CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4421
(619) 767-2370

Thu 8c

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Staff Report:	December 21, 2006
Hearing Date:	January 10-12, 2006

REGULAR CALENDAR
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-06-107

Applicant: Pete Becker Agent: James Sneed

Description: Construct an approximately 544 sq. ft. first floor addition to the landward side of an existing approximately 2,818 sq. ft. one-story single-family residence on an approximately 8,251 sq. ft. blufftop lot.

Lot Area	8,251 sq. ft.
Building Coverage	2,383 sq. ft. (29 %)
Pavement Coverage	2,268 sq. ft. (27 %)
Landscape Coverage	1,009 sq. ft. (12 %)
Unimproved Area	2,640 sq. ft. (32 %)
Parking Spaces	2
Zoning	Medium Residential (5 du/ac)
Plan Designation	Medium Residential
Ht abv fin grade	21 feet

Site: 533 Pacific Avenue, Solana Beach, San Diego County. APN #263-041-01

STAFF NOTES:

Summary of Staff's Preliminary Recommendation: Staff is recommending approval of the proposed residential addition with Special Conditions that include a requirement the proposed addition be constructed with a deepened foundation to assure the addition will not require shoreline protection over its lifetime. The main issue raised by the project relates to constructing additions to an existing structure in a hazardous location and the potential need for future shoreline protection for the new development. The project involves minor additions to the landward portions of the residence that will not increase the threat already posed by erosion to the existing structure, however, without a deepened foundation the addition itself cannot be found to be consistent with the requirements of Section 30253 of the Coastal Act. The Commission had previously approved a new home on this site in 2003 (that ultimately was not constructed) and determined that unless deepened foundations were utilized, a setback of approximately 88 ft. would be required

to assure any new development would be safe from the threat of erosion over its projected lifetime. The proposed addition will occur at approximately 56 to 68 ft. from the edge of the bluff, and therefore requires the deepened foundation. Other Special Conditions include an assumption of all risk associated with the project, submission of as-built foundation plans, the elimination of any blufftop irrigation devices and a condition addressing future development of the site.

Standard of Review: Chapter 3 policies of the Coastal Act

Substantive File Documents: City of Solana Beach General Plan and Zoning Ordinance; Design Review Permit/Structural Development Permit No. 17-05-36; "Geotechnical Basis of Design, Sea-Cave Infills, 533 Pacific Avenue" by Group Delta Consultants, November 11, 1999; "Geotechnical Investigation Proposed Single-family Residence on Coastal Bluff Property 533 Pacific Avenue, Solana Beach, California" by Southland Geotechnical Consultants dated December 19, 2001; "Responses to Staff Comments, Geotechnical Investigation" by Southland Geotechnical Consultants dated December 19, 2002; "Development Review Permit – Response to City Planning Department Request for Additional Information" by Geotechnical Exploration, Inc. dated 1/24/06; CDP #6-99-91/Becker and #6-02-95/Becker.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION: ***I move that the Commission approve Coastal Development Permit No. 6-06-107 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1)

feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions.

See attached page.

III. Special Conditions.

The permit is subject to the following conditions:

1. Revised Final Plans. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, final site, building, landscaping, drainage and foundation plans that have been approved by the City of Solana Beach and that substantially conform with the plans by Bokal & Sneed Architects dated 9/20/05, but shall be revised to include the following:

a. The residential addition including foundations and any cantilevered floors shall not be constructed closer than 56 feet from the edge of the bluff that is shown on the above-cited plans dated 9/20/05.

b. Engineering plans and supporting calculations for a foundation system that will assure structural stability of the residential addition, over 75 years, and that will meet the following conditions:

1. The foundation shall assure structural stability and allow ongoing shoreline erosion (37.5 feet of erosion is anticipated over the next 75 years, based on historic long-term average, annual erosion rate), bluff retreat and possibly bluff collapse to continue unimpeded by the foundation system.

2. The foundation shall provide stability for current and foreseeable loads, including seismic loads and impulse loads from bluff collapse, for current site conditions and for the most exposed conditions that could result from erosion, slides, and other changes to the geologic conditions of the site.

3. The plans shall note the most extreme erosion and bluff retreat situation for which the foundation can assure stability.

4. The foundation shall be able to be isolated from and shall not rely upon the foundation for the existing development to provide stability to the residential addition.

5. Other information that demonstrates the residential addition will not require either shore protection or bluff retention for stability over the full life of the structure.

c. The existing residence and accessory improvements (i.e., decks, patios, walls, etc.) located on the site shall be detailed and drawn to scale on a surveyed site plan that is tied into stable monuments.

d. Any existing permanent irrigation system located on the bluff top site shall be removed or capped and no new permanent irrigation system may be installed.

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

2. Assumption of Risk, Waiver of Liability and Indemnity Agreement. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from bluff collapse and erosion; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

3. Future Response to Erosion. If in the future the permittee seeks a coastal development permit to construct bluff or shoreline protective devices, the permittee shall include in the permit application information concerning alternatives to the proposed bluff or shoreline protection that will eliminate impacts to scenic visual resources, public access and recreation and shoreline processes. Alternatives shall include but not be limited to: relocation of portions of the principle structures that are threatened, structural underpinning, and other remedial measures capable of protecting the principal structures and providing reasonable use of the property, without constructing bluff or shoreline stabilization devices. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission or the applicable certified local government to evaluate the feasibility of each alternative, and whether each alternative is capable of protecting existing structures that are in danger from erosion. No shoreline protective devices shall be constructed in order to protect ancillary improvements (patios, decks, fences, landscaping, etc.) located between the principal residential structures and the ocean.

4. Future Development. This permit is only for the development described in coastal development permit No. 6-06-107. Pursuant to Title 14 California Code of

Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply. Accordingly, any future improvements to the proposed single family residence, including but not limited to repair and maintenance identified as requiring a permit in Public Resources Code section 30610(d) and Title 14 California Code of Regulations section 13252(a)-(b), shall require an amendment to permit No. 6-06-107 from the California Coastal Commission or shall require an additional coastal development permit from the California Coastal Commission or from the applicable certified local government.

5. As-Built Plans. Within 60 days following completion of the project, the permittee shall submit as-built plans approved by the City of Solana Beach to be reviewed and approved in writing by the Executive Director documenting that the residential addition and foundations were constructed consistent with the Executive Director approved construction plans

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

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/History. The proposed project involves an approximately 544 sq. ft. first floor addition to the landward side of an existing approximately 2,818 sq. ft. one-story single-family on an approximately 8,251 sq. ft. blufftop lot. The existing home which was built in the 1950's is located approximately 22 ft. from the bluff edge at its closest point and the addition is proposed approximately 56 to 68 ft. from the bluff edge. The applicant is not proposing a deepened foundation for the proposed addition.

In January 2000, the Commission approved the fill of three seacaves below the subject site as a preventative measure to protect the existing residence (ref. 6-99-91/Becker). The permit was conditioned to require ongoing maintenance and monitoring of the

seacave fill. The applicant's representative indicates that the construction of the three infills was completed in approximately March 2001.

In August 2003, the Commission approved the demolition of the existing single-family residence and construction of an approximately 4,092 sq. ft. two-story single-family residence with 45 ft.-deep caisson foundations. Without this deepened foundation it was determined that a setback of 88 to 98 ft. from the bluff edge would have been required to assure the new development would not be subject to erosion over its estimated lifetime of 75 years. The applicant ultimately decided not to pursue the project and that permit has subsequently expired.

The subject site is located five lots north of Tide Beach Park, one of the City's primary beach access points and approximately ½ mile south of Cardiff State Beach. The City of Solana Beach does not yet have a certified Local Coastal Program (LCP) and, therefore, Chapter 3 of the Coastal Act is the standard of review.

2. Geologic Stability/Blufftop Development. The following Coastal Act Policies are applicable to the subject development:

Section 30253

New development shall:

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

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

Section 30235

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

A. Blufftop Stability. The proposed development involves a first floor addition on the landward side of approximately 544 sq. ft. to an existing approximately 2,818 sq. ft. one-story single-family residence. The existing home was constructed in approximately 1950 and is located approximately 22 ft. from an approximately 63 ft. high coastal bluff that has three seacaves below that have been filled with colored and textured erodible

concrete. The shoreline below the development site is a highly used park and recreation area used by the public for a variety of ocean and beach activities. In addition, "Table Top" reef is located below the subject site which is a highly used tide pool viewing area at low tides.

Because of the natural process of continual bluff retreat, coastal bluffs in this area are considered a hazard area. In January 2000, the Commission approved the fill of three seacaves below the subject site based on documentation that the potential collapse of the three seacaves would lead to an "immediate failure and sloughening of the upper bluff materials" (ref. CDP #6-99-91/Becker). The Commission approved the seacave fill as a preventative measure which would serve to delay the construction of more extensive shoreline protection such as a seawall that may have been required to protect the existing structure if the seacaves had collapsed. Also, if the seacaves had collapsed, it is likely a layer of "clean sands" would have become immediately exposed. However, because the construction of the seacave fill was not completed until March of 2001, a portion of one of the seacave roofs' did collapse exposing a layer of clean sands above.

The presence of this clean sand layer within the bluffs along the Solana Beach shoreline has previously been identified in geotechnical reports submitted in conjunction with seawall, seacave and notch infill projects in the portion of the City's shoreline south of Tide Beach Park and south of the subject site (ref. CDP Nos. 6-99-100/Presnell, et. al, 6-99-103/ Coastal Preservation Association, 6-00-66/Pierce, Monroe and 6-02-84/Scism, 6-00-9/Del Mar Beach Club, 6-00-138/Kinzel, Greenberg, 6-02-2/Gregg, Santina and 6-03-33/Surfsong). In addition, the Commission approved an emergency permit in 2002 to fill an "mole hole" sized section of exposed cleans sands that along with an undermined seawall threatened a residential structure located 5 lots north of the subject site (ref. Emergency Permit #6-02-144-G/Steinberg).

According to the Commission's staff geologist, the typical mechanism of sea cliff retreat along the Solana Beach shoreline involves the slow abrasion and undercutting of the Torrey Sandstone bedrock, which forms the sea cliff at the base of the bluffs, from wave action which becomes more pronounced in periods of storms, high surf and high tides. Other contributing factors to sea cliff retreat include fracturing, jointing, sea cave and overhang collapse and the lack of sand along the shoreline. When the lower sea cliff is undercut sufficiently, it commonly fails in blocks. The weaker terrace deposits are then unsupported, resulting in the collapse of the terrace deposits through circular failures. Such paired, episodic failures eventually result in a reduction in the steepness of the upper bluff, and the landward retreat of the bluff edge. Such retreat may threaten structures at the top of the slope. When failures of the upper bluff have sufficiently reduced the overall gradient of the upper bluff, a period of relative stability ensues, which persists until the lower bluff becomes sufficiently undercut to initiate a block failure once more, triggering a repetition of the entire process. The mechanism of bluff retreat that occurs in conjunction with the exposure of the clean sand layer is somewhat different than the paired, episodic failure model described above. Because of the cohesionless character of the clean sands, once they are exposed they continue to slump on an ongoing basis as a result of very small triggers such as traffic vibrations or wind erosion.

To find a proposed blufftop residential addition consistent with Section 30253, the Commission must find that it will be stable throughout its useful life and that it will not require a seawall or other shoreline protective device throughout its useful life. To make these findings for blufftop residential additions in Solana Beach and Encinitas, the Commission has required that such developments be setback a "safe" distance from the bluff edge. In previous permit actions, the Commission has required that new development observe a minimum setback of 40 feet from the top of the bluff that is supported by site specific geotechnical report documenting that the residence or residential additional will be sited at a safe location such that over its lifetime it will not require the construction of shoreline protection.

In the case of the subject development, the applicant has previously submitted geotechnical reports for the subject site relating to a proposed single-family residence (Ref. CDP #6-02-95/Becker that included site-specific quantitative slope stability analyses and an estimation of the long-term erosion rate for the area. The analysis took into account the exposed clean sands layer on the bluff.) The slope stability analysis measures the likelihood of a landslide at the subject site. According to the applicant's geotechnical report of December 2002, a minimum factor of safety of 1.5 (the industry standard) against a landslide occurring at the subject site is located at approximately 51 feet landward of the edge of the bluff. (The factor of safety is an indicator of slope stability where a value of 1.5 is the industry-standard value for new development. In theory, failure should occur when the factor of safety drops to 1.0, and no slope should have a factor of safety less than 1.0.) This implies that the safe location for a slab based foundation structure would need to be setback at least 51 ft. from the edge of the bluff. In addition to the landslide potential, the bluff will be subject to long-term erosion and retreat and the geologic setback will need to be based on an accurate estimate of this retreat rate as well.

The applicant's geotechnical reports cited a variety of long-term erosion rates for the area that range from .22 ft. to .40 ft. per year. However, based on a review of these reports by the Commission's technical services division, none of the citations are based on site-specific information. In the absence of site-specific data, regional data from the literature may be substituted. The current state-of-the-art for establishing bluff retreat rates in this area is a FEMA-funded study done as part of a nationwide assessment of coastal erosion hazards. Data presented in Benumof and Griggs (1999), indicate that the long-term bluff retreat in the general area is from 0.15 to 0.49 feet per year. To allow for accelerated average bluff retreat rates in the future, which are a likely result of any acceleration in the rate of sea level rise, it is appropriate to establish the setback for new development on the basis of the larger value (0.49 ft/yr). Given an estimated 75-year design life, about 37 feet of erosion might be expected to occur at the subject site based on this historic long-term erosion rate. Therefore, based on the combination of slope stability analyses and the estimated erosion rate, the Commission would typically require that any new development at the subject site be located approximately 88 ft. landward of the edge of the bluff. In addition, the Commission would also likely require an additional 10 ft.

buffer to allow for surficial slumping and to allow for uncertainties in the analysis. In this case, it would translate into a setback of 98 ft. for a slab based foundation structure.

In this case, the proposed addition that includes a slab based foundation will be located approximately 56 ft. to 68 ft. from the bluff edge, and, therefore would be sited at a location that would likely be threatened over the next 75 years. While it is clear that the more seaward portions of the home would be threatened first, Section 30253 does not permit new development (such as the proposed addition) if it will be threatened over its lifetime. As the Commission determined in approving a new home on this site in 2003, one alternative available to the applicant is to construct deepened caisson foundations for the new development which will provide a 1.5 factor of safety against sliding so as to not require shoreline protection for its lifetime. The Commission's coastal engineer and geologist have confirmed that the structural stability of the blufftop addition could be assured if such caisson foundations were in fact placed deep enough so as to not be undermined should the bluff erode or collapse in the future.

Therefore, Special Condition #1 has been attached which requires the proposed residential addition be revised to include a deepened foundation system which will provide for a 1.5 factor of safety against sliding for the lifetime of the proposed addition. Only with this revision can the proposed addition be found to be consistent with the requirements of Section 30253.

Although it appears that the use of deeply embedded caissons to assure geologic stability of this residential addition is a practical alternative to the need for shoreline protection, its use in other developments along the Solana Beach shoreline may ultimately have adverse visual impacts as the caissons become exposed following landslide or expected erosion. However, in this case, it is unlikely the caissons required to support the proposed residential addition will become exposed over its lifetime since these caissons will be located not closer than 56 ft. from the bluff edge. The applicant's current geotechnical letter (Ref. "Development Review Permit – Response to City Planning Department Request for Additional Information" by Geotechnical Exploration, Inc. dated 1/24/06) estimates that the bluff at this location may erode by approximately 23 ft. over the next 75 years. However, a geotechnical report provided by the applicant in 2003, estimated the bluff erosion at this location to be up to 30 feet over 75 years (Ref. "Geotechnical Basis of Design, Sea-Cave Infills, 533 Pacific Avenue" by Group Delta Consultants, November 11, 1999). However, as described in detail above, the Commission's technical services staff have identified that a more conservative estimate is that the bluff may recede up to 37 ft. over the 75 years at this location. Therefore, based on all available estimates of bluff erosion at the subject site, it is unlikely a caisson foundation system installed at 56 ft. to 68 ft. from the bluff edge will be exposed over its lifetime.

Because erosion and landslides are caused by a variety of factors including over-watering on the blufftop and inappropriate drainage, Special Condition #1d requires the applicant to not have permanent irrigation devices on top of the bluff.

In addition, although the applicant asserts that the proposed development can be constructed safely despite ongoing erosion and the potential of landslide, the bluffs along

the Solana Beach shoreline are known to be hazardous and unpredictable. Given that the applicant has chosen to construct a residential addition despite these risks, the applicant must assume the risks. Accordingly, Special Condition #3 requires the applicant to acknowledge the risks and indemnify the Commission against claims for damages that may occur as a result of its approval of this permit. In addition, Special Condition #6 requires the applicant to record a deed restriction imposing the conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property.

B. Retention of Structures in Hazardous Locations. The subject applicant proposes to add approximately 544 sq. ft. to the existing approximately 2,818 sq. ft. one-story single-family residence which is located as close as 22 ft. from the edge of the bluff. The City's municipal code requires residential structures on blufftop lots be setback a minimum of 40 feet landward of the bluff edge unless an engineering geology report is prepared that certifies a setback of less than 40 feet (but not less than 25 feet) is adequate to assure the residence will be safe from erosion over an estimated 70 years. Therefore, the existing residence is a legal non-conforming structure. As identified above, the Commission has more recently found that the appropriate setback for new development must be based on site-specific geologic stability analysis such that a property owner, the City and the Commission can no longer assume a 40 ft. setback established in a zoning code is sufficient. In this case, that setback may be as much as 98 ft. from the edge of the bluff.

In the context of proposals to enlarge and reconstruct existing structures, the Commission has sometimes required those structures to be brought into conformity with shoreline hazards policies of the Coastal Act or certified LCPs. (Ref. A-6-LJS-99-160/Summit Resources). Also, in its recent action on the Malibu LCP, the Commission certified ordinances that identify when repair and maintenance or improvements to existing blufftop structures would not require the entire structure be brought into conformance with the certified standards for new development. These criteria include when there is no demolition and/or reconstruction that results in replacement of more than 50 percent of the existing structure, and when additions do not increase the size of the structure by more than 50 percent. In this instance, although much of the existing structure is in a location where the Commission could not now authorize new development due to the threat of shoreline erosion, the new addition to the existing structure is fairly minor in scope and meets the above stated criteria. The proposed development, therefore, does not warrant requiring the entire existing structure to be brought into conformity with Chapter 3 policies regarding shoreline development. However, to assure that future improvements to the residence do not occur without review by the Commission, Special Condition #4 requires that all future modifications that otherwise may be exempt from the need of a coastal permit must be reviewed and approved by the Commission as an amendment to the subject permit or as a new coastal development permit.

Therefore, as conditioned to require the use of a deepened foundation system, the proposed residential addition can be assured structural stability over its lifetime and not require shoreline protection. As conditioned, the proposed development is consistent with Section 30253 and 30235 of the Coastal Act.

3. Visual Resources. Sections 30251, 30240, and 30250 of the Coastal Act require that the scenic and visual qualities of coastal areas be protected, that new development adjacent to park and recreation areas be sited so as to not degrade or impact the areas and that new development not significantly adversely affect coastal resources:

> Section 30251
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> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.
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> Section 30240
>
> [. . .]
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> (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.
>
> Section 30250
>
> (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

The subject development involves an addition to an existing single-story blufftop residence. The existing home and proposed addition are located in a residential neighborhood consisting of single-family homes of similar bulk and scale to the proposed development. The proposed addition will occur on the landward side of the existing residence and the addition will not exceed the height of the existing structure. Although the existing development is visible from the beach below, the proposed additions will not likely be visible from the beach since views of the addition will be blocked by the existing residence. In addition, views across the site to the shoreline are not currently available. In addition, as previously described, the required deepened caisson foundations are unlikely to become exposed in the future. Therefore, it is not anticipated

that the proposed development will have any adverse effect on scenic or visual resources such that the project is consistent with Section 30251 of the Coastal Act.

4. Runoff/Water Quality. Section 30231 of the Coastal Act requires that the biological productivity of coastal waters be maintained by, among other means, controlling runoff:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrapment, controlling runoff, ….

The proposed development will be located at the top of the bluffs overlooking the Pacific Ocean. As such, drainage and run-off from the development could potentially affect water quality of coastal waters as well as adversely affect the stability of the bluffs. To reduce the risk associated with unattended running or broken irrigation systems, Special Condition #1e restricts the property owner from installing permanent irrigation devices and requires the removal or capping of any existing permanent irrigations systems. In addition, in order to protect coastal waters from the adverse effects of polluted runoff, the Commission has typically required that all runoff from impervious surfaces be directed through landscaping as filter mechanism prior to its discharge into the street. In this case, however, directing runoff into blufftop landscape areas could have an adverse effect on bluff stability by increasing the amount of ground water within the bluff material can lead to bluff failures. Therefore, in this case, reducing the potential for water to be retained on the site, will be more protective of coastal resources. The restriction on irrigation will minimize the amount of polluted runoff from the property to the extent feasible. Therefore, the Commission finds the proposed project consistent with Sections 30231 of the Coastal Act.

5. Public Access/Recreation. Section 30212 of the Coastal Act requires, in part:

> (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:
>
> (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
>
> (2) adequate access exists nearby, or, . . .

The subject site is located between the Pacific Ocean and the first public roadway, which in this case is Pacific Avenue. The project site is located within a developed single-family residential neighborhood on an approximately 63 ft.-high coastal blufftop lot. Vertical access through the site is not necessary nor warranted, given the fragile nature of the bluffs. Adequate public vertical access is provided five lots south of the subject site via a public stairway leading to the City of Solana Beach's Tide Beach Park, as well as approximately ½ mile north at Cardiff State Beach. In addition, since the project as

conditioned will be sited at a safe location such that shoreline protection will not be necessary over the lifetime of the addition, the project itself will not result in the placement of any additional structures on the beach that could impede public access. Therefore, the proposed project, as conditioned, will have no impact on public access, consistent with the public access policies of the Coastal Act.

6. Local Coastal Planning. Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The subject site was previously in the County of San Diego jurisdiction, but is now within the boundaries of the City of Solana Beach. The City has recently prepared but not yet submitted a new LCP for the area to the Commission for review. In preparation of its LCP, the City of Solana Beach is faced with many of the same issues as the City of Encinitas, located immediately north of Solana Beach, who's LCP was certified by the Commission in March 1995. The City of Encinitas' LCP includes the intent to prepare a comprehensive plan to address the coastal bluff recession and shoreline erosion problems in the City. The plan will include at a minimum, bluff top setback requirements for new development and redevelopment; alternatives to shore/bluff protection such as beach sand replenishment, removal of threatened portions of a residence or the entire residence or underpinning existing structures; addressing bluff stability and the need for protective measures over the entire bluff (lower, mid and upper); impacts of shoreline structures on beach and sand area as well as mitigation for such impacts; impacts for groundwater and irrigation on bluff stability and visual impacts of necessary/required protective structures.

The City of Solana Beach LCP should also address these items in the context of a comprehensive approach to management of shoreline resources. As shoreline erosion along the coast rarely affects just one individual property, it is imperative that a regional wide solution to the shoreline erosion problem be addressed and solutions developed to protect the beaches. Combined with the decrease of sandy supply from coastal rivers and creeks and armoring of the coast, beaches will continue to erode without being replenished. This will, in turn, decrease the public's ability to access and recreate on the shoreline.

In the case of the proposed project, the applicant has proposed a landward addition that is approximately 56 ft. from the edge of the bluff but is not proposing a deepened foundation to assure no future shoreline protection will be needed for the addition. Since that would be inconsistent with Section 30253 of the Act and the Commission has been provided evidence that a deepened foundation system on the subject site is a practical alternative to assure no future shoreline protection will be needed for the addition, the Commission can only approve the addition if caisson foundations are used. While in this case, the applicant would likely be precluded from constructing a blufftop addition without the deep caisson support, the use of caissons should not send a signal that blufftop development setbacks can be reduced if deep seated caissons are used. While

each case is different, any new development on the blufftop must be sited in ways that are most protective of coastal resources. In this case, on balance, the use of caissons setback at least 56 ft. from the bluff edge achieves that goal. Decisions regarding future blufftop developments should be done through a comprehensive planning effort that analyzes the impact of such a decision on the entire City shoreline.

The location of the proposed residential addition is designated for residential uses in the City of Solana Beach Zoning Ordinance and General Plan, and was also designated for residential uses under the County LCP. As conditioned, the subject development is consistent with these requirements. Based on the above findings, the proposed development is consistent with the Chapter 3 policies of the Coastal Act in that the home addition as conditioned to require deepened foundations will be sited to assure structural stability and not require shoreline protection over its lifetime.

Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the ability of the City of Solana Beach to complete a certifiable local coastal program. However, these issues of shoreline planning will need to be addressed in a comprehensive manner in the future through the City's LCP certification process

7. California Environmental Quality Act (CEQA). Section 13096 of the Commission's Code of Regulations requires Commission approval of coastal development permits to be supported by a finding showing the permit to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect that the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the public access, water quality and geologic stability policies of the Coastal Act. Mitigation measures, including the installation of a deepened foundation to assure stability of the addition over 75 years, reduction in risk by overwatering, future development restrictions and an assumption of risk will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized

agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

(\\Tigershark1\Groups\San Diego\Reports\2006\6-06-107 Becker dft stf rpt.doc)

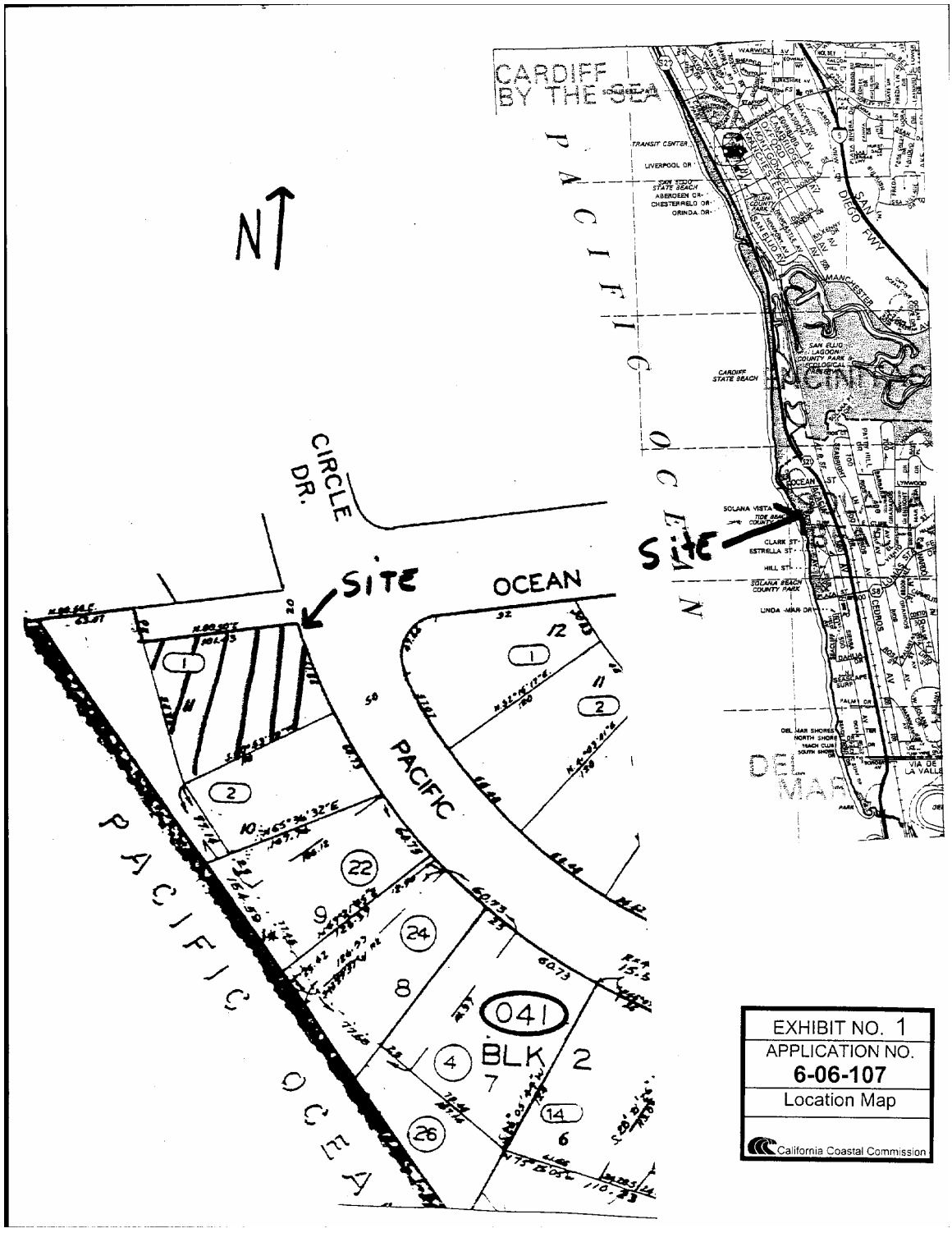
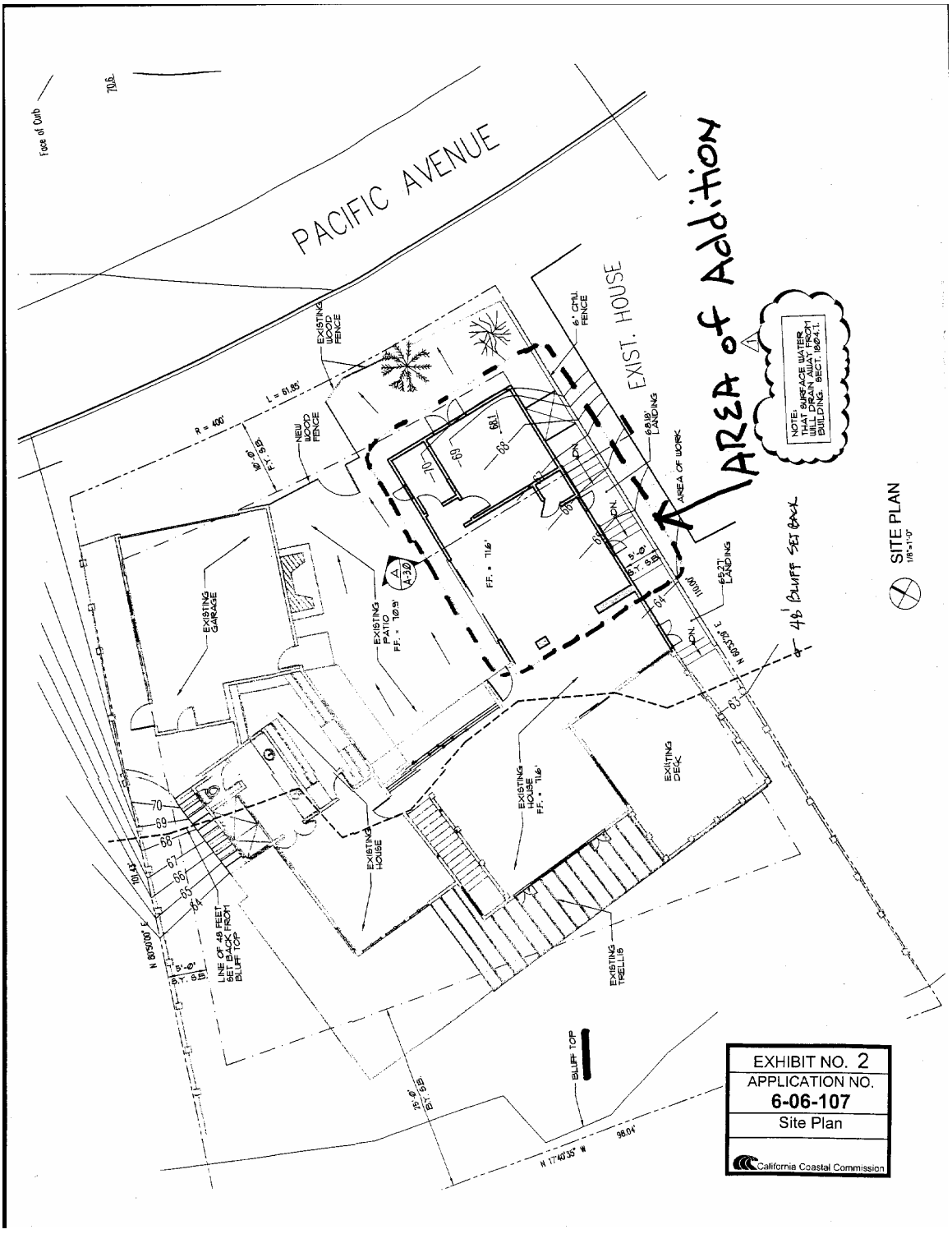


EXHIBIT NO. 1
APPLICATION NO. **6-06-107**
Location Map
California Coastal Commission


PACIFIC AVENUE
Face of Curb
TOS
EXISTING WOOD FENCE
NEW WOOD FENCE
6' CHU FENCE
EXIST. HOUSE
AREA of Addition
NOTE: FINAL SURFACE WATER SHALL DRAIN AWAY FROM BUILDING. SECT. 1804.1.
AREA OF WORK
EXISTING GARAGE
EXISTING PATIO
EXISTING HOUSE
EXISTING HOUSE
EXISTING DECK
EXISTING TRELLIS
48' BLUFF SET BACK
LINE OF 40 FEET BEHIND BLUFF TOP
BLUFF TOP
SITE PLAN
EXHIBIT NO. 2
APPLICATION NO.
6-06-107
Site Plan
California Coastal Commission