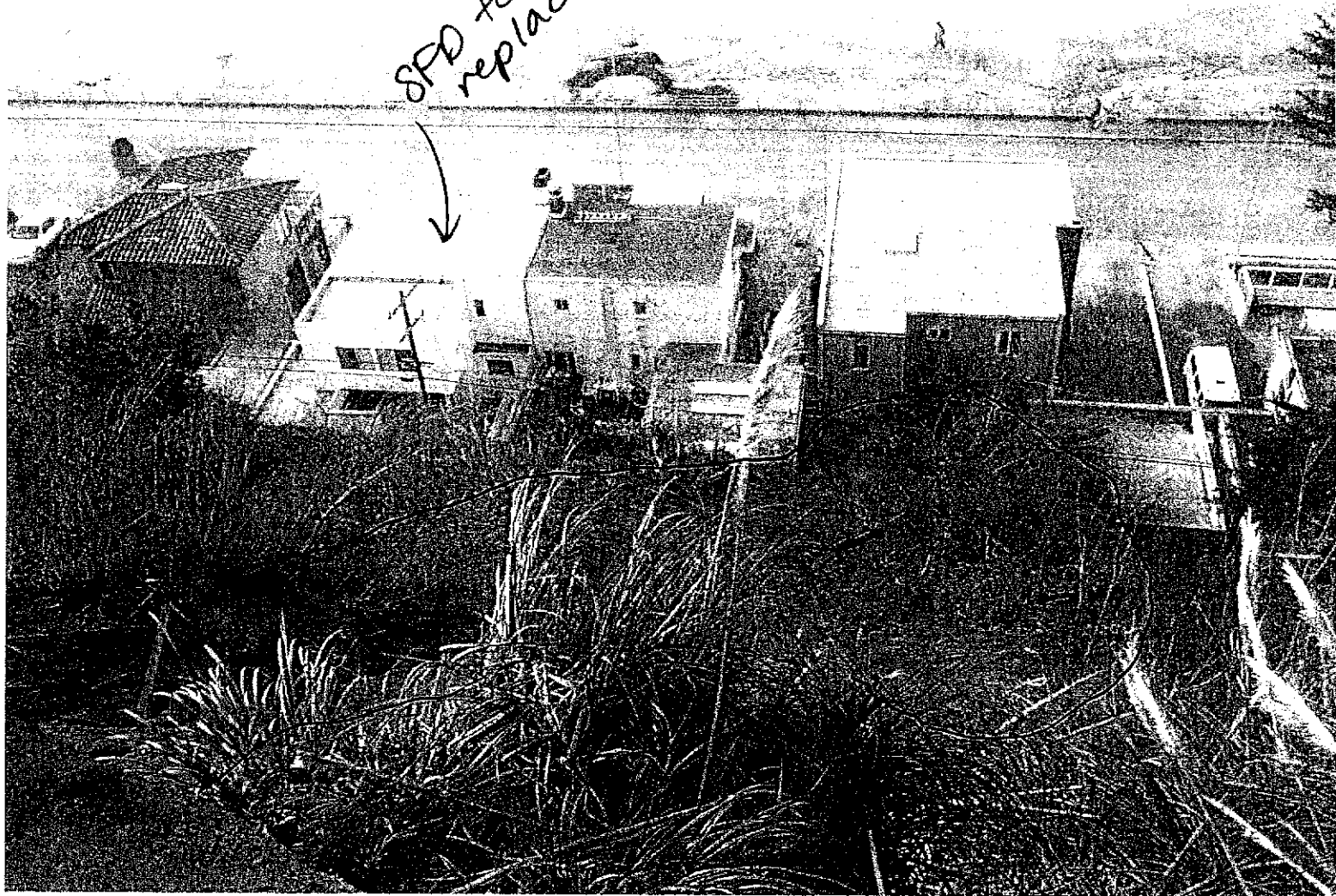
Figure #

6

Map created by JLD  
March 2007



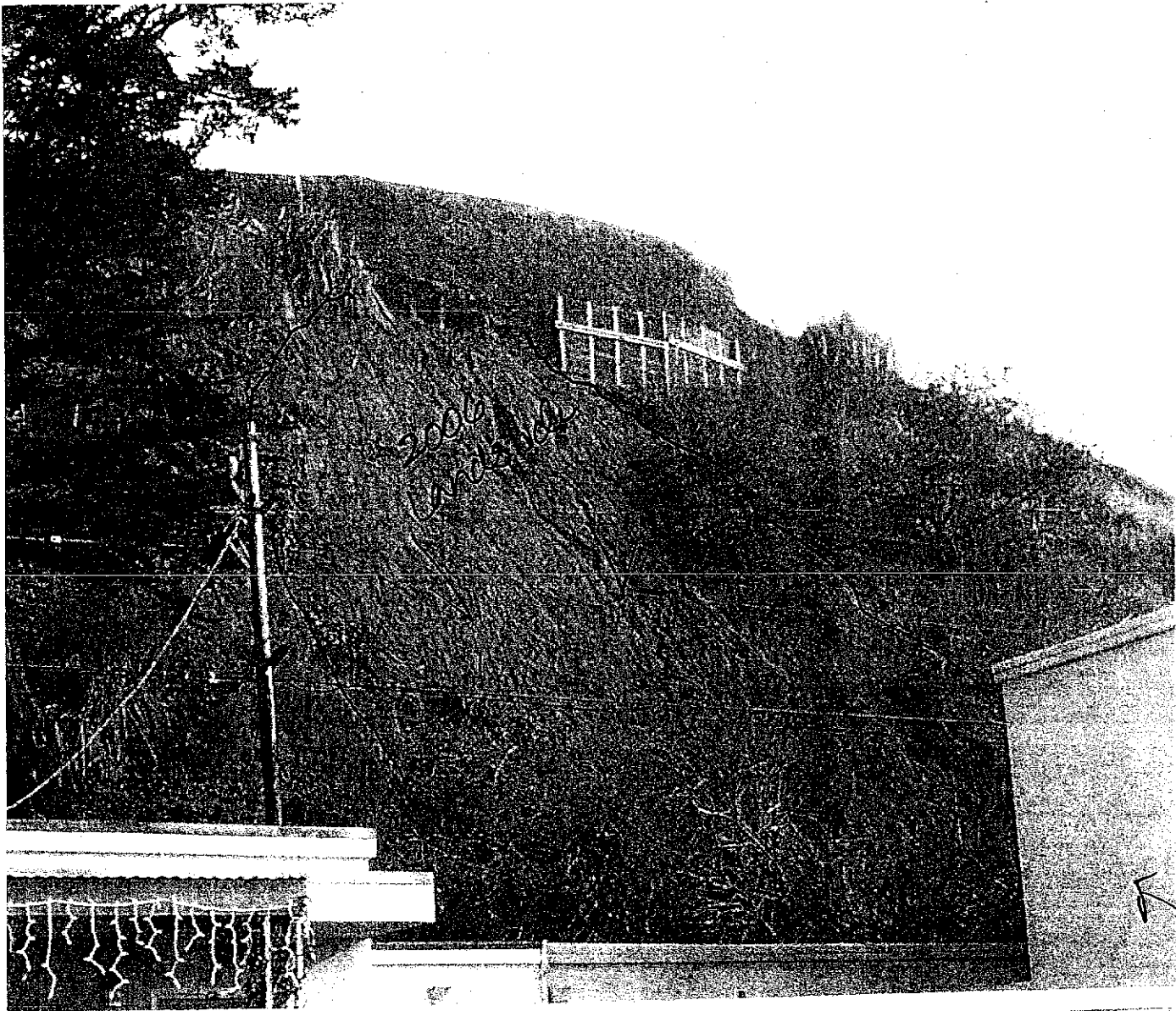
SFD to be replaced



2006  
Landslide  
damaged  
405 Beach Dr.

709  
Beach Dr.

2006  
landslide  
damaged  
SFD at  
405 Beach Dr.



2006 1502



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

**TOM BURNS, PLANNING DIRECTOR**

April 8, 2008

Mr. Bill Wilson  
C/o Jimmy Fox  
1848 Redwood Drive  
Aptos, CA 94003

**Subject: Review of Geotechnical Investigation by Haro, Kasunich and Associates, Inc.  
Dated January and March 2008, and rresponce letter dated March 13, 2008; Project #:  
SC 9464, and,  
Review of Engineering Geology Report, Rogers E. Johnson, Inc.,; Job No. C07012-57  
APN 043-105-05, Application #: 07-0014**

Dear Applicant:

The purpose of this letter is to inform you that the Planning Department has accepted the subject reports and the following items shall be required:

- 1) All construction shall comply with the recommendations of the reports.
- 2) Final plans shall reference the reports and include a statement that the project shall conform to the reports' recommendations. Plans shall also provide a thorough and realistic representation of all grading necessary to complete this project.
- 3) The structural engineer shall examine the retaining walls behind the home and indicate if the walls require augmentation or replacement. If augmentation or replacement is necessary, this work shall be included in the description of the coastal permit and shall be completed as part of any replacement of the building.
- 4) The project must comply with all FEMA requirements, including the following conditions. See the FEMA Coastal Construction Manual for a complete list of guidelines and requirements.
  - a) The project engineer or architect must indicate on the plans that the project will comply with all FEMA regulations.
  - b) The lowest structural member of the lowest floor and all elements that function as part of the structure must be elevated to or above the base flood elevation.
  - c) The foundation and structure attached thereto shall be anchored to prevent flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall, at a minimum, comply with the California Building Code.
  - d) The space below the lowest floor shall either be free of obstructions or constructed with non-supporting breakaway walls intended to collapse under wind and water loads without causing

(over)

collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.

- e) The use of fill for structural support of buildings, including the parking slab, is prohibited. Plans shall show no fill to be placed beneath the slab per Coastal Construction Manual section 6.4.3.3 and County Code section 16.10.070(h) 5.(vii).
- f) Site grading shall not result in ponding or diversion of drainage toward other homes.
- g) Utilities shall not be located within breakaway walls. All utilities below the base flood elevation shall be mounted on structural components only. If possible they should be located above the Base Flood Elevation.
- h) The parking slab shall be a maximum of 4 inches thick and shall be non-structural. Concrete slab shall be designed to break apart upon impact from storm surges.
- i) Prior to building permit issuance:
  - i) The project architect or engineer shall sign a certification prepared by the County Planning Department that indicates that the plans comply with FEMA regulations.
  - ii) Plan review letters shall be required from the soils engineer and project geologist stating that the plans conform to the recommendations in the accepted reports.
- j) Prior to building permit final:
  - i) Final letters shall be submitted from the architect or civil engineer, soils engineer, and project geologist stating that the completed project conforms to their recommendations and the building plans. These letters shall state that the structure is safe to use for as a house.
  - ii) The architect or engineer shall sign a certification form prepared by the County Planning Department stating that the completed project meets all requirements of FEMA for development within the V zone.
  - iii) A completed Elevation Certificate shall be prepared by the architect or engineer and submitted to Environmental Planning.
- 5) Provide an engineered site plan (and grading plan if needed) with the building permit application. The plan must show all drainage improvements including the existing direction of surface drainage. The engineering geologist, geotechnical engineer, and architect must approve the plan before submittal to County. On site detention or retention of drainage should be handled in a manner that will not violate FEMA requirements.
- 6) Hurricane Impact Windows must be used on the rear wall of the structure, and are recommended by the County on the sides of the structure.
- 7) The proposed structure must be either elevated 8 feet above the existing ground surface or above the Base Flood Elevation, which ever is greater.
- 8) The home shall be setback 14 feet from the toe of the lowest retaining wall.
- 9) The concrete used in all structural components of the building must comply with FEMA and California Building Code Requirements.

- 10) Final plans shall show the maintenance pathway from the base of the slope through the lowest level to the street.
- 11) A declaration of geologic hazard shall be recorded on the property that refers to both the flood hazard and landslide hazard. The declaration is attached for your use.

After building permit issuance the soils engineer *must remain involved with the project* during construction. Please review the *Notice to Permits Holders* (attached).

Our acceptance of the report is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Please submit two copies of the report at the time of building permit application.

Please call the undersigned at (831) 454-3175 if we can be of any further assistance.

Sincerely,

  
Joe Hanna  
County Geologist, CEG 1313

  
Kent Edler PE  
Civil Engineer

Cc: Haro, Kasunich and Associates, Inc.  
Rogers E. Johnson and Associates, Inc.



**NOTICE TO PERMIT HOLDERS WHEN A SOILS REPORT HAS BEEN PREPARED, REVIEWED AND  
ACCEPTED FOR THE PROJECT**

After issuance of the building permit, the County requires your consultants to be involved during construction. Several letters or reports are required to be submitted to the County at various times during construction. They are as follows:

1. **When a project has engineered fills and / or grading**, a letter from your soils engineer must be submitted to the Environmental Planning section of the Planning Department prior to foundations being excavated. This letter must state that the grading has been completed in conformance with the recommendations of the soils report. Compaction reports or a summary thereof must be submitted.
2. **Prior to placing concrete for foundations**, a letters from the soils engineer and engineering geologist must be submitted to the building inspector and to Environmental Planning stating that the they have observed the foundation excavation and have determined that the excavations meets the recommendations of the soils report.
3. **At the completion of construction**, *final letters* from your soils engineer and engineering geologist are required to be submitted to Environmental Planning that summarizes the observations and the testing completed during construction. The final letter must also state the following: "Based upon our observations and tests, the project has been completed in conformance with our report's recommendations."

If the *letters* identifies any items of work remaining to be completed or that any portions of the project were not observed by the soils engineer and engineering geologist, you will be required to complete the remaining items of work and may be required to perform destructive testing in order for your permit to obtain a final inspection.



**County of Santa Cruz**

**PLANNING DEPARTMENT**

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123  
TOM BURNS, PLANNING DIRECTOR

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**STEPS FOR COMPLETING THE ENCLOSED DECLARATION OF  
GEOLOGIC HAZARDS**

Read the following instructions and carry out all steps. Do not make any alterations to the form, except as allowed by #2 below. FAILURE TO FOLLOW THE INSTRUCTIONS OR ALTERATIONS TO THE FORM WILL RESULT IN A DELAY IN THE ISSUANCE OF YOUR PERMIT.

Read the entire Declaration.

- 1 Check the information filled in by County staff (ownership, Assessor's Parcel Number, recordation dates, volume and page number and address). IF THERE ARE OMISSIONS, FILL IN THE BLANKS. The information can be found on the recorded deed or in the County Recorder's Office. If you feel there are any other errors, contact Environmental Planning staff for instructions. The form is a formal document and shall not be altered as above. Any unauthorized change(s) will result in an additional delay in processing your permit.
- 2 Have all owner(s) signatures acknowledged by a notary public. An acknowledgement is a form obtained from the notary verifying that the signatory is the person stated on the Declaration.
- 3 Take, do not mail, the form and recording fee to:

Office of the County Recorder  
County Government Center  
701 Ocean Street, Room 230  
831) 454-2800

- 4 Bring or send a copy of the recorded document to:

County of Santa Cruz  
Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor  
Santa Cruz, Ca. 95060

**YOUR PERMIT CANNOT BE APPROVED UNTIL THE ABOVE STEPS ARE COMPLETED.**  
Please call Joe Hanna at 831-454-3175 if you have any questions regarding this form.

(over)



Return recorded form to:  
Planning Department  
County of Santa Cruz  
701 Ocean Street, 4<sup>th</sup> Floor

Attention: Joe Hanna  
County Geologist  
831-454-3175

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## Notice

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION (CALIFORNIA GOVERNMENT CODE §27361.6)

RECORDED AT REQUEST OF:  
County of Santa Cruz

WHEN RECORDED MAIL TO:

Santa Cruz County Planning  
701 Ocean St.  
Santa Cruz, CA 95060

(Space above this line for Recorder's use only)

Note to County Recorder:

Please return to the staff geologist in the Planning Department when completed.

**DECLARATION REGARDING THE ISSUANCE OF A DEVELOPMENT PERMIT**  
**IN AN AREA SUBJECT TO GEOLOGIC HAZARDS**  
**DECLARATION REGARDING THE ISSUANCE OF A DEVELOPMENT PERMIT**  
**IN AN AREA SUBJECT TO GEOLOGIC HAZARDS**

The undersigned \_\_\_\_\_ (names of property owners) (does) (do) hereby certify to be the owner(s) of the real property located in the County of Santa Cruz, State of California, commonly known as \_\_\_\_\_

\_\_\_\_\_ (Street address); legally described in that certain deed recorded in Book \_\_\_\_\_ on Page \_\_\_\_\_ of the official records of the Santa Cruz County Recorder on \_\_\_\_\_ (deed recordation date); Assessor's Parcel Numbers 043-152-58.

And, acknowledge that records and reports, filed with the Santa Cruz County Planning Department, indicates that the above described property is located within an area that is subject to geologic hazards, to wit:

The proposed home will be constructed at the toe of the slope and will be designed so that any landslide debris from the slope above the home will flow underneath the home without damaging it. The home is also designed to resist wave action and will be raised above the Base Flood Elevation. A **Geotechnical Engineering Report** by Haro, Kasunich, and Associates dated March 2008, and March 13, 2008, Project Number SC9464; and a **Engineering Geology Report** by January 7, 2008, Job Number C07012-57 specify a building envelope and standards for the foundations that reduce the potential damage to the site from flooding, coastal erosion, and slope instability. This property will also be subject to intense seismic shaking.

In addition, having full understanding of said hazards and the proposed mitigation of these hazards, we elect to pursue development activities in an area subject to geologic hazards and do hereby agree to release the County from any liability and consequences arising from the issuance of the development permit.

This declaration shall run with the land and shall be binding upon the undersigned, any future owners, encumbrancers, their successors, heirs, or assignees. This document should be disclosed to the forgoing individuals. This declaration may not be altered or removed from the records of the County Recorder without the prior consent of the Planning Director of the County of Santa Cruz.

OWNER: \_\_\_\_\_  
Signature

OWNER: \_\_\_\_\_  
Signature

ALL SIGNATURES ARE TO BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC. IF A CORPORATION, THE CORPORATE FORM OF ACKNOWLEDGEMENT SHALL BE USED.

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On \_\_\_\_\_, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(Seal)

\_\_\_\_\_  
Signature

subject property from wave attack; therefore, the probability of coastal erosion due to wave attack at the subject property is low.

It is unlikely that the water table gradient at the subject property will rise high enough to saturate potentially liquefiable near-surface earth materials at the subject property under maximum expected tidal fluctuations. It is our opinion that the liquefaction potential at the subject property is low.

Based on the information gathered and analyzed, it is our opinion that the proposed improvements to the subject parcel are geologically suitable. The proposed improvements to the single-family dwelling will probably be subject to "ordinary" risks (as defined in Appendix B) if our recommendations are followed. Appendix B should be reviewed in detail by the property owner to determine whether this risk as defined in the appendix is acceptable. If this level of risk is unacceptable to the property owner, then the risk should be further mitigated to an acceptable level.

## RECOMMENDATIONS

- 1) The elevated residence design should incorporate piers sufficiently embedded into the underlying bedrock. The piers should be designed to withstand impact loads of about 30 feet per second by material shed from the slope backing the residence. The geotechnical engineers should evaluate the liquefaction potential of the earth materials underlying the location of the proposed improvements.
- 2) The lowest habitable floor and all critical utility connections should lie at a minimum elevation of +22 NGVD.
- 3) Runoff should not be allowed to accumulate uphill of the retaining walls immediately behind the residence or at the base of the slope.
- 4) The seismic parameters, debris volume estimates and debris flow impact velocities presented in this report should be made available to architects and engineers for their use in designing the proposed dwelling.
- 5) We recommend the homeowner implement the simple procedures outlined in Peace of Mind in Earthquake Country by Peter Yanev for improving the home's strength and safety in a large earthquake. This book contains a wealth of information regarding seismic design and precautions the homeowner can take to reduce the potential for injury, property damage, and loss of life.

Injury and loss of life during large earthquakes results mainly from falling objects, overturned furniture and appliances, and fires caused by severed utility lines. The majority of damage in the City of San Francisco in the 1906 earthquake resulted from the

fires that burned out of control for weeks after the quake. Securing furniture and large appliances to the floor or structural components of the building will help to reduce this risk.

- 6) The procedures and practices regarding the maintenance of hillside homesites presented in Appendix C herein should be followed.
- 7) We request the privilege of reviewing all geotechnical engineering, civil engineering, drainage, and architectural reports and plans pertaining to the proposed development. We must approve the locations of any proposed homesites on the proposed parcels.
- 8) *Rogers E. Johnson and Associates should inspect all final excavations for the proposed developments. We should be notified at least four days prior to their completion. If any unexpected variations in soil conditions or if any undesirable conditions are encountered, we may have to provide supplemental recommendations.*

#### INVESTIGATION LIMITATIONS

1. The conclusions and recommendations contained herein are based on probability and in no way imply that the proposed development will not possibly be subjected to ground failure, seismic shaking or landsliding of such a magnitude that it overwhelms the site. The report does suggest that using the site for residential purposes in compliance with the recommendations contained herein is an acceptable risk.
2. This report is issued with the understanding that it is the duty and responsibility of the owner or his representative or agent to ensure that the recommendations contained in this report are brought to the attention of the architect and engineers for the project, incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
3. If any unexpected variations in soil conditions or if any undesirable conditions are encountered during construction, Rogers E. Johnson and Associates should be notified so that supplemental recommendations may be given.

## DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Our seismic loading or pseudostatic analyses of the bluff face between the blufftoe and blufftop retaining wall systems indicate the design slope failure can potentially generate a slide mass volume of approximately 700 cubic feet per linear foot of blufftoe. Working with the project engineering geologists we have determined that the reconstructed Wilson residence, situated about the same distance as the existing residence from the blufftoe retaining wall system, can accommodate the design wet winter seismic slope failure event if the residence is elevated to provide at least 8 vertical feet of freeboard under the structure. Elevating the structure also allows the reconstructed residence to conform to current FEMA regulations outlining that the bottom of the lowest horizontal structural members supporting the lowest living floor will be elevated above 21 feet NGVD, the local Base Flood Elevation (BFE).

Our firm will next conduct a field exploration program at the toe of the bluff to determine foundation design criteria for the proposed reconstructed residence. Our Geotechnical Investigation for the design of the residence will include geotechnical engineering design criteria to mitigate wave impact/coastal flooding hazards at the project site as well as a landslide debris impact analysis for design of the columns supporting the elevated residence. Our future work will also include criteria to upgrade the existing blufftoe retaining wall system to current seismic standards.