CALIFORNIA COASTAL COMMISSION
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Hearing Date:	September 14-16, 2005

REGULAR CALENDAR
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-05-30

Applicant: Dr. Leonard Okun Agent: Bob Trettin

Description: Construction of an approximately 100 ft.-long, 20 to 27 ft.-high concrete tiedback seawall at the base of the bluff below an existing single-family residence as follow-up to an emergency permit. Also proposed is the removal of riprap from the public beach after the seawall is completed and payment of an in-lieu fee for sand replenishment as mitigation for impacts of the seawall on sand supply.

Site: On the public beach below 828 Neptune Avenue, Leucadia, Encinitas, San Diego County. APN 256-011-13, 02

STAFF NOTES:

Summary of Staff's Preliminary Recommendation:

Staff recommends that the Commission **deny** the applicant's request for post-emergency permit permanent authorization for the construction of 100 ft.-long, approximately 20 to 27 ft.-high seawall. Although the proposed seawall is required to protect the existing development, the project has not been designed to eliminate or effectively mitigate for its adverse effects on the shoreline sand supply, visual resources, public access or recreational opportunities. The applicant is proposing mitigation in the form an in-lieu fee for sand replenishment that is based on a calculation of the cost for a one-time placement of sand. Such mitigation does not fully eliminate or mitigate the significant adverse impacts associated with shoreline protection devices over the estimated lifetime of the structures (in this case, 22 years) as required by Section 30235 of the Coastal Act. In addition, staff is recommending denial of the applicant's request to delay removal of the riprap until the seawall is completed since its continued placement on the beach adversely affects public access and recreational opportunities. The riprap was placed on the public beach by the applicant in 2001 pursuant to an emergency permit to facilitate construction of the seawall (ref. 6-01-11-G/Okun). The emergency permit required that the riprap be removed from the beach by May of 2001. The seawall structure has already

been substantially constructed (all that remains is the necessary visual treatments - color and texturing of the wall) pursuant to other Emergency Permits issued by the Executive Director in January 2001 (ref. 6-01-005-G/Okun) and May of 2001 (ref. 6-01-085-G/Okun. The subject permit application is for the required follow-up regular coastal development permit for the seawall structure.

Due to Permit Streamlining Act (PSA) requirements, the Commission must act on the application request at its September 2005 hearing unless the applicant grants an extension of time. However, the applicant has been unwilling to grant an extension to the PSA deadline.

Standard of Review: The City of Encinitas has a certified LCP, however, the proposed projects are located on the public beach in the Commission's permit jurisdiction such that the standard of review is Chapter 3 policies of the Coastal Act.

Substantive File Documents: Certified City of Encinitas Local Coastal Program (LCP); 01-160 MUP/CDP dated March 3, 2005; "Preliminary Geotechnical Evaluation, Proposed Lower and Upper Bluff Repairs Okun Residence, 828 Neptune Ave." by Soil Engineering Construction (SEC) dated January 2, 2001; Letter from SEC dated July 23, 2004; "Landslide Hazards in the Encinitas Quadrangle, San Diego County, California", Open File Report, dated 1986 by the California Division of Mines and Geology; CDP Nos., 6-85-396/Swift; 6-89-136-G/Adams; 6-89-297-G/Englekirk; 6-92-82/Victor 6-92-212/Wood, 6-93-36-G/Clayton; 6-93-131/Richards, et al; 6-93-136/Favero; 6-93-181/Steinberg; 6-95-66/Hann; 6-96-96-G/Okun; 6-98-39/ Denver/Canter, 6-98-131/Gozzo, Sawtelle and Fischer; 6-99-9/Ash, Bourgualt, Mahoney; 6-99-41/Bradley; 6-00-009/Ash, Bourgault, Mahoney; 6-00-74 Grey Diamond Marketing, Funke, Kimball; 6-01-005/Okun; 6-01-011/Okun Sorich; 6-01-40-G/Okun; 6-01-85-G/Okun; 6-01-162-G/Okun and 6-02-074-G/Okun

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I. PRELIMINARY STAFF RECOMMENDATION:

MOTION: ***I move that the Commission approve Coastal Development Permit No. 6-05-030 for the development proposed by the applicant.***

STAFF RECOMMENDATION OF DENIAL:

Staff recommends a **NO** vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO DENY THE PERMIT:

The Commission hereby denies a coastal development permit for the proposed development on the ground that the development will not conform with the policies of Chapter 3 of the Coastal Act. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/History. The proposed project involves the construction of an approximately 100 ft.-long seawall varying in height from 20 to 27 ft. and comprised of 36 inch steel reinforced soldier pile caissons spaced 8 ft. on center with one row of tiebacks approximately 60 to 70 ft. in length with a reinforced shotcrete wall between the soldier pile caissons. The seawall will be located along the pre-landslide toe of the bluff, approximately 20 to 30 ft. landward of the toe of bluff sloughage material leftover from landslides that occurred in 1996. The face of the seawall is proposed to be colored and textured to closely resemble a natural bluff. Seawalls similar in height and design to the proposed development are located adjacent to both the north and south sides of the subject seawall location. The subject application is for the required follow-up regular coastal development permit for the seawall, which was constructed in 2001 pursuant to Emergency Permits #6-01-005/Okun and 6-01-085/Okun. While substantially completed, the seawall still needs to be colored and textured to match the natural bluffs. To mitigate for the adverse effects of the seawall on sand supply, the applicant proposes to pay an *in lieu* fee of $11,687.20 to the San Diego Association of Governments' sand replenishment fund.

The applicant has also requested authorization to remove riprap from the public beach seaward of the seawall after completion of the texturing and coloring of the seawall. In 2001, the applicant received an emergency permit for the placement of approximately 60 to 80 lineal feet of ½-ton to 2-ton quarry stone riprap, approximately 5 to 7 feet in height on the public beach approximately 20 to 30 ft. seaward of the seawall (ref. Emerg. Permit #6-01-011/Okun). The riprap was described as necessary to protect a construction access ramp that was used to construct the seawall. The ramp no longer exists. The emergency permit for placement of the riprap required the riprap be removed by no later than May 11, 2001, which to date has not occurred.

The subject development is located at the base of an approximately 90 foot-high coastal bluff fronting two blufftop lots that contain a single-family residence constructed prior to the Coastal Act. In 1996 the bluff fronting the subject residence sustained a series sloughages/landslides that eventually led to the loss of a portion of the residence. The landslides extended to two lots south of the subject site and three lots north. As a result of these landslides, the Executive Director approved emergency permits in 1996

authorizing a series of measures to temporarily protect the residence until more substantive measures could be designed and implemented. These included the use of soil nails, chemical grouting, the placement of riprap at the toe of the landslide and underpinning of the residence. Of these, only the underpinning of the residence subsequently occurred (ref. Emergency Permit 6-96-96-G/Okun). In January of 2001, the Executive Director authorized an emergency permit for the construction of a 100 ft.-long, 20 to 27 ft. high seawall to be backfilled with soil (Ref. Emergency Permit #6-01-005/Okun). Since the work was not completed before the emergency permit expired, the Executive Director authorized a new emergency permit for the seawall's completion in June of 2001 (ref. Emergency Permit #6-01-85-G/Okun). The applicant was informed (in the context of each emergency permit authorization) and signed an acknowledgement that the work authorized by the permit was "temporary and subject to removal if a regular Coastal Permit is not obtained to permanently authorize the emergency work" and that any such permit may be subject to substantial conditions. (Ref. page 5 of Exhibit #5) Because of winter storms that occurred during the construction, the Executive Director also authorized the temporary placement of riprap seaward of the seawall to protect a construction platform/ramp (as previously described above; ref. 6-01-011-G/Okun). During construction of the seawall, the Executive Director also authorized the construction of an approximately 100 ft.-long upper bluff retaining wall, approximately 14 to 20 ft.-high to be placed approximately 20 ft. seaward of the bluff edge and backfilled (Ref. Emergency Permits #6-01-40-G/Okun, 6-01-62-G/Okun and 6-02-074-G/Okun. The upper wall was proposed to colored and textured to match the natural bluff. At the time of construction of this upper bluff wall, portions of the residence were located 10 ft. seaward of the bluff edge.

Both the seawall and upper bluff retention systems authorized by the emergency permits were subsequently constructed although the visual treatment of the seawall and upper bluff wall have not been completed. In addition, although soil was approved to backfill the area between the seawall and the upper bluff retaining wall, the applicant substituted gravel for the soil in violation of the emergency permit. The gravel is highly visible and not in character with the natural appearance of the bluffs along this section of coastline. The upper bluff retaining wall and backfill behind the seawall lie within the City of Encinitas' coastal development permit jurisdiction. On March 3, 2005, the City approved the required follow-up coastal development permit for the residential underpinning, upper bluff wall and backfill material. To mitigate the visual impacts of the gravel material that was placed without authorization, the City required that a portion of the gravel be removed and be replaced by soil and landscaping. In the area that gravel could not be completely removed, the City required the gravel be covered by soil and landscaped. That action by the City was not appealed to the Coastal Commission. The project under review by the Commission only involves the seawall at the toe of the bluff and the riprap that is located approximately 20 to 30 ft. seaward of the seawall.

The subject seawall and riprap lie seaward of the mean high tide line (MHTL). In September 1994, State Lands Commission surveyed the MHTL in Encinitas and concluded that the MHTL follows the toe of the bluff in the City of Encinitas ("Batiquitos Lagoon Dredging Survey", 1994). The City of Encinitas has a certified LCP

and has been issuing coastal development permits since May of 1995. However, because the proposed development lies seaward of the MHTL, it is located within the Commission's area of original jurisdiction, where permit jurisdiction is not delegated to the local government. As such, the standard of review is Chapter 3 policies of the Coastal Act, with the certified LCP used as guidance.

2. Geologic Conditions and Hazards. Section 30235 of the Coastal Act states, in part:

> 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.

In addition, Section 30253 of the Coastal Act states, in part:

> 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...

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" solutions can alter natural shoreline processes. Such devices are required to be approved only when necessary for the enumerated purposes and when designed to eliminate or mitigate adverse impacts on shoreline sand supply. The Coastal Act does not require the Commission to approve shoreline altering devices to protect vacant land or in connection with construction of new development. A shoreline protective device proposed in those situations is likely to be inconsistent with various other Coastal Act policies. For example, Section 30253 addresses new development and requires that it be sited and designed to avoid the need for protective devices that would substantially alter natural landforms along bluffs and cliffs. The Commission has generally interpreted Section 30235 to require the Commission to approve shoreline protection only for existing principal structures. The Commission must always consider the specifics of each individual project.

The proposed development is located at the base of a coastal bluff in the City of Encinitas that currently contains similarly designed seawalls at both the north and south sides of the subject site. Continual bluff retreat and the formation and collapse of seacaves have been documented in northern San Diego County, including the Cities of Solana Beach and Encinitas. Bluffs in this area are subject to a variety of erosive forces and conditions

(e.g., wave action, reduction in beach sand, landslides). The subject site is located in an area identified as experiencing historical landslides. As a result, the bluffs and blufftop lots in the Encinitas area are considered a hazard area. Furthermore, in 1986 the Division of Mines and Geology mapped the entire Encinitas shoreline as an area susceptible to landslides, i.e., mapped as either "Generally Susceptible" or "Most Susceptible Areas" for landslide susceptibility (ref. Open File Report, "Landslide Hazards in the Encinitas Quadrangle, San Diego County, California", dated 1986). The subject site and properties immediately north and south of the subject site have recently experienced significant landslides that have threatened residences at the top of the bluff (portions of the residence on the subject site were destroyed) and resulted in numerous Executive Director approved emergency permits for seawall and upper bluff protection devices (ref. Emergency Permit Nos. 6-00-171-G/Brown, Sonnie, 6-01-041/Sorich, 6-01-42-G/Brown, Sonnie and 6-01-62-G/Sorich). In addition, documentation has been presented in past Commission actions concerning the unstable nature of the bluffs in these communities and nearby communities (ref. CDP Nos. 6-93-181/Steinberg, 6-92-212/Wood, 6-92-82/Victor, 6-89-297-G/Englekirk, 6-89-136-G/Adams, and 6-85-396/Swift, 6-00-009/Ash, Bourgault, Mahoney).

Pursuant to Section 30253 of the Coastal Act, in approving new development on blufftop lots, structures are required to be setback an appropriate distance (based on a site specific geotechnical report) from the edge of the bluff that will allow for the natural process of erosion without triggering the need for a seawall. This "geologic setback area" is so designated to accommodate the natural erosion of the bluff. In other words, on blufftop lots, residences are set back from the bluff edge to allow the natural process of erosion to occur on the site without causing the residence to be threatened. Thus, at some future point when evidence of some erosion of the setback area is identified (even undercutting and subsequent block failures), this does not necessarily lead to a need for bluff or shore protection to protect the residence.

However, in the subject case, the existing residence lost a portion of its seaward side in 1996 following a landslide and the remaining residence is located at the edge of the bluff and is threatened. The geologic report prepared for the subject properties at the time of the emergency permits in 2001, stated that:

> The westernmost portion of the residence is supported by temporary underpinning piers. These piers were constructed under an emergency permit in 1996 after a landslide occurred below the subject property and adjacent properties to the north and south. This landslide resulted in the failure of two rooms across the rear of the subject residence . . . .The temporary piers were initially placed to protect the structure, and construction crews, through the balance of the emergency solution. They were not designed to indefinitely sustain the structure. . . .
>
> As observed from the beach, landslide debris exists across the property as well as the two properties to the north and portions of the property to the south. Some large blocks of the lower claystone/siltstone formation still exist and front the two neighboring properties on the north. Near the base of the bluff on the southern

> neighboring properties, at approximately +8' MSL, a clay seam exists. Major landslides appear to have occurred on this clay seam on the subject property and on the properties to the north and south of the subject site. An ongoing landslide failure exists on portions of the subject site and on the neighboring properties to the north and portions of the property on the south. . . . (Ref. Soil Engineering Construction, dated January 2, 2001)

The applicant's geotechnical reports also indicated that ". . . the results of the slope stability analyses clearly demonstrates [sic] that the factors against sliding, without the proposed bluff repairs, are less than which [sic] is required to protect the residential structures from a potential bluff failure." (Ref. Letter from Soil Engineering Construction dated July 23, 2004) The failure plane identified by the slope stability analysis intersected under the residence at the top of the bluff. The Commission's staff geologist and coastal engineer have reviewed the applicant's geotechnical and engineering reports regarding the need for and design of the seawall and concur with their conclusions. In addition, the applicant's geotechnical reports have also been subject to third party review by a geologist employed by the City of Encinitas, who concurred with the reports' findings.

Based on the applicant's geotechnical report and its review by the Commission's technical services staff, the applicant has demonstrated that the existing structure at the top of the bluff is threatened and a seawall is required to protect the structure. Although construction of a seawall is necessary to protect the existing principle structures on the site, Section 30235 of the Coastal Act states that approval of a permit for such a device is only required when the shoreline protection is designed to eliminate or mitigate adverse impacts on local shoreline sand supply. In this case, the applicant has not been able to demonstrate that the seawall has been designed consistent with these requirements of Section 30235.

There are a number of adverse impacts to public resources associated with the construction of shoreline structures, most of which are either a direct result of or otherwise related to changes in shoreline sand supply. The natural shoreline processes referenced in Section 30235, such as the formation and retention of sandy beaches, are altered by construction of a seawall. Bluff retreat is one of several ways that beach area and beach quality sand is added to the shoreline. This retreat is a natural process resulting from many different factors such as erosion by wave action causing wearing away of the lower bluff material, undercutting and/or cave formation, enlargement and eventual collapse; saturation of the bluff soil from ground water causing the bluff to slough off; landslides; and natural bluff deterioration. When a seawall is constructed on the beach at the toe of the bluff, it directly impedes some or all of these natural processes.

Some of the adverse effects of a shoreline protective structure on the beach, such as scour, end effects, and modifications to the beach profile, are temporary or difficult to distinguish from all the other actions which modify the shoreline. Seawalls also have non-quantitative effects to shoreline character and visual quality. Some of the other adverse effects which a structure may have on natural shoreline processes can be

quantified. These effects include: 1) loss of the beach area on which the structure is located; 2) the long-term loss of the two dimensional area that would have become beach if the backshore were not fixed by the seawall; and 3) the amount of material which would have been supplied to the beach if the back beach or bluff were to erode naturally. These impacts on the beach and sand supply have previously been found to result from seawalls in other areas of Encinitas (ref. CDP Nos. 6-93-36-G/Clayton, 6-93-131/Richards, et al, 6-93-136/Favero, 6-95-66/Hann, 6-98-39/ Denver/Canter, 6-98-131/Gozzo, Sawtelle and Fischer, 6-99-9/Ash, Bourgualt, Mahoney, 6-99-41/Bradley and 6-00-74 Grey Diamond Marketing, Funke, Kimball). In each case, the Commission required that the applicants mitigate for the anticipated impacts of their projects by, among other means, paying an in-lieu fee to be used for future sand replenishment projects in San Diego County. As previously cited, the subject applicant is proposing to mitigate for the proposed seawall's impact on local sand supply through the payment of $11,687.20 to the San Diego Association of Governments' sand replenishment fund.

The San Diego Association of Governments (SANDAG) has adopted the Shoreline Preservation Strategy for the San Diego region and is currently working on techniques toward its implementation. The Strategy considers a full range of shoreline management tactics, but emphasizes beach replenishment to preserve and enhance the environmental quality, recreational capacity, and property protection benefits of the region's shoreline. Funding from a variety of sources will be required to implement the beach replenishment and maintenance programs identified in the SANDAG Strategy. SANDAG has agreed to administer a program to identify projects appropriate for support from the beach sand replenishment fund, through input from the Shoreline Erosion Committee which is made up of representatives from all the coastal jurisdictions in San Diego County. The Shoreline Erosion Committee is currently monitoring several large-scale projects, both in and out of the coastal zone, which they term "opportunistic sand projects", that will generate large quantities of beach quality material suitable for replenishing the region's beaches. The purpose of the account is to aid in the restoration of the beaches within San Diego County.

Loss of beach material and loss of beach area are two concerns. A beach is the result of both sandy material and a physical area between the water and the back beach. Thus, beach area is not simply a factor of the quantity of sandy beach material. In Encinitas, the shoreline is typically characterized as consisting of a shallow bedrock layer covered by a thin veneer of sand. The bedrock layer provides an area for collection of sandy material. The sand material is important to the overall beach experience, but even without the sand, the bedrock layer provides an area for coastal access between the coastal bluff and the ocean. The loss of sandy beach material that will be a direct result of this project (by stopping the bluff from eroding) can be balanced or mitigated by obtaining similar quality and quantity of beach quality sand from outside the littoral cell and adding this sand to the littoral cell. In this case, the applicant estimates that approximately 120.2 cu. yds. of sand will not reach the beach because the seawall prevents its contribution. There are sources of beach quality sediment that can be drawn upon to replace the bluff material that will no longer reach the beach and feed into the littoral cell. Unfortunately there is not a source of extra beach land that can be used to

add new land area to the littoral cell, and therefore it is not possible to directly mitigate for the loss of coastal land caused by the direct encroachment onto such lands by shoreline protective devices when they are required to protect existing development or by the lost opportunity to have such lands created when a shoreline protective device arrests the natural process of the retreat of the back beach. In this particular case, dedication of an isolated portion of the applicant's blufftop properties would not mitigate for potential impacts to public access and recreation associated with the loss of beach land because the blufftop property is not accessible to the public in the same manner as the beach. In previous Commission actions, beach nourishment has been found to be an indirect method to mitigate the loss of coastal land. While it does not create new coastal land, it can convert tidelands into dry beach, thus providing many of the same benefits that will be lost when the beach area is covered by a seawall or "lost" when the back bluff location is fixed (thereby preventing the development of new beach area that would otherwise be created as the toe of the bluff recedes is prevented from forming).

The applicant has proposed a mitigation fee for sand replenishment based on the formula that the Commission has used in the past to calculate partial impacts of seawall structures. The Commission's engineer reviewed the calculations and determined that it conforms to the methodology required by the Commission in previous seawall approvals. The proposed seawall, which is approximately 100 ft. long by 2 feet seaward of the toe of the bluff, occupies approximately 200 sq. ft. of public beach area. Because the proposed seawall is located seaward of the Mean High Tide Line (MHTL) it would be located on land subject to the public trust, and therefore will displace beach that would otherwise be available for public use. In addition, since the seawall will fix the back beach location, approximately 594 sq. ft. of beach landward of the seawall location will not be created over the 22 years the seawall will be in place (100 ft. x .27 ft. of erosion per year x 22 years). In the past, the Commission has allowed seawall applicants to mitigate for these impacts through the payment of an in-lieu fee for sand replenishment calculated based on the cost of a one-time placement of the volume of sand sufficient to create the same square footage of dry beach at the water's edge. Based on the US Army Corps of Engineers Coast of California Storm, Tide and Wave Study for San Diego County, and supported by the ongoing monitoring for the 2001 Regional Beach Sand Project, it is estimated that approximately 0.9 cubic yards of sand would be necessary to nourish approximately 1 square foot of dry beach area (Ref. Oceanside Littoral Cell Preliminary Sediment Budget Report", December 1987, part of the Coast of California Storm and Tide Wave Study, Document #87-4). By multiplying the amount of beach area impacted by the seawall by the 0.9 cu. yds. per square foot conversion factor, it is possible to determine the amount of sand necessary to nourish a beach area that is equivalent to the impacted area. In this case, it would require approximately 714.6 cu. yds. of sand [(200 + 594) x .9] to nourish 794 sq. ft. of dry beach. The fee adds this volume of sand together with the amount to compensate for the sand material that would have been contributed from the bluff were it not for the seawall placement. In this case, that amount is estimated to be 120.2 cu. yds. of sand. Therefore, the total amount of sand for one-time placement is estimated to be 834.8 cu. yds. The cost of purchasing that amount of sand is estimated to $11,687.20 based recent sand costs bids of $14.00 per cu. yds.

In applying this formula to previous seawall approvals in San Diego County, the Commission has always recognized that it only partially mitigates for impacts associated with shoreline devices (ref. CDP Nos. 6-93-36-G/Clayton, 6-93-131/Richards, et al, 6-93-136/Favero, 6-95-66/Hann, 6-98-39/ Denver/Canter, 6-98-131/Gozzo, Sawtelle and Fischer, 6-99-9/Ash, Bourgualt, Mahoney, 6-99-41/Bradley and 6-00-74/Grey Diamond Marketing, Funke, Kimball). It does not address the impacts from scour or end effects that can result from shoreline protection. Also, the mitigation addresses the opportunity to develop a beach nourishment project in the general area of the project – but does not provide for a one-to-one replacement of beach area in the exact location where the impacts will occur. Beach nourishment can be used to replace a lost area of beach, but once the sand is used for nourishment, it will migrate throughout the littoral cell. This is one of the differences between the initial beach area and use of nourishment to create a new beach area. The initial beach area for which mitigation is being sought, is in a specific location; the new beach area that can be created through nourishment will move through the cell over time, wherever in the cell it is created. While the Commission has sought ways to guarantee that some specified width of beach shall be preserved seaward of each seawall, there do not now exist techniques that will nourish only short segments of beach. The mobile nature of sand allows it to be used through a coastal region for beach nourishment, but also prevents it from being fixed in one small location for long-term enhancement. This also means that when nourishment is used to enhance the recreational opportunities of a beach area, that those benefits will be redistributed along the coast as the sand is redistributed along the shoreline, but there will be little long-term improvement to the local recreational benefits that were available at the project site.

In addition to the greater understanding about the difficulty in developing site-specific mitigation for the site-specific impacts from seawalls, the Commission has had growing awareness of the economic benefits of beaches. Wide sand beaches can provide shore protection, as well as recreational and tourist benefits that are important to the local, regional and state economy. The importance of beaches and the need to protect and mitigate for impacts to the sand supply are highlighted in a recent report entitled "California's Ocean Economy" (July 2005).

In July of 2005, the Commission determined that the in-lieu fee based on a one-time placement of sand does not effectively mitigate for all the known adverse impacts of a seawall in Solana Beach (ref. CDP No.6-04-156/Las Brisas). Specifically, the Commission recognized that in order for sand to remain on the beach at the Las Brisas site over the 22 year lifetime of the seawall, beach nourishment would need to occur multiple times since any sand placed there would be redistributed through the littoral cell by wave action and would not likely remain fixed in the Las Brisas beach. In addition to asking for a more accurate estimation of the cost for sand replenishment, the Commission asked what appropriate mitigation would be available for the site-specific losses of public access and recreational opportunities resulting from the seawall's encroachment and its adverse effect on shoreline sand supply. Unfortunately the Las Brisas applicant was unwilling to extend the time period for Commission's review of the permit application beyond the July 2005 hearing so that the necessary information could be obtained. As a result, the Commission denied the seawall finding that the applicant had failed to meet its

burden of demonstrating that the seawall design and the proposed in lieu fee would effectively mitigate for the seawall's adverse impacts.

The proposed project will result in the total loss of 794 sq. ft. of beach, due to the long-term physical encroachment of the seawall (200 sq. ft.) combined with the beach area that will no longer be formed because the back of the beach will be fixed (594 sq. ft.). This 794 sq. ft. of beach could be temporarily built or created through the one-time placement of 714.6 cubic yards of sand seaward of the seawall. The applicant has proposed to pay an in-lieu fee for the future purchase of this amount of sand along with an amount to account for the sand that will no erode from the bluff onto the beach because of the seawall (estimated to be 120.2 cu. yds.). However, as the Commission recently identified in its denial of the Las Brisas seawall in Solana Beach (ref. 6-04-156/Las Brisas), this mitigation would result in only a one-time placement of sand and its one-time placement will not result in creation of beach area over the entire 22 years of seawall impacts since any deposited sand will wash away in a relatively short period of time and will not return. In other words, the proposed mitigation is inadequate to meet the requirements of Section 30235. Therefore, the proposed seawall, while necessary to protect a threatened residential structure, has not been designed to eliminate or mitigate its adverse impacts on shoreline sand supply, much less its resulting adverse impacts to public access and recreational opportunities. The seawall is therefore inconsistent with Section 30235 and must therefore be denied.

The Commission requested that the applicant provide additional information pertaining to the development of more effective mitigation measures to address the adverse effects of seawalls. In addition, Commission staff advised the applicant that a Commission funded economic study is under way in connection with the resubmittal of the Las Brisas seawall application in Solana Beach (Ref. 6-05-72/Las Brisas) that may provide additional information relating to effective mitigation for the adverse effects of seawall, at least as it relates to a seawall in nearby Solana Beach. However, the applicant refused to grant the Commission additional time beyond September 20, 2005 to evaluate potentially more effective mitigation measures. Without a better understanding of: (1) how often sand would need to be placed on the beach in order to (a) maintain the current beach profile, (b) replicate the lost areas at the water's edge, and/or (c) replace the sand that will be prevented from being released from the bluff; and/or (2) the real estate and/or recreational value of the area to be lost, the Commission is unable to evaluate whether the project adequately mitigates the seawall's impacts or what else would need to be done to mitigate those impacts. The applicant has not submitted information necessary to analyze whether the project is consistent with Section 30235 or what changes would have to be made in order to make it so consistent. This leaves the Commission with no choice but to deny the project. The applicant has the burden to provide that information and, since he has failed to do so, the Commission cannot find the project consistent with the requirements of Section 30235 of the Act.

3. Public Access/Recreation. Pursuant to Section 30604 (c), the Coastal Act emphasizes the need to protect public recreational opportunities and to provide public

access to and along the coast. Section 30210 of the Coastal Act is applicable to the proposed development and states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

In addition, Section 30212 of the Act is applicable and states, 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:
>
> (l) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
>
> (2) adequate access exists nearby....

Additionally, Section 30220 of the Coastal Act provides:

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

The proposed approximately 100 foot-long seawall will encroach approximately 2 ft. seaward of the toe of the bluff occupying approximately 200 sq. ft. of public beach area. The beach is public trust lands because it is seaward of the MHTL. The State Lands Commission (SLC) retains ownership of the public trust lands; however, the SLC leases the area to the City of Encinitas. The site is located approximately one block south of the City of Encinitas' Beacon's Beach public access pathway. The beach at the project site is used by local residents and visitors for a variety of recreational activities. Thus, the proposed seawall is located on sandy beach area that would otherwise be available to the public. As previously identified, the project will have several adverse impacts on public access including the loss of beach area by the encroachment of the seawall, the denial of sand to the beach that would have been contributed by way of erosion of the bluffs over the 22 year period and the beach area that would have been created as the toe of the bluff extends landward over 22 years.

The seawall will be attached to similarly constructed seawalls on both its north and south ends. Although the seaward encroachment of the wall will not extend further than the existing walls on either side, the beach along this area of the coast is narrow and at high tides and winter beach profiles, the public may be forced to walk virtually at the toe of the bluff or the area may be impassable. As such, any encroachment of structures, no matter how small, onto the sandy beach in this area, results in a significant reduction in the beach area available for public use. This is particularly true given the existing beach profiles and relatively narrow beach. Aside from the direct encroachment, it is expected

that over the life of the seawall, the beach area seaward of the seawall will gradually reduce in size resulting in further impacts on public access. The extent of these impacts and any appropriate mitigation to address them has not been adequately evaluated.

As stated elsewhere in these findings, Section 30235 of the Act allows for the use of such a shoreline protective device (in this particular case, a seawall) where it is needed to protect existing development or for certain other specified purposes and where it has been designed to mitigate adverse impacts upon shoreline sand supply. In this case, the applicant has failed to demonstrate adequate mitigation for the seawall's adverse impacts and the request must be denied. In addition, the applicant requests that following completion of the seawall, the applicant be allowed to remove rock rip-rap that lies on the beach approximately 20-30 ft. seaward of the seawall. The property owners at 816 Neptune (Sorich) and 828 Neptune (Okun) received an emergency permit in January 2001 to construct an approximately 60 to 80 ft.-long, 5 to 7 ft.-high rip-rap structure on the beach fronting 828 Neptune Avenue with a small portion placed below 816 Neptune Avenue (Emerg. Permit #6-01-11-G/Okun, Sorich). The riprap was necessary to protect a temporary construction related platform/access ramp used in the construction of a seawall below 828 Neptune Avenue. The construction platform/access ramp has subsequently been removed. The emergency permit for the riprap was conditioned to require the riprap be removed within 120 days of placement (by May 11, 2001) since it would no longer be necessary once the construction ramp was removed. To date the riprap has not been removed, and its continued placement on the public beach that would otherwise be available for public use has a significant adverse impact on public access. Therefore, the applicant's request to retain the riprap on the beach until completion of the seawall must be denied since its continued placement adversely affects public access and recreational opportunities.

In summary, the riprap has significant and unmitigated impacts to public access and recreational opportunities, is inconsistent with the public access and recreation policies of the Coastal Act and, therefore, must be denied.

4. Visual Resources/Alteration of Natural Landforms. Section 30251 of the Coastal Act states, in part:

> 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.

The proposed 20 to 27 ft.-high seawall to be constructed along the base of a coastal bluff fronting a public beach raises concerns relative to adverse impacts on visual resources. The bluffs along this section of the Encinitas coastline currently have a series of seawalls at the toe of the bluff that are approximately 15 to 27 feet in height and extend from the end of the subject properties for approximately 200 feet to the north and 300 feet to the

south. Although seawalls lie at the base of the bluffs, the bluffs above the seawalls to the south remain in their natural state. The bluffs at the subject site and across the two properties to the north have unpermitted gravel placed across their face such that their appearance is not natural for a coastal bluff. The City's coastal development permit for the subject site's backfill material and upper bluff retaining wall was conditioned on the applicant mitigating the appearance of the bluff by removal of a substantial portion of the gravel, filling the area will soil and landscaping. Since the proposed seawall and riprap lie on the public beach, the potential for adverse impacts on visual resources associated with the proposed development could be significant.

In order to address this concern and reduce potential adverse visual impacts associated with the proposed development, the applicant has identified that the proposed seawall will be colored and textured to make it appearance more natural. Similar designed seawalls have recently been constructed along the Encinitas shoreline in close proximity to the subject site (Ref. CDP Nos. 6-00-74 Grey Diamond Marketing, Funke, Kimball; 6-03-48/Gault, Sorich). However, aside from a general description, details of the proposed visual treatment including construction methods, color/texture samples and a maintenance and monitoring plan for the visual treatment have not been provided. Unless the method of construction is clearly identified, the Commission has no ability to evaluate its success. Since the visual appearance of seawall will likely deteriorate over time due to wave action and weathering, it is not known how often maintenance will be needed or how quickly it will implemented. Without this information, the Commission cannot be assured that the visual appearance of the seawall can be effectively mitigated. Therefore, the Commission finds that potential visual impacts associated with the proposed development have not been reduced to the maximum extent feasible, as required by Section 30251 of the Coastal Act, and the seawall must be denied.

In addition, the riprap which is located on the sandy beach consists of approximately 60 to 80 lineal feet of ½-ton to 2-ton quarry stone approximately 5 to 7 feet in height. The large rocks are not part of the natural landscape found along the Southern California Coast and, therefore, represent a visual blight to the sandy beach. The riprap was required to be removed in May of 2001 and it's continued placement has significant adverse visual impacts as well as significant public access impacts. In addition, the riprap no longer is necessary since the construction ramp it was designed to protect no longer exists. Therefore, the applicant's request to retain the riprap until the seawall is completed has significant adverse impacts inconsistent with Section 30251 of the Coastal Act and must be denied.

5. Unpermitted Development. The proposed development will occur on a site where conditions of approval for three previously issued emergency permits have not been satisfied. This application was submitted in follow-up to two of the emergency permits to authorize the temporary seawall as permanent development. In 2001, the applicant at 828 Neptune Avenue received two emergency permits from the Executive Director granting temporary authorization to construct a seawall at the base of the bluff, which were conditioned to require the applicant to submit a complete application to the Coastal Commission for a regular coastal development permit by no later than August 18, 2001 in

order to permanently authorize the temporary emergency work as permanent development (ref. Emerg. Permits Nos. 6-01-005-G/Okun and 6-01-085-G/Okun). However, the regular application was not submitted until March 24, 2005. In addition, if a follow-up regular permit was not received by the Commission, the entire project was conditioned to be removed by no later than November 16, 2001. In addition, a third emergency permit has been previously issued for emergency work on site. The property owners at 816 Neptune (Sorich) and 828 Neptune (Okun) received an emergency permit in January 2001 to construct an approximately 60 to 80 ft.-long, 5 to 7 ft.-high rip-rap structure on the beach fronting 828 Neptune Avenue with a small portion placed below 816 Neptune Avenue (Emerg. Permit #6-01-11-G/Okun, Sorich). The riprap was necessary to protect a temporary construction related platform/access mound used in the construction of a seawall below 828 Neptune Avenue. The construction platform/access mound has subsequently been dismantled. The emergency permit for the riprap was conditioned to require the riprap be removed within 120 days of placement (by May 11, 2001). To date the riprap has not been removed. The subject application includes the proposal to remove the segment of riprap located on the subject site at 828 Neptune Avenue following completion of the subject seawall. However, since the seawall has been substantially completed and the construction platform for which the riprap was suppose to protect no longer exists, the Commission's staff engineer can find no need for the rock riprap to remain on the public beach.

Resolution of these unpermitted developments should occur through separate enforcement action by the Commission's enforcement staff. Consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Review of this permit does not constitute a waiver of any legal action with regard to the alleged violation nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal permit.

6. Local Coastal Planning. The subject site is located on the beach within the City of Encinitas. In November of 1994, the Commission approved, with suggested modifications, the City of Encinitas Local Coastal Program (LCP). Subsequently, on May 15, 1995, coastal development permit authority was transferred to the City. Although the site is within the City of Encinitas, it is within the Commission's area of original jurisdiction. As such, the standard of review is Chapter 3 policies of the Coastal Act, with the City's LCP used as guidance.

As shoreline erosion along the coast rarely affects just one individual property, it is imperative that a region 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.

Based on specific policy and ordinance language requirements in the LCP suggested by the Commission and accepted by the City, the City of Encinitas is in the process of developing a comprehensive program addressing the shoreline erosion problem in the

City. The intent of the plan is to look at the shoreline issues facing the City and to establish goals, policies, standards and strategies to comprehensively address the identified issues. To date, the City has conducted several public workshops and meetings on the comprehensive plan to identify issues and present draft plans for comment. However, based on recent discussions with City Planning Staff, it is uncertain when the plan will come before the Commission as an LCP amendment or when it will be scheduled for local review by the Encinitas City Council.

Planning for comprehensive protective measures which may include a combination of continual lower bluff protection constructed in substantial segments, limits on future bluff development and ground and surface water controls, in conjunction with beach replenishment, should occur to avoid the need for substantial alteration of the natural landform in the future. When shoreline protective devices must be installed because all feasible alternatives have been eliminated, the comprehensive plan should include measures that assure adequate mitigation for adverse impacts to shoreline sand supply, including the resulting impacts on public access and recreational opportunities.

Based on the above discussion, the proposed seawall development has been found to be inconsistent with numerous Chapter 3 policies of the Coastal Act because while the seawall is necessary to protect the residence its adverse impacts on beach sand supply, public access and recreational opportunities have not been sufficiently evaluated. The Commission finds that approval of the proposed seawall development as proposed would prejudice the ability of the City of Encinitas to prepare a comprehensive plan addressing the City's coastline as required by Section 30.34.020B(9) of the City's certified Implementation Plan and consistent with Chapter 3 policies and, therefore, it must be denied.

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.

As described above, the proposed project would have adverse impacts on local shoreline sand supply and beach area and, as a result, on public access and recreational opportunities. While the proposed seawall has been documented to be needed to protect the existing blufftop home, adequate measures to mitigate for the adverse impacts caused by the seawall on shoreline sand supply and public access have not been identified or evaluated, and alternatives have not been explored. With respect to the riprap, its immediate removal is a feasible alternative that would reduce its adverse impacts on visual quality and public access and recreation. Therefore, the proposed project is not consistent with CEQA or the policies of the Coastal Act because there are feasible

alternatives or mitigation measures that would lessen the significant adverse impacts the activity would have on the environment. Therefore, the project must be denied.

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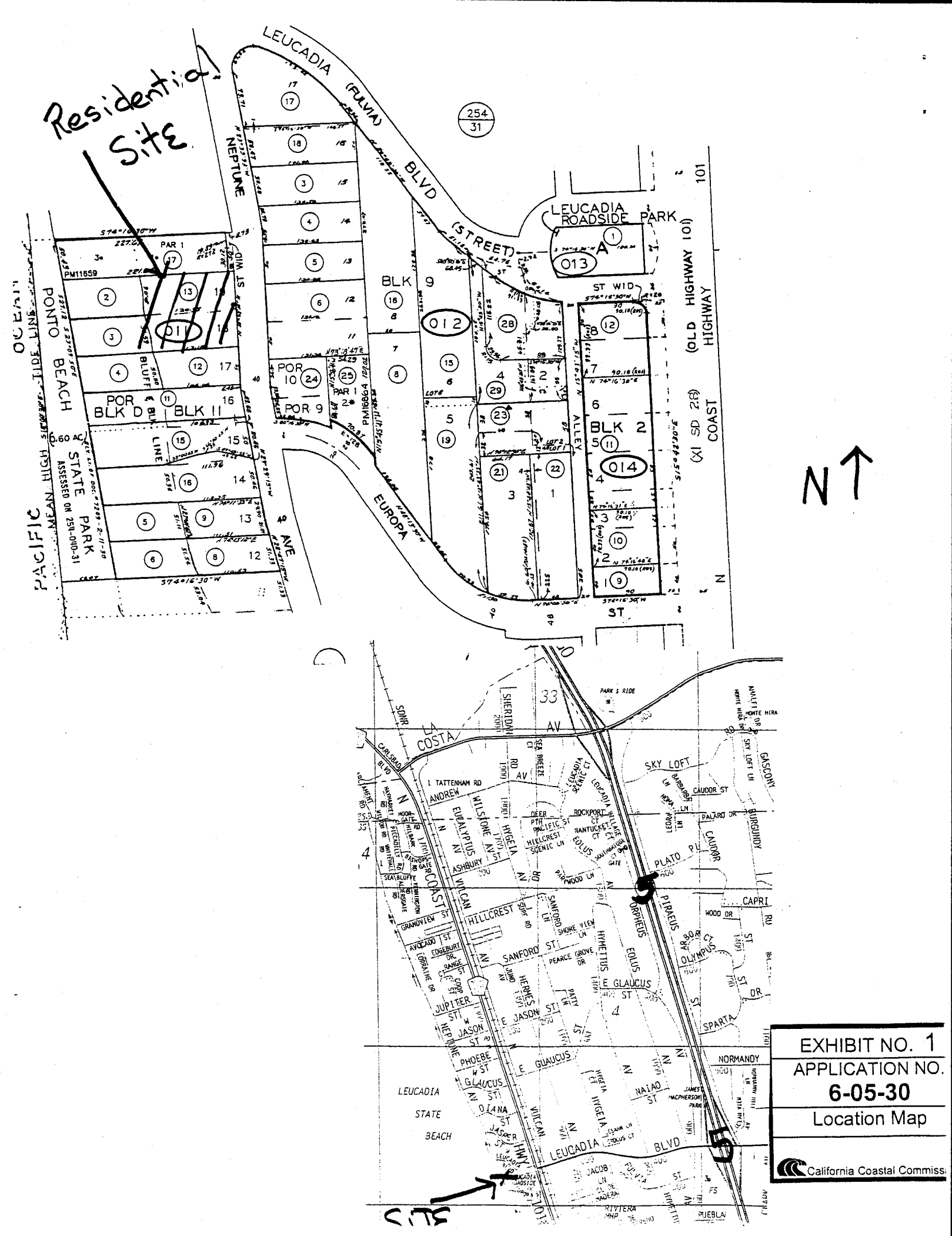

EXHIBIT NO. 1
APPLICATION NO.
6-05-30
Location Map

California Coastal Commiss

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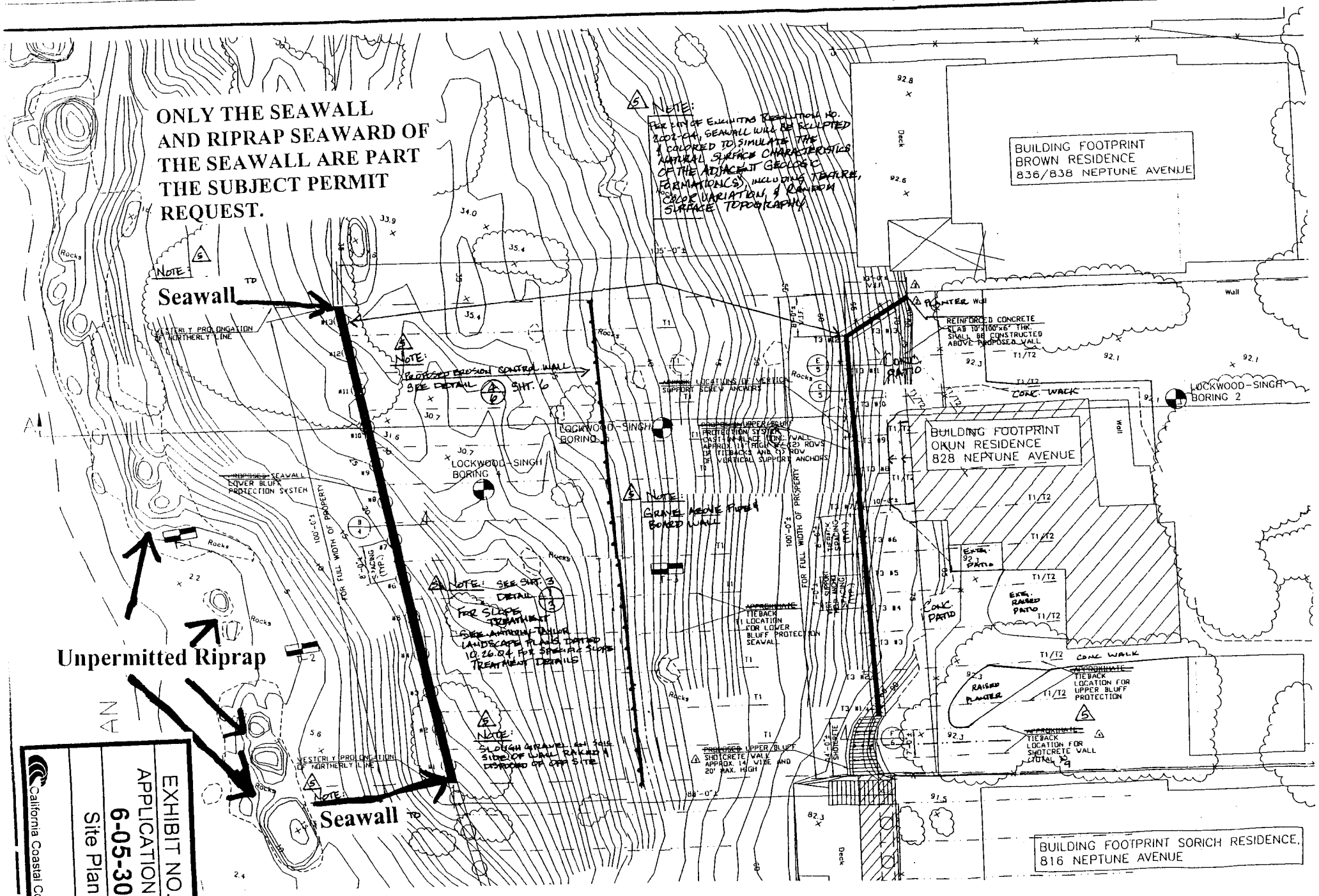


EXHIBIT NO. 2
APPLICATION NO.
6-05-30
Site Plan

California Coastal Commission

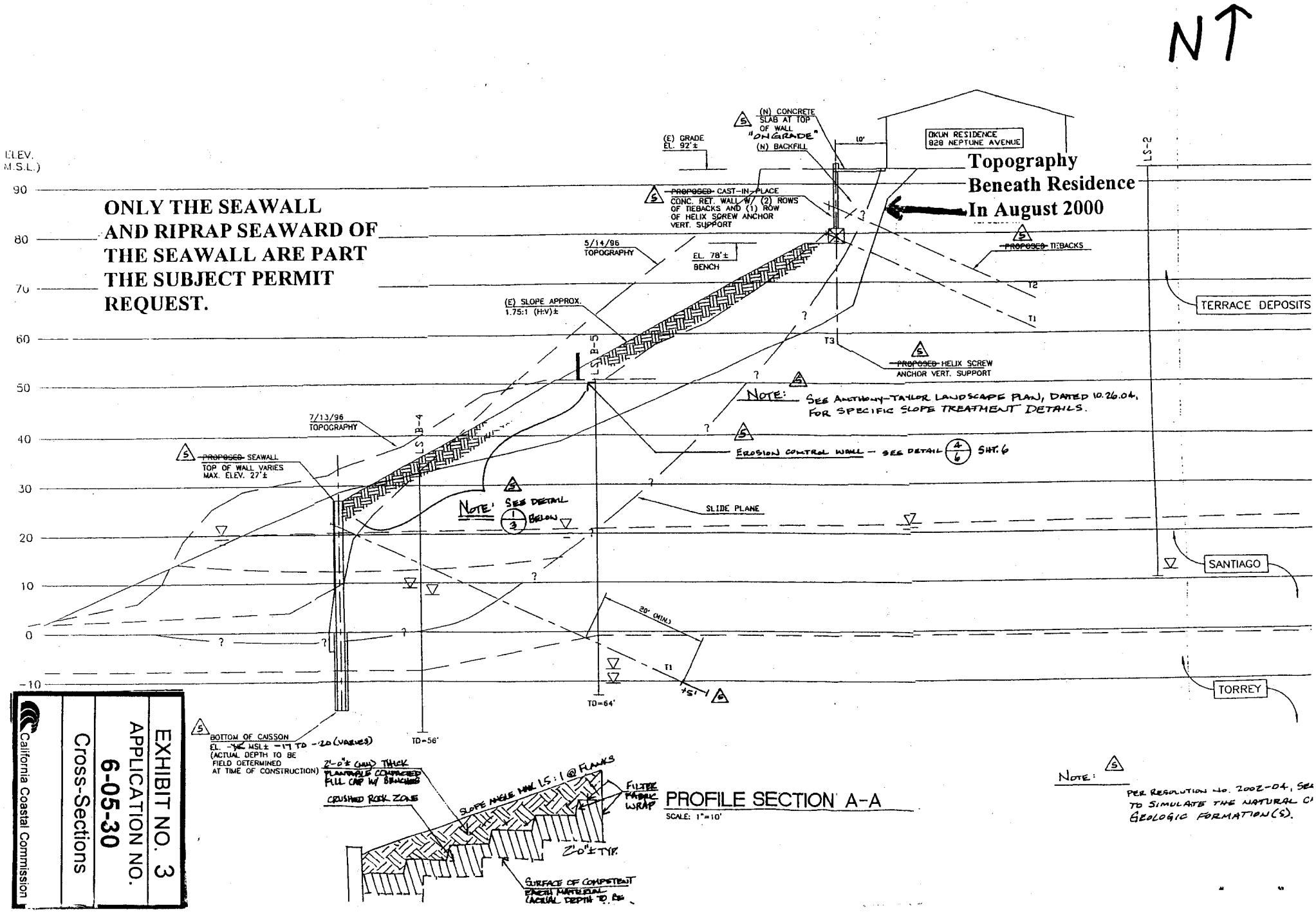
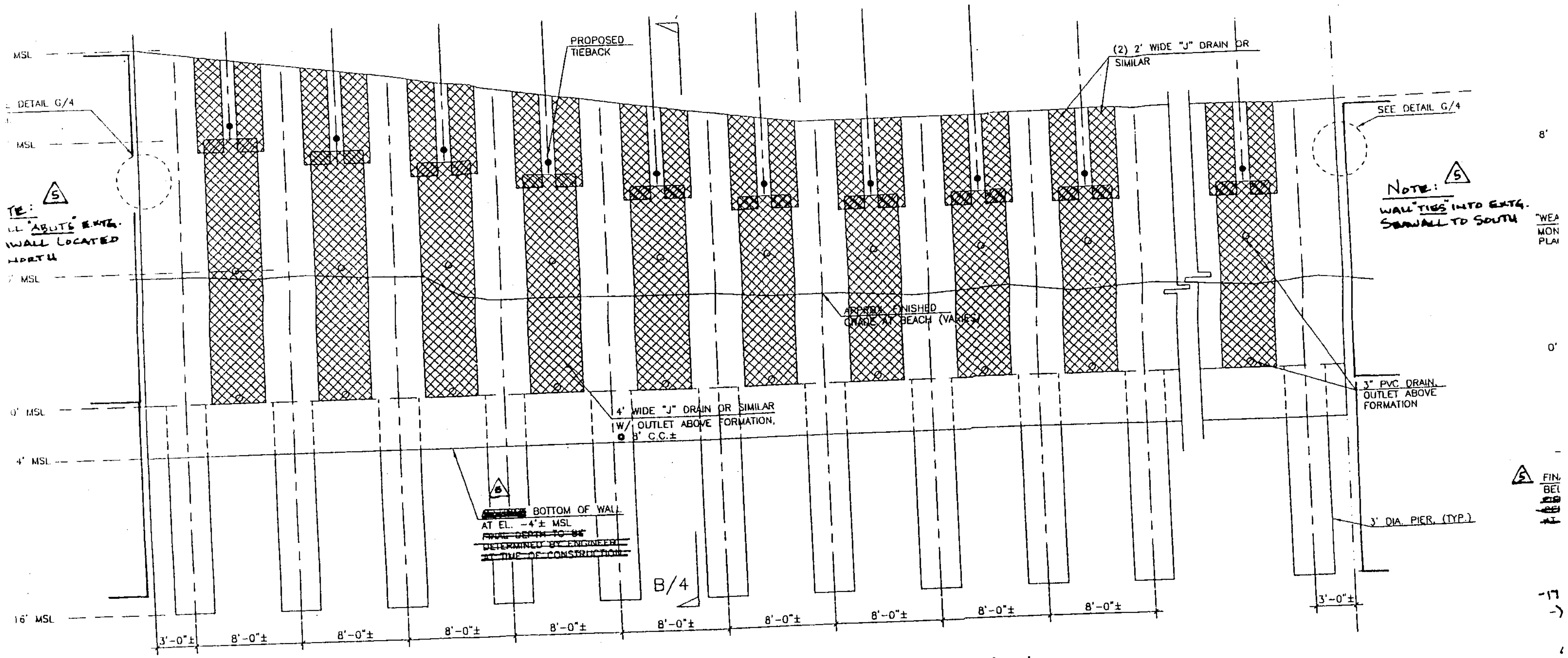


EXHIBIT NO. 3
APPLICATION NO. 6-05-30
Cross-Sections
California Coastal Commission



LOWER WALL ELEVATION

SCALE: 3/16" = 1'-0"

NOTE: PER RESOLUTION NO. 2002-04, SEAWALL WILL BE SCULPTED & COLORED TO SIMULATE THE NATURAL SURFACE CHARACTERISTICS OF THE ADJACENT GEOLOGIC FORMATION(S), INCLUDING TEXTURE, COLOR VARIATIONS, & RANDOM SURFACE TOPOGRAPH

EXHIBIT NO. 4
APPLICATION NO.
6-05-30
Elevations
California Coastal Commission

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STATE OF CALIFORNIA – THE RESOURCES AGENCY

GRAY DAVIS, Governor

CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370

EMERGENCY PERMIT

Emergency Permit No. **6-01-005-G** Date: **January 23, 2001**

Applicants: **Dr. Leonard Okun**
828 Neptune Avenue
Encinitas, CA 92024

LOCATION OF EMERGENCY WORK: **On the beach fronting 828 Neptune Avenue, Encinitas (San Diego County)**

WORK PROPOSED: **Construction of an approximately 100 ft. long seawall. The seawall will range in height from 20 ft. at its southern end to 27 ft. at the north and will be comprised of 36 inch steel reinforced soldier piles spaced 8 ft. on center with one row of tiebacks approximately 60 ft. to 70 ft. in length with a reinforced shotcrete wall between the caissons. The seawall will be located along the pre-existing toe of the bluff, approximately 20 ft. to 30 ft. landward of the toe of the existing debris pile. The face of the seawall will be colored and textured to closely resemble the surrounding natural bluff. (ref. repair plans by Soil Engineering Construction inc., dated 12/17/00).**

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of ongoing erosion and sloughage of the upper bluff at the site of an existing landslide requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows;

(c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS
Executive Director

Deborah N. Lee

By: DEBORAH LEE
Deputy Director

EXHIBIT NO. 5
APPLICATION NO.
6-05-30
Signed Emergency Permit 6-01-005-G

California Coastal Commissi