Staff Report to the Zoning Administrator

Application Number: **07-0117**

Applicant: Matson-Britton Architects
Owner: Kelley and Cindy Trousdale
APN: 043-161-57 and 043-161-58

Agenda Date: August 17,2007
Agenda Item #: **3.**
Time: After 10:00 a.m.

Project Description: Proposal to demolish an existing single-family residence on two lots (043-161-57 and -58) and construct one single-family residence of about 5,000 square feet with an attached garage on parcel 043-161-58. Requires a Coastal Development Permit and an Engineering Geologic and Soils Report review.

Location: Project located at the southern end of Bayview Drive, on the site of 660 Bayview Drive.

Supervisoral District: 2nd District (District Supervisor: Ellen Pine)

Permits Required: Coastal Development Permit, Engineering Geolgoic & Soils Report Review, Design Review

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 07-0117, based on the attached findings and conditions.

Exhibits

A.	Project plans	H.	Excerpt of conclusions and recommendations from the project Engineering Geologic report by Zinn Geology, dated August 2006.
B.	Findings	I.	Geotechnical and Engineering Geologic report acceptance letter from Joe Hanna, County Geologist, dated 3/21/07.
C.	Conditions	J.	Urban Designer's comments, dated 4/5/07.
D.	Categorical Exemption (CEQA determination)	K.	Photo-simulations of site
E.	Assessor's parcel map	L.	Printout of Discretionary Comments, dated 7/17/07.
F.	Zoning, General Plan, & Location maps		
G.	Excerpt of conclusions and recommendations from the project Geotechnical report, prepared by Pacific Crest Engineering, dated August 2006.		

Parcel Information

Parcel Size:	About 10,400 square feet (-58)
Existing Land Use - Parcel:	One single-family dwelling
Existing Land Use - Surrounding:	Single-family dwellings, beach
Project Access:	Bayview Drive (a County road)
Planning Area:	Aptos
Land Use Designation:	R-UL (Urban Low Density Residential)
Zone District:	R-1-6 (Single-familyresidential, 6,000 square foot minimum)
Coastal Zone:	_X_ Inside __ Outside
Appealable to Calif. Coastal Comm.	_X_ Yes __ No

Environmental Information

Geologic Hazards:	Coastal bluff setbacks apply
Soils:	Elkhom Sandy Loam
Fire Hazard:	Not a mapped constraint
Slopes:	About 10% to 15%
Env. Sen. Habitat:	Not mappedno physical evidence on site
Grading:	98 cubic yards of cut, 40 cubic yards of fill
Tree Removal:	One 18" dbh tree to be removed
Scenic:	Coastal scenic
Drainage:	Existing and proposed drainage adequate
Archeology:	Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	_X_ 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

According to Assessor's records, the existing house was originally constructed in 1938. In 1995, the repair and extension of the bluff protection wall and drainage swale below the project site was approved under Coastal Permit 95-0149. Recent surveys show this wall on the adjacent property to the south of the project site, so a condition of approval requires the property owner to obtain an easement for the continued maintenance and repair of the wall and drainage swale (condition of approval II.J.).

A lot legality study was applied for in 2005 (application 05-0727), which eventually determined that the project site is composed of two separate legal lots of record. Unconditional Certificates of Compliance were recorded, and parcel 043-161-50 became 043-161-57 and –58 (the current parcels). The outcome of this lot legality determination allows the existing dwelling to be

demolished and two new homes to be constructed on the lots without a land division.

Project Setting

The project site is located at the southeast end of Bayview Drive, at 660 Bayview Drive. The new dwelling will be constructed on the portion of the site **furthest** away from Bayview Drive, on parcel 043-161-58. The project site is bounded by single-family homes to the north, coastal bluff and beach to the west and south, and three vacant parcels to the east. The site is located within the coastal scenic area as it is visible fiom Hidden Beach, to the west and south of the project site.

Project Scope

The owner proposes to demolish the existing 3,500 square foot single-family dwelling that straddles parcels 043-161-57 and 043-161-58, and to construct one single-family dwelling of about 4,600 square feet on parcel 043-161-58. **A** separate coastal permit application, 07-0325, is currently in process for the construction of a new single-family dwelling on parcel 043-161-57 (the portion of the project site closest to Bayview Drive).

The existing residence has six bedrooms, and the proposed residence will have only four bedrooms. Therefore, childcare, parks, roadside, and transportation improvement fees will not be required for the proposed project. **Any** future construction on parcel 043-161-58 (the adjacent upcoast parcel) will have a two-bedroom credit.

Zoning & General Plan Consistency

The subject property is a 10,539 square foot lot (lot –58), located in the R-1-6 (Single-family residential, 6,000 square foot minimum) 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.

Site standards
The R-16 site standards apply to the site, as outlined in the table below:

	R-1-6 Site Standards	Proposed
Front yard setback	20'	About 21'
Rear yard setback	15'	About 27'*
Side yard setbacks	5' **and** 8'	***5'*** and 8'
Maximum height	28'	28'
Maximum % lot coverage	**30%**	29.9%
Maximum Floor Area Ratio	50%	48%

Adequate parking will be provided on site for the four-bedroom residence, and the amount of paving in the front yard setback will be conditioned to be less than 50% of the frontage (condition of approval II.B.10).

Geologic Hazards

The project site is located adjacent to a coastal bluff, and is subject to the County's Geologic Hazards Ordinance (Section 16.10.070(h) of the County Code). ***An*** engineering geologic report by **Zinn** Geology (dated 8/06) and a Geotechnical report by Pacific Crest Engineering (dated 8/06) have been reviewed and accepted by the County Geologist (Exhibit I). These reports established a coastal bluff setback of 25-30 feet from the edge of the bluff along the rear of the property (see Geologic Site Map by **Zinn** Geology, dated 8/17/06, Exhibit H). As mentioned, the proposed project exceeds these setback requirements.

Local Coastal Program Consistency

The proposed single-family dwelling conforms to the County'scertified Local Coastal Program, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood and natural environment. Homes of a similar size, bulk, mass, and scale exist in the vicinity along the southeastern end of Bayview Drive. The house will be more visible from the beach than the existing residence, as it is two stories in height. However, two-story homes are common along the bluff side of Bayview Drive at this location, so the increase in bulk and mass will not be out of character with surrounding development. Furthermore, the house will incorporate earth-tone colors to complement the surrounding natural environment.

One 18" tree is proposed to be removed, with other trees on site proposed to be retained. The tree to be removed is not considered a significant tree as it has a diameter breast height of less than 20 inches and is located within the area of the proposed driveway, so the project cannot be redesigned to avoid removal. Protective measures will be required for other trees on site during demolition and construction (condition of approval II.B.8.).

The project will not interfere with coastal access as no coastal access easements encumber the subject property and access is available nearby (via Cliff Drive to Hidden Beach Way, see Vicinity Map, Exhibit F).

Design Review

The proposed replacement single-family dwelling complies with the County's Design Review ordinance (Chapeter 13.11 of the County Code), in that the bulk, mass, and scale of the proposed residence is compatible with existing homes at the southern end of Bayview Drive. The increased bulk and mass of the proposed residence compared to the existing residence will not present a significicant visual impact from the street due to the downslope location of the project site and the existing pine trees.

Drainage

Conceptual drainage plans have been submitted and reviewed by the County Geologist and DPW Engineering (sheet C-1 of the engineered plans). The plans show a portion of the new drainage system within the 25 foot coastal bluff setback, which cannot be approved. As a condition of approval, the drainage system will be required to be moved to a location outside of this setback, possibly requiring the system to run beneath the proposed patio (condition of approval XX).

In addition, the final drainage plans must indicate that drainage will be routed to the base of either the coastal bluff, the arroyo to the east of the project site, or conveyed to Bayview Drive in order *to* avoid potential slope mstability. The County geologist, project Geotechnical Engineer, and the Department of Public Works, Drainage Section must approve the revised final drainage plan prior to building permit issuance.

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 **07-0117,** 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

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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-1-6 (Single-family residential, 6,000 square foot minimum), 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 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 compatible with the surrounding neighborhood at the Southeastern end of Bayview Drive in terms of bulk, mass, and scale; the site is surrounded by lots developed to an urban density; and the colors will be earth-tone in appearance and complementary to the site. The house will be visible from the beach, but will have a visual impact similar to that of adjacent homes on adjacent upcoast properties on Bayview Drive, where many second story homes of a similar height exist.

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 no public access easements exist on site. Public access is provided in the vicinity from Cliff Drive to Hidden Beach.

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

This finding can be made, in that the 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-1-6 (Single-family residential, 6,000 square foot minimum) 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. Size and architectural styles vary widely in the area, and the design submitted is consistent with the existing range.

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, in that the project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the Uniform Building Code, the County Building ordinance, and the recommendations of the project's Engineering Geologic and Geotechnical reports to insure the optimum in safety and the conservation of energy and resources. The proposed single-family dwelling will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood.

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-1-6 (Single-family residential, 6,000 square foot minimum) 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.

The proposed residence will comply with the County's Geologic Hazards Ordinance, in that the project will comply with the minimum setback from the coastal bluff to ensure 100-year stability of the structure (25-30 feet at this location).

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).

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-1-6 zone district (including setbacks, lot coverage, floor area ratio, height, and number of stones) and will result in a structure of similar bulk, mass,

and scale as other two-story homes immediately upcoast of the project site on Bayview Drive.

The project will comply with General Plan/LCP Policy **5.10.7** (Development on Open Beaches and Blufftops) in that the project site is an existing lot of record and the proposal is compatible with the pattern of existing development in that many houses along the top of the bluff at the southern end of Bayview Drive have two-stories with similar visual impacts. Furthermore, existing vegetation mounding the project site reduces the visual impacts from the public beach.

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 four-bedroom single-family dwelling will replace an existing six-bedroom single-family dwelling, resulting in a net decrease in the number of bedrooms. The expected level of traffic generated by the proposed project is anticipated to be similar to that generated by the existing residence.

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 structure is located in a neighborhood containing both one and two-story homes of a similar size, and the proposed 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 single-family dwelling will be of an appropriate bulk, mass, and scale for the surrounding neighborhood, and the use of earth-tone colors combined with existing vegetation will soften the visual impact of the residence from the beach.

Conditions of Approval

Exhibit **A:** Project plans, 10 sheets; sheets P1 through P6 drawn by Matson-Britton Architects on 3/6/07; sheets C-1 through C-3 drawn by RI Engineering Inc. and dated 2/07; sheet 1 drawn by Gary Ifland and dated 4/4/06.

I. This permit authorizes the demolition of an existing single-family dwelling and construction of a two-story single-family dwelling on parcel 043-161-58. 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.

D. Obtain a Grading Permit from the Santa Cruz County Building Official, if more than 100 cubic yards of grading is proposed, if cuts exceed 5 feet, or if fill exceeds 2 feet in height.

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. Identify finish and color of exterior materials and roof covering for Planning Department approval if any change is proposed from the color and materials on file for application 07-0117. Any color boards must be in an 8.5" x 11" format.

2. An engineered grading plan

3. **A** final engineered drainage plan, with the following additional information as required by the County Geologist and DPW Drainage:

   a. Modify the drainage system to convey drainage to the base of the coastal bluff, a safe outlet location in the arroyo to the east of the project site, cr **to** Bayview Drive. The plan shall be reviewed and approved by the County Geologist, the project Geotehcnical Engineer, and the Department of Public Works, Drainage Division.

   b. Provide a final review letter fiom the project geotechnical engineer stating that the proposed drainage plan will not cause any erosion or stability problems on this site **or** downstream fiom the site.

   c. Provide a copy of the recorded drainage easement for parcel 043-161-57 drainage facilities that will handle upstream runoff on the subject property

   d. Show the drainage system is in a location outside of the coastal bluff setback as determined by the Engineering Geologist.

   e. Details of the person and/or entity responsible for the maintenance of the existing concrete gutter on the downstream property.

4. **A** detailed erosion control plan for review and approval by Environmental Planning staff.

5. Show on the plans how the existing retaining wall and associated drainage improvements on the property to the south of the subject property will be maintained by the owner of the subject parcel, either through approval of a lot line adjustment or the recordation of a maintenance easement.

   a. If a lot line adjustment is pursued to cure this encroachment, the adjustment must be approved by the County Planning Department prior to issuance **of** the building permit for the subject parcel.

   b. If an easement is sought for continued maintenance, proof of recordation must be submitted prior to building permit issuance.

6. 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 28-feet.

7. Details showing compliance with fire department requirements, including all requirements of the Urban Wildland Intermix Code, if applicable.

8. Plans shall include a statement that the project will comply with the accepted Engineering Geologic and Geotechnical reports for this project, and both the building plans **and** engineering plans must clearly show the accepted geologic building envelope.

9. Plans shall show protective fencing around all trees within 20 feet of the area of disturbance, except for the single tree proposed to be removed.

10. Show the proposed location of on-site sewer lateral(s), clean out(s), and connection(s) to the existing public sewer. Existing sewer laterals must be properly abandoned prior to issuance of the demolition permit.

10. Revised site plans and engineered plans showing the driveway does not exceed more than 50% of the front yard frontage.

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, if applicable.

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. Submit plan review letters from both the project Geotechnical Engineer and the project Geologist, confirming the building, grading, drainage, and erosion control plans conform to the recommendations of the Geotechnical and Engineering Geologic report, respectively. At least three **(3)** copies of each letter shall be submitted for review and approval.

G. 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.

H. 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.

I. Sign, date, and record a Declaration of Geologic Hazards. **You cannot alter the wording of this declaration.** Please return a copy of the recorded document to the Planning Department as proof this declaration has been recorded.

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. The project must comply with all recommendations of the approved soils and engineering geology reports.

D. 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 fiom 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, it 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.

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 on the expiration date listed below unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Don Bussey	David Keyon
Deputy Zoning Administrator	Project Planner

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 h w e been specified in this document.

Application Number: 07-0117
Assessor Parcel Number: 043-161-57 and 043-161-58
Project Location: 660 Bayview Drive

Project Description: Demolish existing single-family dwelling and construct new single-family dwelling

Person or Agency Proposing Project: Matson-Britton Architects

Contact Phone Number: (831) 425-0544

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 Proiect** 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. __X__ **Categorical Exemption**

Specify type: Class 2: Replacement **of** existing structure

F. Reasons why the project is exempt:

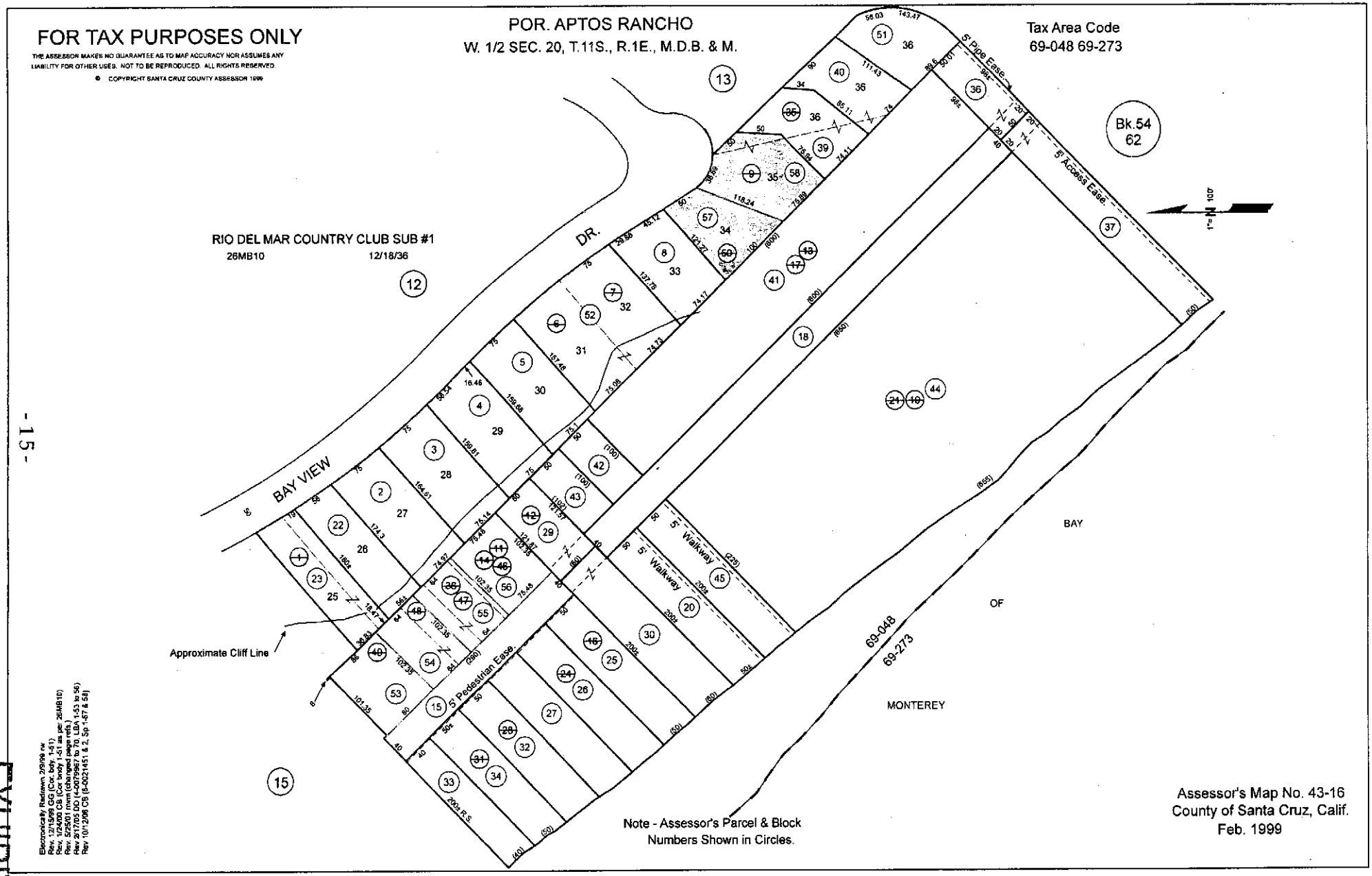
Demolish and re-construct single-family dwelling on existing lot

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

_____ Date:_____

David Keyon, Project Planner

EXHIBIT D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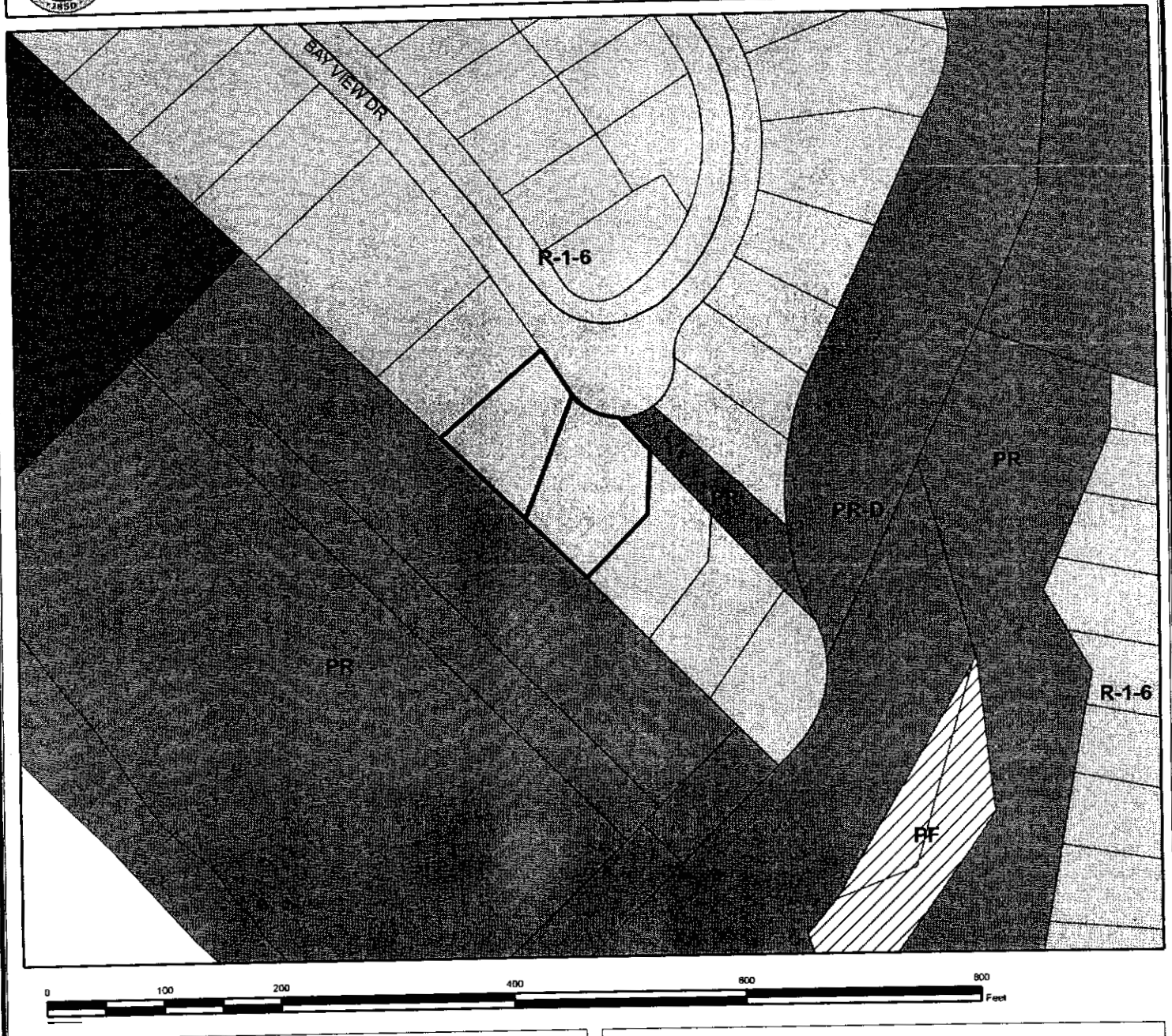
© COPYRIGHT SANTA CRUZ COUNTY ASSESSOR 1999
POR. APTOS RANCHO
W. 1/2 SEC. 20, T.11S., R.1E., M.D.B. & M.
Tax Area Code
69-048 69-273
Bk.54
62
RIO DEL MAR COUNTRY CLUB SUB #1
26MB10 12/18/36
BAY VIEW
DR.
5' Pipe Ease.
5' Access Ease.
5' Walkway
5' Walkway
5' Pedestrian Ease.
Approximate Cliff Line
BAY
OF
MONTEREY
69-048
69-273
1" = 100'
Note - Assessor's Parcel & Block Numbers Shown in Circles.
Assessor's Map No. 43-16
County of Santa Cruz, Calif.
Feb. 1999
Electronically Redrawn 2/9/99 rw
Rev. 12/15/99 GG (Cor. bdy. 1-51)
Rev. 1/24/00 CB (Cor bndy 1-51 as per 26MB10)
Rev. 5/25/01 mvm (changed page refs.)
Rev 2/17/05 DD (4-0079567 to 70, LBA 1-53 to 56)
Rev 10/12/06 CS (8-0021451 & 2, Sp 1-67 & 68)

EXHIBIT F

Zoning Map



Legend

- APNs 043-161-57, -58
- Assessors Parcels
- Streets
- RESIDENTIAL-SINGLE FAMILY (R-1)
- PARK (PR)
- RESIDENTIAL- OCEAN BEACH (RB)
- PUBLIC FACILITY' (PF)

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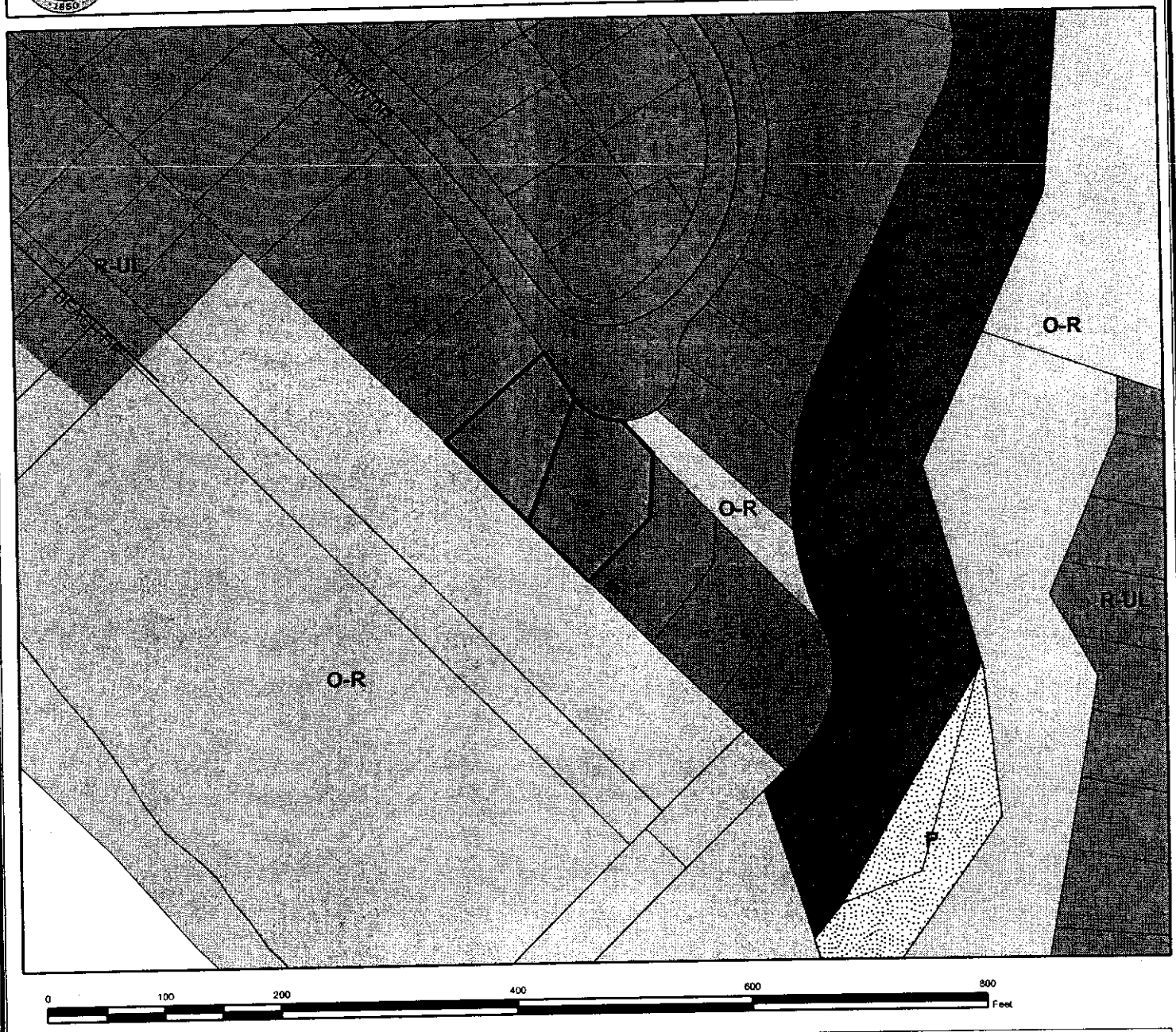
Map Created by
County of Santa Cruz
Planning Department
March 2007

EXHIBIT F

General Plan Designation Map



Legend

- APNs 043-161-57, -58
- Assessors Parcels
- Streets
- Residential - Urban **Low** Density (R-UL)
- Parks and Recreation (O-R)
- Urban Open Space (O-U)
- Public Facilites (P)

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W E
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Map Created by
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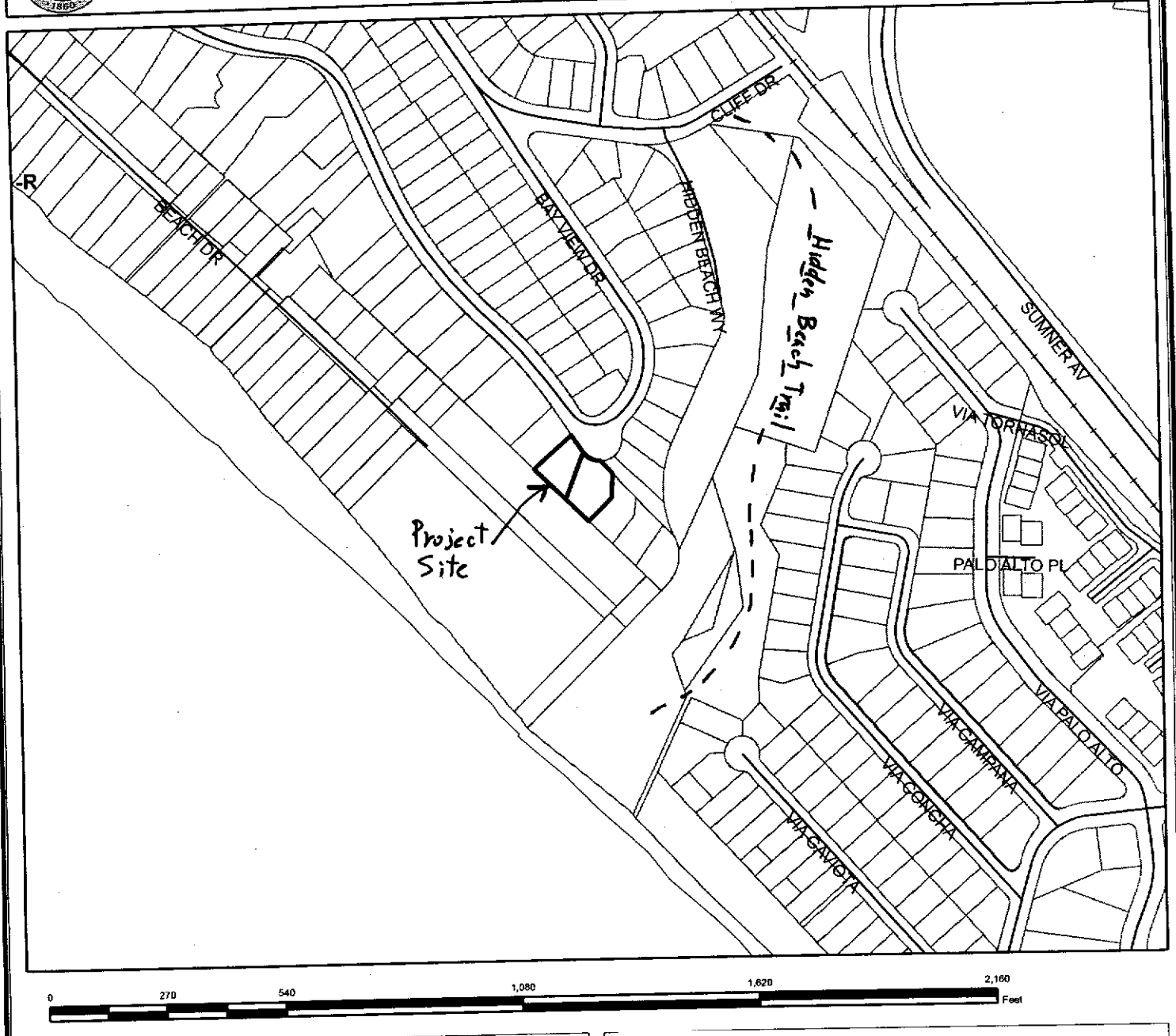
March 2007

EXHIBIT F

Location Map



Legend

- APNs 043-161-57, -58
- Assessors Parcels
- Streets
- Railroads
- County Boundary

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March 2007

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DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

GENERAL

1. The results of ow investigation indicate that from a geotechnical engineering standpoint the property may be developed as proposed, provided our recommendations and those of the project geologist are included in the design and construction.

2. Grading and foundation plans should be reviewed by Pacific Crest Engineering Inc. during their preparation and prior to contract bidding.

3. Pacific Crest Engineering Inc. should be notified at least four (4) working days prior to any site clearing and grading operations on the property in order to observe the shipping and disposal of unsuitable materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with at least you or your representative, the grading contractor, a county representative and one of our engineers present. At this meeting, the project specifications and the testing and inspection responsibilities will be outlined and discussed.

4. Field observation and testing must be provided by a representative of Pacific Crest Engineering Inc., to enable them to form an opinion as to the degree of conformance of the exposed site conditions to those foreseen in this report, regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements. Any work related to grading or foundation excavation or drilling performed without the full knowledge and direct observation of Pacific Crest Engineering Inc., the Geotechnical Engineer, will render the recommendations of this report invalid.

SITE PREPARATION

5. The initial preparation of the site will consist of the removal of trees as required, and any accumulated debris as a result of demolition activities. Tree removal should include the entire stump and root ball. Any existing foundation elements to be abandoned should be completely removed. Septic tanks and leaching lines, if found, must also be completely removed. The extent of this removal will be designated in the field by a representative of Pacific Crest Engineering Inc. These materials must be removed from the site.

6. Any voids created by the removal of trees, root balls, septic tank, leach lines, foundations, or any other unsuitable materials must be backfilled with properly compacted native soils that are free of organic and other deleterious materials or with approved imported fill.

7. Any wells encountered shall be capped in accordance with the requirements and approval of the Santa Cruz County Health Department. The strength of the cap shall be equal to the adjacent soil and shall not be located within 5 feet of a structural footing.

EXHIBIT G

8. Surface vegetation, tree roots and organically contaminated topsoil should then be removed ("stripped") fkom the area to be graded. This material may be stockpiled for future landscaping. In addition, any remaining debris or large rocks must also be removed (this includes asphalt or rocks greater than 2 inches in greatest dimension). It is anticipated that the depth of stripping may be 2 to 4 inches, however the required depth of stripping must be based upon visual field observations of a representative of Pacific Crest Engineering Inc. The depth of stripping will vary upon the type and density of vegetation across the project site and with the time of year. Areas with dense vegetation or groves of trees may require an increased depth of stripping.

9. It is possible that there are areas of man-made fill on the project site that our field investigation did not detect. Areas of man-made fill, if encountered on the project site will need to be completely excavated to undisturbed native material. The excavation process should be observed and the extent designated in the field by a representative of Pacific Crest Engineering Inc. Any voids created by fill removal must be backfilled with properly compacted approved native soils that are free of organic and other deleterious materials, or with approved imported fill.

10. Following the stripping, the area should be excavated to the design grades. The exposed soils in the building and paving areas should be scarified, moisture conditioned, and compacted as an engineered fill except for any contaminated material noted by a representative of Pacific Crest Engineering Inc. in the field. The moisture conditioning procedure will depend on the time of year that the work is done, but it should result in the soils being within about 1 to 3 percent of their optimum moisture content at the time of compaction. Compaction of the exposed subgrade soils should extend 5 feet beyond all building and pavement areas.

11. **Note: If this work is done during or soon after the rainy season, the on-site soils and other materials may he too wet in their existing condition to be used as engineered fill. These materials may require a diligent and active drying and/or mixing operation to reduce the moisture content to the levels required to obtain adequate compaction as an engineered fill. If the on-site soils or other materials are too dry, water may need to be added.**

12. With the exception of the upper 8 inches of subgrade in paved areas and driveways, the soil on the project should be compacted to a minimum of 90% of its maximum dry density. The upper 8 inches of subgrade in the pavement areas and all aggregate subbase and aggregate base should be compacted to a minimum of 95% of its maximum *dry* density.

13. The maximum dry density will be obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557. This test will also establish the optimum moisture content of the material. Field density testing will be in accordance with ASTM Test #D2922.

14. Although not anticipated, should the use of imported fill be necessary on this project it should meet the following specifications:

- free of organics, debris, and other deleterious materials,
- free of "recycled" materials such as asphaltic concrete, concrete, brick, etc.,

EXHIBIT G

- granular in nature, well graded, and contain sufficient binder to allow utility trenches to stand open,
- free of rocks in excess of 2 inches in size,
- have a Plasticity Index between 4 and 12, and
- have a minimum Resistance "R" Value of 30, and be non-expansive.

15. Samples of any proposed imported fill planned for use on this project should be submitted to Pacific Crest Engineering Inc. for appropriate testing and approval not less than 4 working days before the anticipated jobsite delivery. Imported fill material delivered to the project site without prior submittal of samples for appropriate testing and approval must be removed from the project site.

CUT AND FILL SLOPES

16. The following recommendations for cut and fill slopes are provided for general planning purposes only. Any fill slopes, or cut slopes greater than 4 feet in height, should he specifically reviewed by the geotechnical engineer during grading plan preparation so that additional recommendations can be made.

17. Excavations should be properly shored and braced during construction to prevent sloughing and caving. .The contractor should be aware of all CAL OSHA and local safety requirements and codes dealing with excavations and trenches.

18. All fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report and have a gradient no steeper than 3:1 (horizontal to vertical).

19. Fill slopes should be keyed into the native slopes by providing a 10 foot wide base keyway sloped negatively at least 2% into the bank. The depth of the keyways will vary, depending on the materials encountered. It is anticipated that the depth of the keyways may be 3 to 6 feet, but at all locations shall be at least 2 feet into firm material. Subsequent keys may be required as the fill section progress upslope.

20. Cut slopes shall not exceed a 3:1 (horizontal to vertical) gradient and a 4-foot vertical height unless specifically reviewed by the Geotechnical Engineer.

21. The above slope gradients are based on the strength characteristics of the materials under conditions of normal moisture content that would result from rainfall falling directly on the slope, and do not take into account the additional activating forces applied by seepage from spring areas. Therefore, in order to maintain stable slopes at the recommended gradients, it is important that any seepage forces and accompanying hydrostatic pressure encountered be relieved by adequate drainage. Drainage facilities may include subdrains, gravel blankets, rock fill surface trenches or horizontally drilled drains. Configurations and type of drainage will be determined by Pacific Crest Engineering Inc. during grading plan preparation.

22. The surfaces of all cut and fill slopes should be prepared and maintained to reduce erosion. This work, *at* a minimum, should include track rolling of the slope and effective planting. The

EXHIBIT G

protection of the slopes should be installed as soon as practicable so that a sifficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

23. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may take place.

24. Fill slopes should not be placed above cut slopes for this project.

EROSION CONTROL

25. The surface soils are classified as having a high potential for erosion. Therefore, the finished ground surface should be planted with ground cover and continually maintained to minimize surface erosion. For specific and detailed recommendations regarding erosion control on and surrounding the project site, you should consult your civil engineer or an erosion control specialist.

TEMPORARY SHORING

26. If basements are planned, temporary construction shoring may be necessary for this project. The design, construction and installation of the shoring system is the sole responsibility of the Contractor.

27. Excavations should be properly shored and braced during construction to prevent sloughing and caving. The contractor should be aware of all CAL OSHA and local safety requirements and codes dealing with excavations and trenches.

28. Basement or trench excavations should have temporary sidewall slopes which do not exceed a 2:1 (horizontal to vertical) gradient. The "top" of any temporary cut slope should be set-back at least ten feet (measured horizontally) from any nearby structure or property line. Any basement or trench excavation planned which cannot meet these side slope gradients will need to have a shoring system designed to support steeper sidewall gradients.

29. The recommended temporary cut slopes of 2:1 (h:v) are considered acceptable for short-term construction periods if performed during periods of fair weather. It should be understood that on-site safety is the *sole responsibility* of the Contractor, and that the Contractor shall designate a ***competent** person* to monitor the slope excavation prior to the start of each work day, and throughout the work day as conditions change. The competent person designated by the Contractor shall determine if flatter slope gradients are more appropriate, or if shoring should be installed to protect workers in the vicinity of the slope excavation. Refer to Title 8, California Code of Regulations, Sections 1539-1543.

30. The temporary shoring may consist of either a soldier pier wall with wood lagging or a soil nail wall with a shotcrete facing. Irrespective of the type of shoring, the chosen wall should be fully drained and should not obstruct nor significantly change the normal flow of moisture or groundwater through the project soils. Wall drainage should discharge to an approved location.

EXHIBIT G

31. If a soldier pier wall with wood lagging is utilized, the wood lagging, and any gravel backfill (or other drainage material) behind the wall, must be completely removed as the excavation is backfilled, and prior to the completion of the project. Soldier piles should be cut off a minimum of 5 feet below finished grade.

32. All shoring backfill to be placed in maximum 8 inch lifts, at a water content which is 1 to 3 percent above the laboratory optimum value. The material should be compacted to at least 90 percent relative compaction. If a clean gravel backfill is utilized as shoring backfill, it should be compacted in maximum 1 to 2 foot lifts using a vibra-plate or similar equipment. **It is recommended** that **all voids behind the shoring system be completely filled with soil or gravel backfill while the shoring work is in progress.**

33. The temporary shoring wall system chosen by the designer should be designed using the geotechnical design criteria presented in the "Lateral Pressures" section of this report.

34. Shoring should be reviewed by the Geotechnical Engineer for conformance with our recommendations at least two weeks prior to the start of any shoring work.

FOUNDATIONS - PIER AND GRADE BEAM

35. At the time we prepared this report, the grading plans had not been completed and the structure locations and foundation details had not been finalized. We request an opportunity to review these items during the design stages to determine if supplemental recommendations will be required.

36. An appropriate foundation system to support the proposed structures will consist of end bearing cast-in-place reinforced concrete piers in conjunction with reinforced concrete grade beams.

37 The end bearing piers should be designed for the following criteria:

a. Minimum pier embedment should be 5 feet into the Purisima bedrock. This will necessitate pier depths of approximately 30 to 35 feet. Actual depths could depend upon a lateral force analysis performed by your structural engineer.

b. Minimum pier size should be 18 inches in diameter and all pier holes must be free of loose material on the bottom.

c. Passive pressures of 400 psf/ft of depth can be developed, acting over a plane 1% times the pier diameter. Passive resistance due to the Purisima bedrock may be increased to 600 psf/ft of depth. Neylect passive pressure over the upper five feet of pier.

d. The allowable end bearing capacity is 3,000 psf, with a 1/3rd increase for wind or seismic loading.

EXHIBIT G

e. All grade beams should be embe d at least 12 inches below lowest adjacent grade.

f. All piers must be constructed within ½ percent of a vertically plumb condition.

g. All pier excavation spoils must be removed from slope areas which are steeper than 5:1 (horizontal to vertical).

h. It is possible that the piers will need to be cased during dnlling and that the water will have to' either be pumped before steel and concrete placement or the concrete placed through a tremie.

i. If the casing is pulled during the concrete pour, it must be pulled slowly with a minimum of 4 feet of casing remaining embedded within the concrete at all times.

j. If concrete is placed via a tremie, the end of the tube must remain embedded a minimum of 4 feet into the concrete at all times.

k. The Contractor should expect very dense drilling conditions beginning at an approximate depth of 25 feet, based on the findings outlined in our test borings. Therefore appropriately sized drilling equipment should be selected for these drilling conditions so that the piers may extend to the full depth outlined in the geotechnical report and the project plans and specifications.

1. All pier construction must be observed by a Pacific Crest Engineering Inc. Any piers constructed without the full knowledge and continuous observation of a representative from Pacific Crest Engineering Inc., will render the recommendations of this report invalid.

38. The piers and grade beams should contain steel reinforcement as determined by the Project Civil or Structural Engineer.

SLAB-ON-GRADE CONSTRUCTION

39. Concrete slab-on-grade floors should be limited to garages or basement floors. The upper 12 inches of subgrade below slabs should be scarified, moisture conditioned and compacted to a minimum of 90% relative compactive effort.

40. Slabs may be structurally integrated with the footings. If the slabs are constructed as "free floating" slabs, they should be provided with a minimum ¼ inch felt separation between the slab and footing. The slabs should be separated into approximately 15' x 15' square sections with dummy joints or similar type crack control devices.

41. All concrete slabs-on-grade should be underlain by a minimum 4 inch thick capillary break of ¾ inch clean crushed rock (no fines). It is recommended that neither Class II baserock nor sand be employed as the capillary break material.

EXHIBIT C

42. Where floor coverings are anticipated or vapor transmission may be a problem, a waterproof membrane should be placed between the granular layer and the floor slab in order to reduce moisture condensation under the floor coverings. A 2 inch layer of moist sand on top of the membrane will help protect the membrane and will assist in equalizing the curing rate of the concrete.

43. We recommend basement slab and retaining walls be sealed using Xypex C-1000 mixed into the concrete in addition to any water proofing compound on the exterior of the basement walls. Refer to www.xypex.com for additional information.

Please Note: Recommendations given above for the reduction of moisture transmission through the slab are general in nature and present good construction practice. Pacific Crest Engineering Inc. are not waterproofing experts. For a more complete and specific discussion of slab moisture protection, a waterproofing expert should be consulted.

44. Slab thickness, reinforcement, and doweling should be determined by the Project Civil or Structural Engineer.

UTILITY TRENCHES

45. Utility trenches that are parallel to the sides of the building should be placed so that they do not extend below a line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom outside edge of all footings.

46. Utility pipes should be designed and constructed so that the top of pipe is a minimum of 24 inches below the finish subgrade elevation of any road or pavement areas. Any pipes within the top 12 inches of finish subgrade should be concrete encased, per design by the Project Civil Engineer.

47. For the purpose of this section of the report, backfill is defined as material placed in a trench starting one foot above the pipe, and bedding is all material placed in a trench below the backfill.

48. Unless concrete bedding is required around utility pipes, free-draining clean sand should be used as bedding. Sand bedding should be compacted to at least 95 percent relative compaction.

49. Approved imported clean sand or native soil may be used as utility trench backfill. Backfill in trenches located under and adjacent to structural fill, foundations, concrete slabs and pavements should be placed in horizontal layers no more than 8 inches thick. Each layer of trench backfill should be water conditioned and compacted to at least 95 percent relative compaction. Clean sand is defined as 100 percent passing the #4 sieve, and less than 5 percent passing the #200 sieve.

50. Utility trenches should be backfilled with controlled density fill (such as 2-sack sand\cement slurry) below perimeter footing areas to help minimize potential moisture intrusion

EXHIBIT C

below slabs. The width of the plug should be at least the width of the footing or grade beam at the building perimeter, but no less than 18 inches.

LATERAL EARTH PRESSURES

51. Retaining walls with full drainage should be designed using the following criteria:

a. Active earth pressure values may be used when walls *are* free to yield an amount sufficient to develop the active earth pressure condition (about ½% of height). The effect of wall rotation should be considered for areas behind the planned retaining wall (pavements, foundations, slabs, etc.). Use **an** equivalent fluid weight of 45 pcf for a level backslope gradient; and 60 pcf for a maximum 2:1 (horizontal to vertical) backslope gradient. **This assumes a fully drained condition.**

b. Where walls *are* restrained from moving at the top, or where minimal wall rotation is desired, design for a ***uniform*** pressure acting along the full wall height equivalent to 25H psf for a level backslope, and 38H psf for **a** 2:1 maximum backslope (where H is the height of the wall). **This assumes a fully drained condition.**

c. For resisting passive earth pressure use 200 psf/ft of depth. To develop the resisting passive earth pressure, the retaining wall footings should be embedded a minimum of 18 inches below the lowest adjacent grade. There should be a minimum of 5 feet of horizontal cover as measured from the outside edge of the footing.

d. A "coefficient of friction" between base of foundation and soil of 0.35 may be used.

e. Retaining walls to be integrated with the proposed residences should be supported by drilled pier foundations designed in accordance with the criteria outlined under the Foundations – Pier and Grade Beam section of this report. Site retaining walls may be designed for allowable bearing capacities of 1,800 psf for Dead plus Live Load, with a 1/3rd increase for short term loads.

f. Any live or dead loads which will transmit **a** force to the wall, refer to Figure No. 9 of Appendix A.

g. The resultant seismic force on retaining walls $20H^2$ and acts at a point 0.6H up from the base of the wall. This force has been estimated using the Mononobe-Okabe method of analysis as modified by Whitman (1990).

Please note: Should the slope behind the retaining walls be steeper than 2:1 horizontal to vertical, supplemental design criteria will be provided for lateral earth pressures for the particular slope angle.

52. The above criteria are based on fully drained conditions. Therefore, we recommend that permeable material meeting the State of California Standard Specification Section 68-1.025, Class 1, Type A, be placed behind the wall, with a minimum width of 12 inches and extending

for the full height, of the wall to within 1 foot of the ground surface. The permeable material should be covered with Mirafi 140 filter fabric or equivalent and then compacted native soil placed to the ground surface. **A** 4 inch diameter perforated rigid plastic drain pipe should be installed within 3 inches of the bottom of the permeable material and be discharged to a suitable, approved location such as the project storm drain system. The perforations should be located and oriented on the lower half of the pipe. Neither the pipe nor the permeable material should be wrapped in filter fabric. Please refer to Figure No. 10 of Appendix **A,** Typical Retaining Wall Drain Detail.

53. The area behind *the* wall and beyond the permeable material should be compacted with approved material to a minimum relative *dry* density of 90%.

SURFACE DRAINAGE

54. Surface water must not be allowed to pond or be trapped adjacent to the building foundations nor on the building pad nor in the parking areas.

55. All roof eaves should be guttered, with the outlets from the downspouts provided with adequate capacity to carry the storm water from the structures to reduce the possibility of soil saturation and erosion. The connection should be in a closed conduit which discharges at an approved location away from the structures and the graded area. The discharge location should not be located at the top of, or on the face of, any topographic slopes. ***Surface** runoff be **directed** away from all bluff **edges.***

56. Final grades should be provided with a positive gradient away from all foundations in order to provide for rapid removal of the surface water from the foundations to an adequate discharge point. Grades should slope away from foundation areas at least 2 percent for the first 5 feet. Concentrations of surface water runoff should be handled by providing necessary structures, such as paved ditches, catch basins, etc.

57. Cut and fill slopes shall be constructed so that surface water will not be allowed to drain over the top of the slope face. This may require berms along the top of fill slopes and surface drainage ditches above cut slopes. **All** cut, fill and disturbed native slope areas should be hydro-seeded or other means of erosion control provided, as determined by the Project Civil Engineer.

58. Irrigation activities at the site should not be done in an uncontrolled or unreasonable manner.

59. The building and surface drainage facilities must not be altered nor any filling or excavation work performed in the area without first consulting Pacific Crest Engineering Inc

PAVEMENT DESIGN

60. The design of the pavement section was beyond our scope of services for this project. To have the selected pavement sections perform to their greatest efficiency, it is very important that the following items be considered:

EXHIBIT G

a. Properly scarify and moisture condition the upper 8 inches of the subgrade soil and compact it to a minimum of 95% of its maximum dry density, at a moisture content about 1 to **3%** over the optimum moisture content for the soil.

b. Provide sufficient gradient to prevent ponding of water

c. Use only quality materials of the type and thickness (minimum) specified. **All** aggregate base and subbase must meet Caltrans Standard Specifications for Class 2 materials, and be angular in shape. All Class 2 aggregate base should be ¾ inch maximum in aggregate size.

d. The use of "recycled" materials, such as asphaltic concrete for aggregate base or subbase is not recommended.

e. Compact the base and subbase uniformly to a minimum of 95% of its maximum dry density.

f. Use ½ maximum, Type "A" medium graded asphaltic concrete. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits by Cal Trans Specifications.

g. Place ¼ gallon per square yard of SG-70 prime coat over the aggregate base section, prior to placement of the asphaltic concrete.

h. Maintenance should be undertaken on a routine basis

PLAN REVIEW

61. We respectfully request an opportunity to review the plans during preparation and before bidding to ensure that the recommendations of this report have been included and to provide additional recommendations, if needed. If we are not afforded the opportunity to review the plans, we cannot be responsible for misinterpretation of our recommendations. In addition, project plans which have not been reviewed **by** the Geotechnical Engineer may result in changes to the project design during the construction phase, with potential additional costs and delays to bring the project into conformance with the requirements outlined in this report.

EXHIBIT G

On a final note, another factor not mentioned thus far is the intensity and magnitude of future large coastal storms. If for some reason the intensity and magnitude of coastal storms increase in the future, there is some possibility that the bluff retreat rates will also increase. As with the other factors mentioned above, we know of no way to accurately estimate this prediction, and even if we could, we wouldn't know how to insert it into our bluff retreat calculations.

In *summary,* we felt it prudent to mention that there are some unknown future variables which might increase the bluff retreat rates from the values presented in this report, and that there is no reliable way that we are aware of to quantify these transient processes. The variables that might adversely impact our calculations are rising sea levels, intensity and magnitude of coastal storms, and fluctuations in the **size** of the large beach fronting the bluff. In the end, however, we have to form a competent opinion with the data available to us, and we feel **we** have done this while adhering to the standard **of** care for coastal geology investigations.

CONCLUSIONS

Based on the information gathered and analyzed in the steps outlined above, it is our opinion that the subject property is geologically suitable for the future proposed residential development, and will be subject **to** "ordinary" **risks** as defined in Appendix B, provided our recommendations are followed. Appendix B should be reviewed in detail by the developer and all property owners to determine whether an "ordinary" risk as defined in the appendix is acceptable. If this level of risk is unacceptable to the developer and the property owners, then the geologic hazards in question should be mitigated to reduce the corresponding risks to an acceptable level.

The subject property is located in an area of high seismic activity **and** will be subject to strong seismic shaking in the future. Modified Mercalli Intensities of IX are possible. Depending upon the type of engineering analysis, the controlling seismogenic sources for the subject properties are the Zayante fault, 6.8 kilometers to the northeast and the San Andrea fault, 12.6 kilometers to the northeast. The design earthquake on the Zayante fault should be a M_w 7.0, while that of the San Andreas fault should be M_w 7.9. Expected duration of strong shaking for the Zayante fault event is about 16 seconds. Although it yields lower seismic shaking values, the expected duration of strong shaking for a M_w 7.9 earthquake on the San Andreas fault is about 38 seconds. Deterministic analysis for the site yields a mean peak ground acceleration of 0.55 g with an associated effective peak acceleration of **0.41**, and a mean peak ground acceleration plus one dispersion of 0.83 g for the Zayante fault and for the San Andreas fault a mean peak ground acceleration of 0.43 g with an effective peak acceleration **of** 0.32 g, and mean peak ground acceleration plus one dispersion of 0.63 g.

Our historical bluff retreat analysis indicates that the top of the coastal bluff is retreating on average between 0.09 and 0.30 feet per year since 1928. We have drawn a bluff setback line on Plate 1 that is setback between **25** and 30 feet from the top of today's bluff, with the setback value being driven by the average historical retreat rate unless it results in a setback that is less

then 25 feet (in which case the default setback is ***25*** feet as dictated by County **of** Santa Cruz ordinances).

RECOMMENDATIONS

1. All habitable structures, access roads and utilities should be located within our "Geologically Suitable Development Envelope For Residences", landward of the coastal bluff retreat line, as portrayed graphically on Plate 1.

2. For ***structural design***, the project designers and engineers should consider **our** deterministic seismic analysis for the site, yielding **an** effective peak acceleration (EPA) of 0.41 g, a mean peak ground acceleration **of** 0.55 g, and a mean peak ground acceleration plus one dispersion of 0.83 g.

3. We recommend that the project geotechical engineer perform a quantitative slope stability analysis of our geological cross section utilizing the parameters outlined in this report, including: our predicted future bluff geometry, a ground water table of several feet perched atop the contact between the marine terrace and fluvial terrace deposits and the bedrock, and an appropriately derived seismic site coefficient using the simplified method developed by Ashford and Sitar (2002). When deriving the seismic site coefficient, we recommend that the deterministically-derived mean peak ground acceleration value of 0.43 g for the San Andreas be used.

4. We recommend that all drainage from improved surfaces such **as** walkways, patios, roofs, and driveways be collected and dispersed on site in such a way as to avoid ponding on the ground adjacent to a building site or spilling directly onto the steep coastal bluff. Gutters should be utilized on rooftops, channeling drainage up to Bayview Drive or down into the existing arroyo to the east, or dispersed on the property in such a way as to avoid ponding or concentrated discharge on steep slopes.

5. We recommend that **our** firm be provided the opportunity for a review of any forthcoming reports, designs and specifications by the project geotechnical engineer, structural engineer, architect and landscaper, in order that our recommendations may be properly interpreted and implemented in the design and specification. **If** our firm is not accorded the privilege of making the recommended review we can assume no responsibility for misinterpretation of our recommendations.

6. For further information about what you can do to protect yourself from earthquakes and their associated hazards, read ***Peace of Mind in Earthquake Country***, by **P.** Yanev **(1991).**

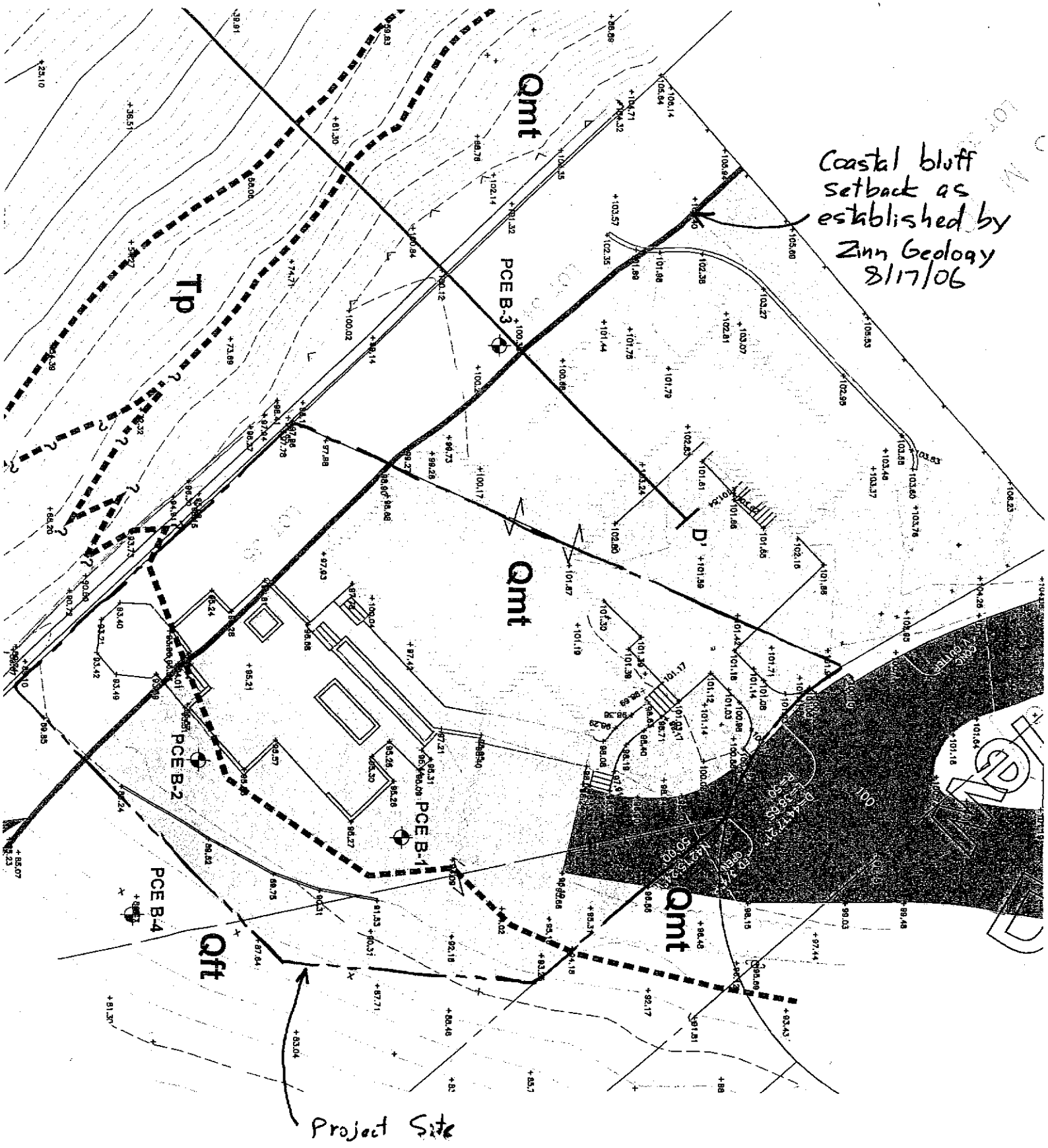
Coastal bluff setback as established by Zinn Geology 8/17/06
Qmt
Tp
Qft
PCE B-1
PCE B-2
PCE B-3
PCE B-4
D'
Project Site

EXHIBIT H

COUNTY OF SANTA CRUZ

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

March 21,2007

Matson-Britton Architects
728 N. Branciforte Ave
Santa Cruz, CA 95062

Subject: Review of Engineering Geology Report by Zinn Geology, Dated August 17,2006, Project No. 2006017-G-SC; and Geotechnical Report by Pacific Crest Engineering, Inc., Dated August 24,2006, Project NO. 0624-SZ70-D57,

Reference: APN: 043-162-58
Application No.: 07-0117

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.

3. Before building permit issuance, *plan-review letters* shall be submitted to Environmental Planning from both the geotechnical engineer and engineering geologist. The authors of the reports shall write the *plan* review *letters.* Each letter shall state that the project plans conform to the report's recommendations.

4. The application for a building permit shall include an engineered grading and drainage plan.

5. A notice of geologic hazards shall be executed and recorded with County Recorders Office that indicates that home is located in an area of flooding, wave attack, and landsliding. The blank notice is attached for your use.

All of these conditions become conditions of approval of the Coastal Permit.

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

(over)

EXHIBIT I

Our acceptance of the reports 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 call the undersigned at (831) 454-3175, email pln829@co.santa-cruz.ca.us if we can **be** of any further assistance.

Sincerely,

Joseph L. Hanna CEG 1313
County Geologist

Cc: Owner: Kelley & Cindy Trousdale, 660 Bay View Dr., Aptos, CA 95003
Pacific Crest Engineering, Inc, 444 Airport Blvd., Ste. 106, Watsonville, CA 95076
Zinn Geology, 3085 Carriker Ln., Ste. B, Soquel, CA 95073
Andrea Koch, Resource Planner
David Keyon, Project Planner

COUNTY OF SANTA CRUZ Planning Department

INTEROFFICE MEMO

APPLICATION NO 07-0117

Date: April 5, 2007

To: David Keyon, **Project** Planner

From: Larry Kasparowitz, Urban Designer

Re: Review of a new residence at 660 Bayview 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
All new development shall **be** sited, designed and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas	✔		
Minimum Site Disturbance			
Grading, earth moving, and removal of major vegetation shall be minimized.	✔		
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.	✔		
Special landscape features (rock outcroppings, prominent natural landforms, tree groupings) shall be retained.	✔		

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Ridgeline Development			
Structures located near ridges shall be sited and designed not to project above the ridgeline or tree canopy at the ridgeline			NIA
Land divisions which would create parcels whose only building site would be exposed on a ridgetop shall not be permitted			NIA
New or replacement vegetation shall be compatible with surrounding vegetation and shall be suitable to the			N/A

Rural Scenic Resources			
Location of development			
Development shall be located, if possible, on parts of the site not visible or least visible from the public view.			NIA
Development shall not block views of the shoreline from scenic road			N/A
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			N/A
Screening and landscaping suitable to the site shall be used to soften the visual impact of development in the viewshed			NIA
Building design			
Structures shall be designed to fit the topography of the site with minimal cutting, grading, or filling for			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 duster of			NIA

EXHIBIT J

buildings, colors and materials shall repeat or harmonize with those in the cluster			
Large agricultural structures			
The visual impact of large agricultural structures shall be minimized by locating the structure within or near an existing group of buildings			N/A
The visual impact of large agricultural structures shall be minimized by using materials and colors which blend with the building cluster or the natural vegetative cover of the site (except for greenhouses).			N/A
The visual impact of large agricultural structures shall be minimized by using landscaping to screen or soften the appearance of the structure			N/A
Restoration			
Feasible elimination or mitigation of unsightly, visually disruptive or degrading elements such as junk heaps, unnatural obstructions, grading scars, or structures incompatible with the area shall be included in site development			N/A
The requirement for restoration of visually blighted areas shall be in scale with the size of the proposed project			N/A
Signs			
Materials, scale, location and orientation of signs shall harmonize with surrounding elements			N/A
Directly lighted, brightly colored. rotating, reflective, blinking, flashing or moving signs are prohibited			N/A
Illumination of signs shall be permitted only for state and county directional and informational signs, except in designated commercial and visitor serving zone districts			N/A
In the Highway 1 viewshed, except within the Davenport commercial area, only CALTRANS standard signs and public parking lot identification signs, shall be permitted to be visible from the highway. Signs shall be of natural unobtrusive materials			N/A

EXHIBIT C

Beach Viewsheds			
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			N/A

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
Compatible Site Design			
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	✔		

EXHIBIT C

Landscaping	✔		
Streetscape relationship			N/A
Street design and transit facilities			N/A
Relationship to existing structures	✔		
Natural Site Amenities and Features			
Relate to surrounding topography	✔		
Retention of natural amenities	✔		
Siting and orientation which takes advantage of natural amenities	✔		
Ridgeline protection			N/A
Views			
Protection of public viewshed	✔		
Minimize impact on private views	✔		
Safe and Functional Circulation			
Accessible to the disabled, pedestrians, bicycles and vehicles			N/A
Solar Design and Access			
Reasonable protection for adjacent properties	✔		
Reasonable protection for currently occupied buildings using a solar energy system	✔		
Noise			
Reasonable protection for adjacent properties	✔		

13.11.073 Building design.

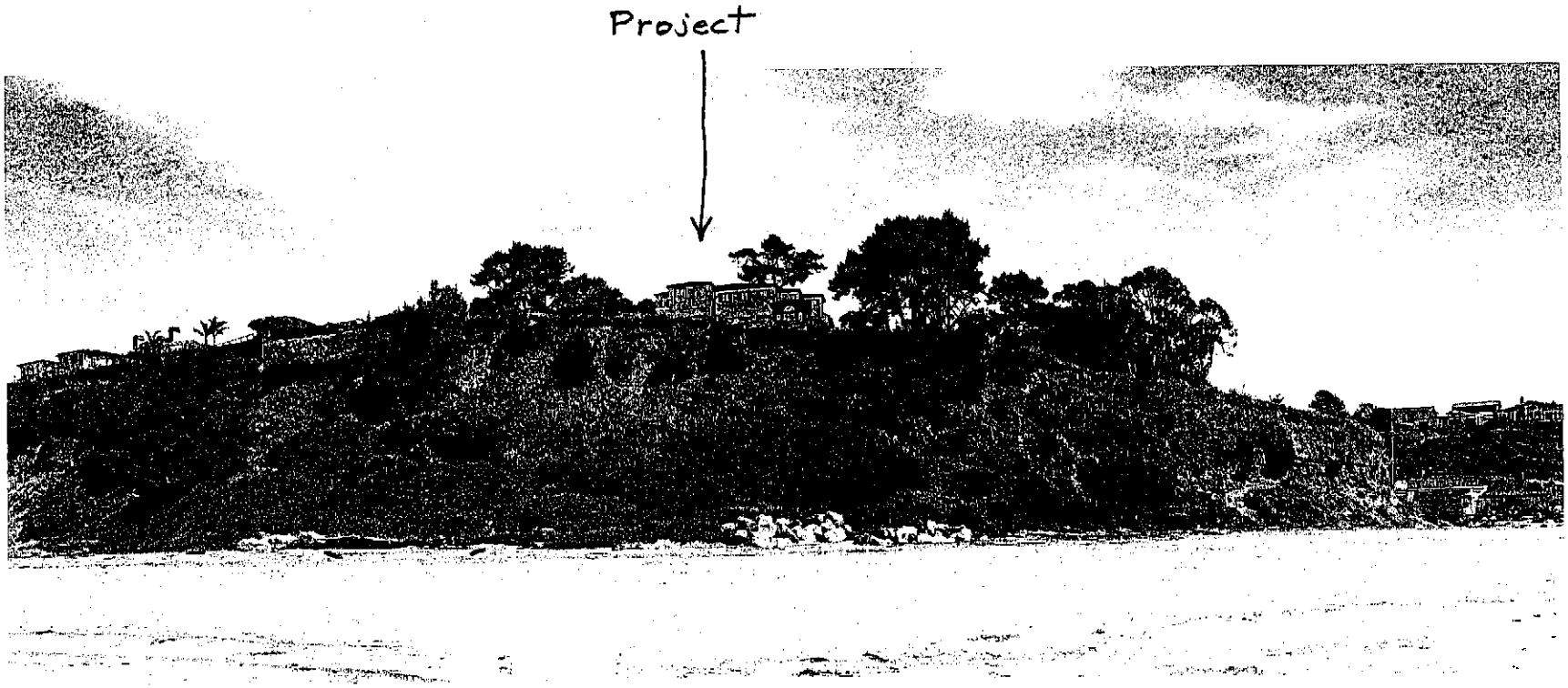
Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
Massing of building form	✔		
Building silhouette	✔		
Spacing between buildings	✔		
Street face setbacks	✔		
Character of architecture	✔		
Building scale	✔		
Proportion and composition of projections and recesses, doors and windows, and other features	✔		

Location and treatment of entryways	✔		
Finish material, texture and color	✔		
Scale			
Scale is addressed on appropriate levels	✔		
Design elements create a sense of human scale and pedestrian interest	✔		
Building **Articulation**			
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	✔		

Urban Designer's Comments:

This is an unusual site, given the turn around and island *in the right-of-way and* the *downslope of the grade from Bayview Drive. If this residence were proposed for a lot in the middle of Bayview on the bluff side, it would seem too large for the same size lot.*

The designer should be aware that a design for the remaining lot to the West, it may not be compatible with neighborhood to build w the full 50% FAR (it is far more visible than the current proposal).



Trousdale residence

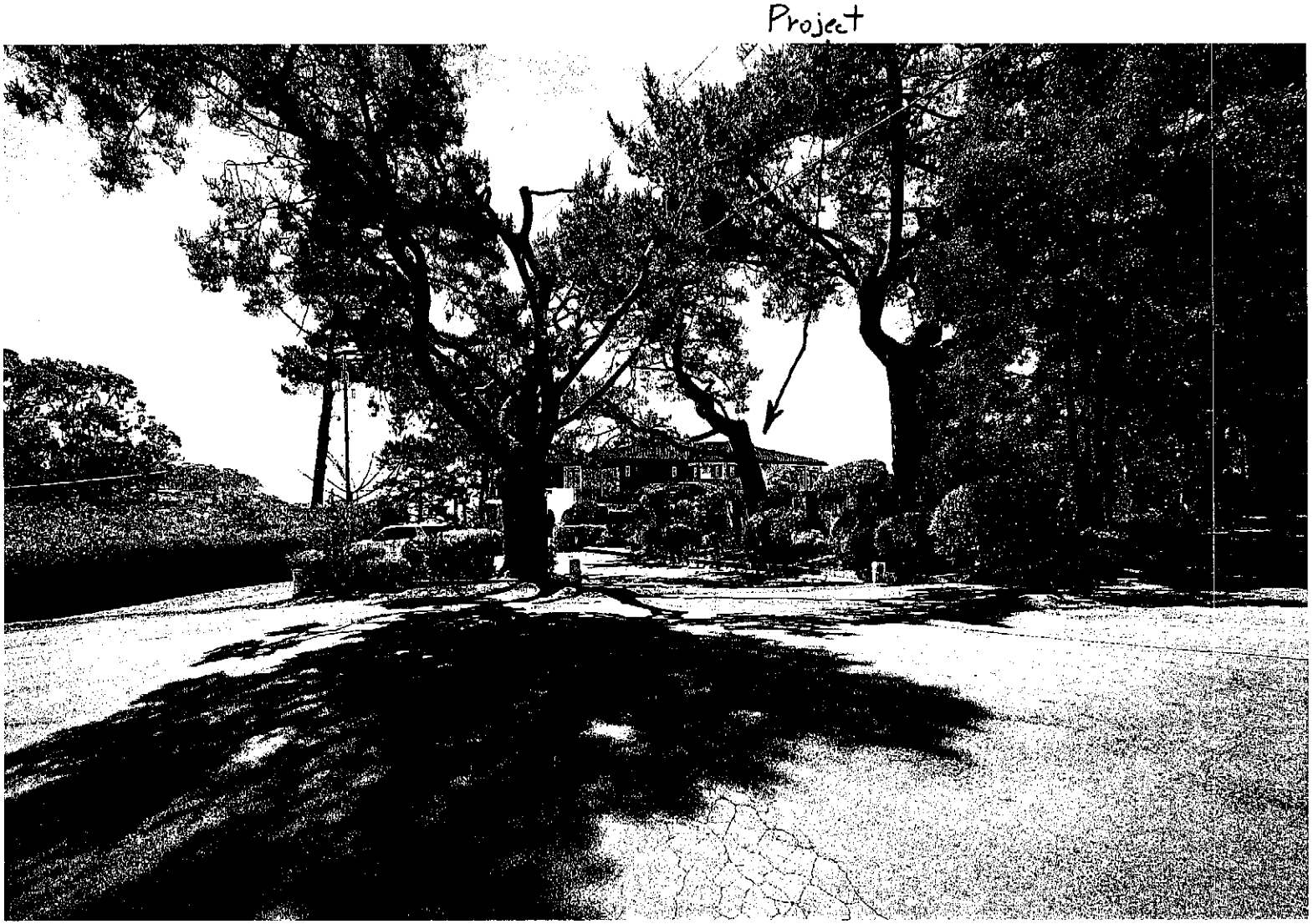
660 Bayview Drive, Lot B, Aptos
View from Via Gaviota seawall
Matson Britton Architects
Rendering: ArchiGraphics

EXHIBIT 11

Trousdale residence

660 Bayview Drive, Lot B, Aptos
View looking East from beach
Matson Britton Architects
Rendering: ArchiGraphics

EXHIBIT K



Trousdale residence

660 Bayview Drive, Lot B, Aptos
View from Bayview Drive
Matson Britton Architects
Rendering: ArchiGraphics

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Environmental Planning Completeness Comments

========== REVIEW ON MARCH 15. 2007 BY KEVIN D CRAWFORD ==========
03/15/07 - No fee for Preliminary Review of Grading was collected for this application. Planner should notify applicant of necessity to pay that fee.Grading Plan by R.I. Engineering dated 2/07 (C1-C3) appears acceptable for Completeness from a grading standpoint. NOTE: APN indicated on those sheets needs to be updated.

========== UPDATED ON APRIL 2. 2007 BY ANDREA M KOCH ==========

1) No further completeness comments from Environmental Planning. ========== UPDATED ON JULY 13. 2007 BY JOSEPH L HANNA ==========
The proposed drainage system has not been reviewed by the project engineering geologist and geotechncial engineer. Please have them review the proposal

The better way of disposing this drainage would be to take either to the base of the slope either within the stream or at the toe of the bluff. Please have the engineer examine determine if they have the right to use the subdivion's drainage easements to conduct the drainage to the base of the slope.

Environmental Planning Miscellaneous Comments

========== REVIEW ON MARCH 15. 2007 BY KEVIN D CRAWFORD ==========
NO COMMENT
========== UPDATED ON APRIL 2, 2007 BY ANDREA M KOCH ==========

1) During building permit application, please submit a plan review letter from the engineering geologist. The letter must review the final grading, drainage, structural, and erosion control plans. The letter must state that the final plans conform to the recommendations in the engineering geology report.

2) During building permit application. please submit a plan review letter from the geotechnical (soils) engineer. The letter must review the final grading. drainage. structural, and erosion control plans. The letter must state that the final plans conform to the recommendations in the geotechnical (soils) report.

3) Final building permit plans must reference the geology and soils reports and must include a statement that the project shall conform to the reports' recommendations.

4) The application for a building permit shall include an engineered grading and drainage plan (such as the one submitted with this discretionary permit application).

5) Prior to building permit issuance, please sign, notarize, and record at the County Recorder's Office the Declaration of Geologic Hazards sent to you with the report review letter from Joe Hanna

6) Please show on the final plans protective construction fencing around all retained trees in the vicinity of construction (such as the large trees along

EXHIBIT I

Bayview Drive).

Dpw Drainage Completeness Comments

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

========= REVIEW ON MARCH 22, 2007 BY ALYSON B TOM ========= Application with civil plans dated February 2007 has been received. Please address the following:

1) This project is required to hold post development flows to predevelopment rates and mitigate for added impervious areas on site. Credit can be taken the existing permitted impervious areas on the subject parcel. The project should utilize best management practices such as minimizing impervious areas, disconnected impervious areas, etc. as mitigations. As proposed the project has not minimized impervious area.

2) Describe how the existing home and impervious areas drain. Demonstrate existing drainage patterns are maintained.

3) How much upstream area from road and private properties drains to this parcel? How does the existing concrete gutter along the driveway drain?
========= UPDATED ON JUNE 20, 2007 BY ALYSON B TOM ========= Application with olans dated May 2007 and drainage calculations dated 6/4/07 has been'received. Pleasesee miscellaneous comments.

Dpw Drainage Miscellaneous Comments

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

========= REVIEW ON MARCH 22. 2007 BY ALYSON B TOM ========= Please address the fol lowing with the building application:

1) The proposed outlet facilities should be located as far away from property boundaries as possible.

2) Who maintains the existing concrete gutter on the downstream property?

3) Provide a final review letter from the project geotechnical engineer stating that the proposed drainage plan will not cause any erosion or stability problems on this site or downstream from the site.

4) Provide a copy of the recorded drainage easement for drainage facilities that will handle upstream offsite runoff.

5) Zone 6 fees will be assessed on the net increase in runoff due to additional permitted impervious areas.
========= UPDATED ON JUNE 20. 2007 BY ALYSON B TOM ========= Please address the fol-1owing in addition previous miscellaneous comments

1) Provide information for the existing catch basin at the end of the gutter demonstrating that the project site willnot need to be accepting this offsite

EXHIBIT L

runoff.Describe where this system leads.

Dpw Driveway/Encroachment Completeness Comments

======== REVIEW ON MARCH 12. 2007 BY RUTH L ZADESKY ========

Dpw Driveway/Encroachment Miscellaneous Comments

======== REVIEW ON MARCH 12. 2007 BY RUTH L ZADESKY ========
Driveway to conform to County Design Criteria Standards.
Encroachment permit required for all off-site work in the County road right-of-way.

Dpw Road Engineering Completeness Comments

======== REVIEW ON MARCH 15, 2007 BY GREG J MARTIN ========
A standard driveway geometry is required with returns. The County Design Criteria shows typical configurations. Contact Greg Martin at 831-454-2811 with questions.
======== UPDATED ON JUNE 20, 2007 BY ANWARBEG MIRZA ========
All comments have been addressed.Plans are complete and approved for discretionary stage review.

Dpw Road Engineering Miscellaneous Comments

======== REVIEW ON MARCH 15, 2007 BY GREG J MARTIN ========
======== UPDATED ON JUNE 20. 2007 BY ANWARBEG MIRZA ========

Dpw Sanitation Completeness Comnents

======== REVIEW ON MARCH 12. 2007 BY CARMEN M LDCATEILI ========
======== UPDATED ON MARCH 12. 2007 BY CARMEN M IOCATEILI ========
Sewer service is currently available.

Dpw Sanitation Miscellaneous Comments

======== REVIEW ON MARCH 12, 2007 BY CARMEN M LOCATELLI ========
Sewer service is available for the subject development upon completion of the following conditions. Proposed location of on-site sewer lateral(s), clean-out(s), and connection(s) to existing public sewer must be shown on the plot plan of the building permit application
Existing lateral(s) must be properly abandoned (including inspection by District) prior to issuance of demolition'permit or relocation or disconnection of structure. An abandonment permit for disconnection work must be obtained from the District.
Show all existing and proposed plumbing fixtures on floor plans of building applica tion.
======== UPDATED ON MARCH 12. 2007 BY CARMEN M LOCATELLI ========
======== UPDATED ON MARCH 12. 2007 BY CARMEN M LOCATELLI ========

Aptos-La Selva Beach Fire Prot Dist Completeness C

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

========== REVIEW ON MARCH 29, 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 MARCH 29, 2007 BY ERIN K STOW ==========
NO COMMENT

EXHIBIT I