CALIFORNIA COASTAL COMMISSION
South Coast Area Office
200 Oceangate, Suite 1000
ong Beach, CA 90802-4302
562) 590-5071

Filed:	October 31, 2002
49th Day:	December 12, 2002
180th Day:	April 29, 2003
Staff:	FSY-LB FSY
Staff Report:	February 13, 2003
Hearing Date:	March 4-7, 2003
Commission Action:	

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STAFF REPORT: REGULAR CALENDAR

RECORD PACKET COPY

APPLICATION NO.: 5-02-378

APPLICANTS: William Johnson

AGENT: Culbertson, Adams & Associates, Mr. David B. Neish and Mr. David J. Neish

PROJECT LOCATION: 1008 West Bay Avenue, City of Newport Beach (County of Orange)

PROJECT DESCRIPTION: Construction of a new 70 foot long bulkhead fronting Newport Bay. The bulkhead and backfill will result in the fill of 914 square feet of high intertidal sandy habitat.

SUMMARY OF STAFF RECOMMENDATION:

The applicant proposes to construct a new bulkhead on a bayfront lot in the City of Newport Beach. The primary issues before the Commission are whether construction of the proposed bulkhead is consistent with (1) Coastal Act Section 30233, which does not allow the fill of coastal water for purposes of protecting residential development, much less for converting marine habitat to private yard space, and (2) Coastal Act Section 30235, which permits shoreline altering construction such as bulkheads only under limited circumstances and when multiple criteria are satisfied, including that the proposed structure is "required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion." Staff recommends that the Commission **DENY** the proposed project.

As submitted, the proposed project is primarily inconsistent with the Sections 30233 and 30235 of the Coastal Act. Section 30233 of the Coastal Act identifies an exhaustive list of eight uses for which fill of open coastal waters is allowed. The proposed bulkhead does not qualify as one of the eight permitted uses. The proposed bulkhead will result in the fill of 914 square feet on high intertidal habitat, to be converted to yard space for the residence. Fill of wetland or coastal waters for private residential development is not one of the allowable uses identified under Section 30233. Although the applicant argues that the bulkhead is also needed to protect the existing residence, this is not an allowable use under Section 30233 either, seawall construction being authorized by Section 30235, and then only in limited circumstances, as explained below.

Section 30235 of the Coastal Act requires the Commission to allow construction of a bulkhead when required to protect existing development that is in danger due to erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Although, as indicated above, the applicant argues that the bulkhead is also needed to protect the existing

residence, the evidence does not support this contention. There is no convincing evidence that the proposed bulkhead is not necessary to protect an existing structure that is in danger due to erosion.

Furthermore, feasible alternatives to the proposed project that comply with Coastal Act policies exist, thus adding an additional reason why the current proposal cannot be approved. For example, if erosion is a problem, periodic beach nourishment could be undertaken to maintain the existing beach profile.

Staff recommends that the project be denied, since it is neither an allowable use under Section 30233 of the Coastal Act nor necessary under Section 30235 of the Coastal Act to protect an existing structure threatened by erosion, and because it is not the least environmentally damaging feasible alternative.

LOCAL APPROVALS RECEIVED: Approval In Concept from the City of Newport Beach Harbor Resources Division dated June 7, 2001 and Section 401 Water Quality Standards Certification dated May 8, 2002 from the Regional Water Quality Control Board.

SUBSTANTIVE FILE DOCUMENTS: City of Newport Beach Certified Land Use Plan; Coastal Development Permits 5-00-495 (Schulze); 5-01-104 (Fluter); 5-01-117 (Childs); letter from staff dated June 8, 2001; *Geotechnical Investigation, Proposed Rear Yard Seawall, 1008 West Bay Avenue, Newport Beach, California.* prepared by Petra (Project No. J.N. 178-01) dated May 29, 2001; letter from staff to Marshall Steele dated July 16, 2001; Letter from Richard Okimoto to staff dated December 17, 2001; letter from Richard Okimoto to staff dated February 26, 2002; letter from the City of Newport Beach to William Johnson dated November 1, 2002; *Marine Biological Resources Impact Assessment, Bulkhead Construction Project, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-*229 prepared by Coastal Resources Management dated February 21, 2002; letter from Skelly Engineering dated November 27, 2001; letter from staff to Richard Okimoto dated March 28, 2002; *Conceptual Mitigation Plan for the Restoration of Saltmarsh Habitat Upper Newport Bay, California, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-*229 prepared by Coastal Resources Management dated April 19, 2002; letter from the California State lands Commission to Richard Okimoto dated January 30, 2002; letter from the California Department of Fish and Game to staff dated November 6, 2001; letter from the California Department of Fish and Game to Coastal Resources Management dated April 19, 2002; letter from the United States Fish and Wildlife Service to the United States Army Corps of Engineers dated August 5, 2002; letter from the California Department of Fish and Game to the United States Army Corps of Engineers dated August 1, 2002; letter from the National Marine Fisheries Service to the United States Army Corps of Engineers dated August 6, 2002; and letter from Lesley Ewing, California Coastal Commission Coastal Engineer, dated October 14, 2002 .

EXHIBITS

1. Vicinity Map
2. Assessor's Parcel Map
3. Approval in Concept
4. Site Plan
5. Project Plans
6. Vicinity Pictures
7. Letter from the Department of Fish & Game (DF&G) to Commission staff dated November 6, 2001
8. Letter from the Department of Fish & Game (DF&G) to the Army Corps of Engineers (ACOE) dated August 1, 2002
9. Letter from the Fish & Wildlife Services (F&WS) to the Army Corps of Engineers (ACOE) dated August 5, 2002
10. Letter from the National Marine Fisheries Service (NMFS) to the Army Corps of Engineers (ACOE) dated August 6, 2002
11. Letter from Lesley Ewing, California Coastal Commission Coastal Engineer, dated October 14, 2002
12. Letter from *Skelly Engineering* dated November 27, 2001

STAFF RECOMMENDATION:

I. STAFF RECOMMENDATION OF DENIAL

Staff recommends that the Commission adopt the following resolution to deny the coastal development permit application. The motion passes only by affirmative vote of a majority of the Commissioners present.

A. Motion

I move that the Commission approve Coastal Development Permit No. 5-02-378 for the development proposed by the applicant.

B. 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.

C. 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 and will 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 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.

II. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Project Location, Description and Background

1. Project Location

The proposed project is located on a bayfront lot fronting Newport Bay at 1008 West Bay Avenue in the City of Newport Beach, County of Orange (Exhibits #1-3). North of the project site is Newport Bay; South of the project site is West Bay Avenue and to the East and West are existing residential structures on bulkheaded lots. The project site is located in a residential area where the majority of the homes fronting Newport Bay are located on bulkheaded lots. Staff has researched and determined that these existing bulkheads are pre-coastal (meaning that they pre-date the Coastal Act and the creation of the Coastal Commission). Site conditions include a low retaining wall, beach and a narrow wooden pier with a rectangular deck in the area where the proposed bulkhead will be constructed (Exhibit #6).

2. Project Description

The proposed project consists of the following: construction of a new 70 foot long bulkhead fronting Newport Bay, two 12 foot long return walls (retaining walls) on either side of the property and two buried concrete deadmans tied into the bulkhead and would result in the filling of 914 square feet of high intertidal habitat [1](Exhibits #4-5). The applicant has submitted a more detailed description of the proposed project: "*The wall structure is composed of tongue and groove, conventionally-reinforced 4ft wide precast concrete sheet piles with reinforced concrete cap and side return walls on both far sides of the property. All reinforcing will be epoxy-coated to reduce long-term corrosion. The concrete sheetpiles will be installed via water jetting and self-weight impact. No impact or vibratory hammers will be used. Siltation curtains will be deployed around the construction site to minimize turbidity and impacts to the marine environment during sheetpile installation. It is intended that the precast sheetpiles terminate approximately four feet from edge of property line. The final 4ft portion of the seawall, on either side of the property, will be installed as a conventionally formed and pour-in-lace reinforced concrete wall. This method will also be used for the two return walls on either side of the property. Return walls will connect to the seawall via reinforced dowels with concrete poured flush with the inside face of seawall. Top of seawall elevation shall be +9.0mllw with toe of new wall @ -2.0mllw; i.e., overall wall height will be 11ft, with approximately 4ft of this wall visible above the adjacent mudline. The return walls will extend approximately 12ft landward of the seawall and be buried below the surface of the grade. A space will be created between the new return walls and the neighboring seawalls, to fill with expansive concrete to prevent escape of fine soil materials from the properties and into the bay. The design is intended to create an isolation joint between the new seawall and the existing, neighboring walls.*"

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[1] Exhibits #4-5 show the location of the proposed bulkhead and the outline of the existing home. These plans do not show the outline of the new proposed home approved by the Commission (Waiver 5-01-356 (Johnson)). Plans showing the location of the approved home and the proposed bulkhead have not been submitted. Waiver 5-01-356 (Johnson) will be discussed on the following page in Section II.A.3.

The applicants state that there are three primary reasons why the bulkhead is necessary: 1) to provide continuity of the bulkhead which would be in place along the approved bulkhead line; 2) to prevent movement of land into the water (erosion of the shoreline); and 3) to eliminate damage to the neighboring boundary walls (Exhibit #12).

3. Prior Commission Action at the Subject Site

On May 24, 1983, the Commission approved Coastal Development Permit 5-83-248 (Bergt) for the relocation and revision of a private boat dock located at 1008 West Bay Avenue in the City of Newport Beach. The permit was approved with no special conditions.

On March 5, 2002, the Commission approved Waiver 5-01-356 (Johnson). CDP 5-01-356-W was a waiver that allowed the demolition of an existing two-story single family residence and construction of a new 5,965 square foot two-story single family residence with an attached 342 square foot guest room and an 808 square foot three car garage located at 1008 West Bay Avenue in the City of Newport Beach. The project also consisted of 364 square foot for a veranda on the first floor and 364 square feet for verandas located on the second floor. In addition, the project also consisted of construction of new gates and wrought iron fencing and the existing wood deck and planter wall and bench structure located in the rear will be modified as necessary for construction of the new home. The maximum height of the structure would be 26 feet above finished grade. Grading to take place would consist of recompaction of existing soils. There would be 580 cubic yards of grading, which would balance on site. Runoff would be collected by a system of drain inlets and pipes and discharged into a drainage pit and percolated into the ground. At that time, no evidence had been submitted in connection with application 5-01-356 to indicate that the existing home or the new home would require the construction of the bulkhead.

B. Marine Resources

Section 30233 of the Coastal Act, in relevant part, states:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in

conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

The City of Newport Beach Land Use Plan (LUP) was certified on May 19, 1982. The certified LUP was updated on January 9, 1990. Since the City has an LUP, which is one component of a complete Local Coastal Program (LCP), but does not have a full LCP, the policies of the LUP are used only as guidance. The Newport Beach LUP includes the following policies that relate to development at the subject site:

Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries

1. *Only the following types of developments and activities may be permitted in the parts of Newport Bay which are not within the State Ecological Reserve where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects:*

    a. *Construction or expansion of Port/marine facilities.*

    b. *Construction or expansion of coastal-dependent industrial facilities, including commercial fishing facilities, haul-out boat yards, commercial ferry facilities.*

    c. *In open coastal waters, other than wetlands, including estuaries, new or expanded boating facilities, including slips, access ramps, piers, marinas, recreational boating, launching ramps, haul-out boat yards, and pleasure*

ferries. (Fishing docks and swimming and surfing beaches are permitted where they already exist in Lower Newport Bay).

d. *Maintenance of existing and restoration of previously dredged depths in navigational channels and turning basins associated with boat launching ramps, and for vessel berthing and mooring areas. The 1974 U.S. Army Corps of Engineers maps shall be used to establish existing Newport Bay depths.*

e. *Incidental public service purposes which temporarily impact the resources of the area, such as burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines.*

2. *New developments on the waterfront shall take into consideration existing usable water are for docking facilities. Residential and commercial structures (except piers and docks used exclusively for berthing of vessels) shall not be permitted to encroach beyond the bulkhead line. However,* ***this policy shall not be construed to allow development which requires the filling of open coastal waters, wetlands or estuaries which would require mitigation for the loss of valuable habitat in order to place structures closer to the bulkhead line or create usable land areas****. No bayward encroachment shall be permitted except where there is no feasible less environmentally damaging alternative and where mitigation is provided through payment of in-lieu fees to the Upper Newport Bay Mitigation Fund Administered by the City.* (Emphasis Added)

3. *The City shall examine proposals for construction of anti-erosion structures, offshore breakwaters, or marinas, and regulate the design of such structures to harmonize with the natural appearance of the beach.*

The proposed bulkhead is to be placed at an elevation of +5.23 MLLW and the top of seawall elevation shall be +9.0 MLLW with toe of new wall at -2.0 MLLW with an overall wall height of 11ft, with approximately 4ft of this wall visible above the adjacent mudline. The height of the proposed seawall would be similar to the existing bulkheads adjacent to the site and would result in the filling of 914 square feet of high intertidal habitat (Exhibit #6). This habitat is located at elevations between +5.2 and +7 MLLW (Exhibit #6).

Section 30108.2 of the Coastal Act defines 'Fill" as the placement of earth or any other substance or material placed in a submerged area. Section 30233 of the Coastal Act limits the fill of wetlands and coastal waters to the eight enumerated uses above. In addition, the City has an LUP policy regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries that is similar to Section 30233 of the Coastal Act. The proposed fill of an intertidal area, which would provide yard space for the residence and allegedly provide greater protection to the existing landward development, is not designed or intended to serve any of the allowable uses identified by Section 30233 or the City's LUP. Furthermore, in addition to the requirement that a proposed fill of coastal waters be an allowable use under Section 30233 (and the City's LUP), both of those rules require that, in order to receive approval, projects involving the fill of wetlands and open coastal waters must also demonstrate that there is no feasible less environmentally damaging alternative and that feasible mitigation has been provided.

1. Other Agency Comments

California Department of Fish and Game (DF&G)

The proposed project was submitted to the California Department of Fish & Game (DF&G) for its review. In a letter from the DF&G to Commission staff dated November 6, 2001 (Exhibit #7), it states: "*It is the Department's position to recommend that seawall/bulkhead projects be constructed in such a manner to be least environmentally damaging, with minimal impacts to marine habitats. The loss of marine intertidal habitat associated with the proposed seawall does not appear to be necessary for the continued protection of the property. Therefore, we recommend the seawall proposal be modified to eliminate any loss of intertidal habitat.*" Furthermore, in an additional letter from the DF&G to the Army Corps of Engineers (ACOE) dated August 1, 2002 (Exhibit #8), DF&G restates the request for modification of the proposed bulkhead and also the requirement for mitigation [to be discussed later in this staff report]: "*Accordingly, we recommend to the Corps that the applicant not be granted a permit until the project is modified to eliminate the further loss of intertidal habitat. To accomplish this goal, the seawall could be placed shoreward so that its installation results in no loss or reduced loss of intertidal habitat. If this approach is deemed feasible, the applicant should be required to mitigate for the loss of intertidal habitat and a mitigation plan submitted prior to any construction.*"

United States Department of the Interior, Fish and Wildlife Services (F&WS)

The project was also submitted to the United States Department of the Interior, Fish and Wildlife Services (F&WS) for their review. A letter from the F&WS to the Army Corps of Engineers (ACOE) dated August 5, 2002 (Exhibit #9), states: "We *are concerned for the loss of biological resources associated with the proposed fill into waters of the U.S. As discussed in the PN* [Public Notice 200101390-DPS], *the intertidal soft bottom areas that would be filled provide habitat for burrowing and epibenthic invertebrates and can be used for foraging by invertebrates, fish and birds including the federally listed California least tern (Sterna antillarum brown). Such projects could cause significant cumulative impacts to these important biological resources in Newport Bay. Given the small amount of proposed fill, it appears that relatively minor changes in the bulkhead design would allow the project to avoid any fill unto waters of the U.S. Therefore, the practicability of alternative bulkhead designs that would avoid fill into waters of the U.S. should be evaluated... If avoidance of fill into waters of the U.S. is determined to be impracticable, the applicant should mitigate for the loss of any intertidal habitat by creating and preserving a minimum of 0.01 acre of intertidal habitat within Newport Bay.*"

United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS)

The United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) reviewed the project as well. A letter from the NMFS to the Army Corps of Engineers (ACOE) dated August 6, 2002 (Exhibit #10), states: "*The proposed project is located in an area identified as Essential Fish Habitat (EFH) for fish species federally managed under the Pacific Groundfish*

Management Plan and Coastal Pelagic Fishery Management Plan. While we do concur with your assessment that the impacts associated with this individual project are insignificant, the cumulative impacts of many such projects are significant. Given the history of many similar small projects being implemented in Newport Bay, we believe the impacts of this project must be considered to be significant in an cumulative context...In addition, it is not clear from the information supplied in the Public Notice what the distance between the existing Mean High Water and the proposed location of the new bulkhead. Regardless of what distance this may be, we disagree with your conclusion that this bulkhead work is water dependant. It appears that the applicant is simply attempting to gain additional property at the expense of existing marine habitats. The location of adjacent property bulkheads is not justification for further loss of aquatic habitats." The letter further states that the following provisions should be incorporated into the project: 1) The construction of any bulkhead only occur at or above the MHW elevation; 2) Should the need for the construction of the bulkhead below the Mean High Water be clearly demonstrated, mitigation satisfactory to NOAA Fisheries to offset the loss of any marine habitat will be agreed to prior to issuance of the permit; and 3) Any required mitigation will be completed prior to or concurrent with the construction of the bulkhead.

United States Army Corps of Engineers (ACOE)

The United States Army Corps of Engineers (ACOE) has issued a Public Notice inviting parties to provide their views on the proposed work.

Regional Water Quality Control Board (RWQCB)

Because this project will require a federal license or permit from the ACOE and may result in a discharge into the water, the project was submitted to the California Regional Water Quality Control Board (RWQCB) for its review under section 401(a) of the Clean Water Act. 33 U.S.C. § 1341(a). The RWQCB issued a Section 401(a) certification for the proposed project on May 8, 2002, contingent upon the execution of the following conditions: 1) No fueling, lubrication, or maintenance of construction equipment within 500 feet of waters of the State; 2) No discharge into Newport Bay; and 3) Adherence to the *Caulerpa taxifolia* stipulation.

2. Allowable Use Test[2]

The applicant contends that the primary purpose of the project is to protect its property. The applicant states that the subject site is experiencing erosion, which is having adverse impacts on the property and that the proposed bulkhead is necessary to protect existing structures. Though the project may resolve the applicant's concerns that erosion is having an adverse impact on the property, the approvability of the project is not the adequacy of the engineering, but its conformance with Section 30233.

Section 30233 of the Coastal Act allows the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes for: 1) new, expanded port, energy, and coastal-

[2] Before a project can be approved under Section 30233 of the Coastal Act, it must be evaluated and determined to pass three tests. The three tests involve: 1) allowable use; 2) alternatives analysis; and 3) mitigation. This is the "first" of the three tests.

dependent industrial facilities; 2) maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps; 3) entrance channels for new or expanded boating facilities in wetland areas and in degraded wetlands, identified by the Department of Fish and Game; 4) open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities; 5) incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines; 6) mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas; 7) restoration purposes; and 8) nature study, aquaculture, or similar resource dependent activities.

The City has an LUP policy regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries that is similar to Section 30233 of the Coastal Act. The City's LUP limits the fill of estuaries, wetlands and coastal waters to five enumerated uses: 1) construction or expansion of Port/marine facilities; 2) construction or expansion of coastal-dependent industrial facilities, including commercial fishing facilities, haul-out boat yards, commercial ferry facilities; 3) in open coastal waters, other than wetlands, including estuaries, new or expanded boating facilities, including slips, access ramps, piers, marinas, recreational boating, launching ramps, haul-out boat yards, and pleasure ferries; 4) maintenance of existing and restoration of previously dredged depths in navigational channels and turning basins associated with boat launching ramps, and for vessel berthing and mooring areas and; 5) incidental public service purposes which temporarily impact the resources of the area, such as burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines. In addition, the City's LUP regarding the fill of estuaries, wetlands and coastal waters states: "*...this policy shall not be construed to allow development which requires the filling of open coastal waters, wetlands or estuaries which would require mitigation for the loss of valuable habitat in order to place structures closer to the bulkhead line or create usable land areas.*"

The proposed development would result in 914 square feet of fill in intertidal coastal waters and would expand the yard space of the residence. Neither the protection of existing structures nor the provision of additional yard space for a residence is one of the uses identified by Section 30233 or the City's LUP as an allowable purpose for the fill of open coastal waters. Therefore, the proposed bulkhead does not qualify as one of the allowable uses identified in Section 30233 of the Coastal Act or in the City's LUP.

Although Section 30235 of the Coastal Act does require the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion (and when designed to eliminate adverse impacts on shoreline sand supply), and the subject site is apparently experiencing some erosion, the applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. Additionally, there is evidence that the proposed bulkhead is not as far landward as possible to minimize adverse environmental effects. Therefore, the Commission cannot find that the proposed development is approvable pursuant to Section 30235 of the Coastal Act. This will be discussed further in Section II.C.

3. Alternatives Analysis Test

To demonstrate that the proposed bulkhead is the least environmentally damaging alternative, the applicant has provided an alternatives analysis found within the *Marine Biological Resources Impact Assessment, Bulkhead Construction Project, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-229*. This document was prepared by Coastal Resources Management dated February 21, which explores options other than the proposed bulkhead.

Alternative #1

The first alternative provided by the applicant is a no project alternative. The assessment states that this would not mitigate the soil sloughing from the site and the resulting damage to the adjacent boundary walls, patio slabs and building slabs.

Analysis

This alternative would maintain the existing "natural" condition and not result in the loss of 914 square feet of high intertidal habitat or the creation of a new man made structure on the beach in the form of the proposed bulkhead. The applicant has not provided information documenting that the erosion that is occurring poses an imminent threat to the exiting structure from erosion. The proposed project was reviewed by the Commission's Coastal Engineer (Exhibit #11) who concluded that the bulkhead is not needed to protect the existing principal structure from erosion. Therefore, a no project alternative is a feasible less environmentally damaging alternative. In addition, the proposed bulkhead is not listed as one of the allowable uses identified in Section 30233 of the Coastal Act. Therefore, the Commission cannot find that the proposed development is consistent with Section 30233 of the Coastal Act.

Alternative #2

The second alternative provided by the applicant consists of a quarry stone revetted bulkhead replacing the proposed vertical bulkhead. The coastal assessment states that the quarry bulkhead would be in the same location as the proposed vertical bulkhead. The assessment asserts that a revetment reduces scouring effects associated with wave activities. However, the project site is not affected by strong waves associated with wave activity. Therefore, the assessment concludes that a quarry stone revetment would not provide any substantial net benefit over the vertical bulkhead. Furthermore, the quarry bulkhead would require additional intertidal fill to construct, resulting in an increase in the amount of habitat lost. For these reasons, the revetted bulkhead plan alternative was not chosen by the applicant.

Analysis

Though this is a feasible alternative, it would be environmentally more damaging than the applicant's original proposed bulkhead since it would result in additional fill of intertidal habitat. Thus, this is not the least environmentally damaging alternative. In addition, the construction of a quarry stone revetted bulkhead to protect a residence is not listed as one of the allowable uses identified in Section

30233 of the Coastal Act. Therefore, the Commission cannot find that the proposed development is consistent with Section 30233 of the Coastal Act.

Alternative #3

The third alternative evaluated by the applicant is the periodic addition of sand (beach nourishment) to maintain the existing beach as it currently exists and to prevent the overall net loss of soil at the site. The coastal assessment states that this would not mitigate the soil sloughing from the site and the resulting damage to the adjacent boundary walls, patio slabs and building slabs and does not meet the engineering requirements for the protection of the residential walls and building slabs. Furthermore, the assessment states that the continual addition of soil on site would result in periodic disturbances to intertidal invertebrates, and potentially short term reductions in mid-intertidal beach productivity.

Analysis

This alternative would not result in the loss of 914 square feet of high intertidal habitat and no new man made structure on the beach similar to the proposed bulkhead, which makes it a less environmentally damaging alternative than the proposed bulkhead. Periodic dredging with deposition on the beach would be a preferable method of maintaining the existing beach profile and protecting the structure from the effects of erosion, to the extent that there are any significant adverse effects of erosion on the structures. Although the subject site is apparently experiencing nominal erosion which appears to be the result of natural processes, the applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead, therefore, an alternative such as beach nourishment would makes a less environmentally damaging alternative than the proposed bulkhead. This approach has been taken by the City of Newport Beach on Coastal Development Permit #5-99-282 (City of Newport Beach) approved by the Coastal Commission. Under this permit, navigable channels and berthing slips are periodically dredged and the sand is placed back on the beach to maintain the beach profiles. The proposed project is adjacent to a navigable channel and has a berthing facility. The dredging of beach material that has eroded into Newport Bay back onto the beach would achieve the applicant's project purpose of mitigating the erosion of beach material by maintaining the existing beach profile. Section 30233 of the Coastal Act allows the dredging of open coastal waters for: "*Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*" Section 30233 also states: "*Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.*" The beach nourishment can be conducted on all properties affected.

Erosion and accretion are natural process. The natural state of the beach is that sand moves on and off shore, and the construction of a bulkhead will prevent the natural sand movement process. Periodic dredging of the berthing facilities with deposition on the beach (beach replenishment) would be a preferable method of

maintaining the existing beach profile and the functionality of the berthing facilities, as opposed to the construction of the bulkhead, a permanent structure. The assertion that the masonry for the boundary walls is cracking does not justify a new bulkhead, as the masonry could be repaired or removed. In addition, lateral support can be "fixed" through periodic dredging to maintain the existing beach profile. Though the applicants assert that soil sloughing from the site is resulting in damage to the adjacent boundary walls, patio slabs and building slabs and that they reject this alternative, this alternative would be consistent with Section 30233 and would not result in the permanent loss of 914 square feet of high intertidal habitat or the creation of a new man made structure on the beach similar to the proposed bulkhead, which makes it a less environmentally damaging alternative than the proposed bulkhead.

4. Mitigation Test

Projects that involve fill of open coastal waters must qualify as an allowable use under Section 30233 of the Coastal Act, and then, if the proposed project has not avoided adverse impacts to coastal resources, mitigation is also required to minimize the remaining adverse environmental effects. In this case, the proposed project has not qualified as an allowable use under the Coastal Act or avoided (or even minimized) its impacts. In addition, the California Department of Fish & Game (DF&G) has reviewed the project and states that the bulkhead does not seem necessary for the continued protection of the property and that the bulkhead should be modified to eliminate the loss of any intertidal habitat. The Similarly, the U.S. Fish & Wildlife Service expressed concern over the cumulative impacts to biological resources of projects such as the one proposed, and recommended evaluation of alternative designs. The United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) also reviewed the project and states that the cumulative impacts to habitat of this project is significant due to history of many similar small projects being implemented in Newport Harbor. They also state that it seems that the applicant is merely trying to gain additional property by constructing this bulkhead.

To evaluate the biological impact of the proposed bulkhead, the applicant submitted a *Marine Biological Resources Impact Assessment, Bulkhead Construction Project, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-229*. This document was prepared by Coastal Resources Management dated February 21, 2002. The assessment found that the construction of the new bulkhead will result in the filling of 914 square feet of high intertidal "wetland habitat" as defined by the U.S. Fish and Wildlife Service. The coastal assessment states: "*...few if any marine organisms live in the high intertidal sands above the mean High Tide Line (MHT, +4.6 ft MLLW) and at elevations (+5 to +7 ft MLLW) where the proposed bulkhead is to be located due to limited tidal exposure over the course of the year and consequently, a limited food supply of detrital materials. The high intertidal sandy area where the bulkhead is proposed is a potential habitat for wading ducks and perhaps seagulls and pelicans during periods of lower human use.*" In addition, it states that no endangered, rare or sensitive species of plants or animals were present in the vicinity of the project site.

The applicant has indicated that he is willing to provide mitigation to offset impacts arising from the project as proposed. The applicant has submitted a Conceptual Mitigation Plan, which would mitigate the loss of 914 square feet of high intertidal sandy

beach at a mitigation ratio of 4:1, as typically required by the Commission for this type of impact, resulting in the restoration of 3,656 square feet of high intertidal salt marsh habitat at elevations between +5.0 and +7.0 ft, MLLW within Upper Newport Bay. In a letter dated April 19, 2002, the DF&G states that they have accepted the conceptual mitigation agreement. Nevertheless, before the Commission can approve the project, the project must meet all the requirements of Section 30233 which are that the project must be an allowable use and be the least environmentally damaging alternative, in addition to providing adequate mitigation. In this case, the proposed project does not meet two of the three requirements in that it is neither an allowable use nor the least environmentally damaging alternative, as is explained above. Since the proposed project is neither an allowable use nor the least environmentally damaging alternative, the adequacy of the proposed mitigation is not being assessed herein.

5. City's LUP

The proposed project is in conflict with the City's LUP regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries. The City's LUP limits the fill of estuaries, wetlands and coastal waters to the five enumerated uses listed previously. The proposed fill of the intertidal area would not be for any of the five uses listed in the LUP in that its main functions would be to increase yard space for the residence and to allegedly provide greater protection to the existing structures, neither of which is one of the allowable uses identified by the City's LUP regarding the fill of estuaries, wetlands and coastal waters. In addition, there are other less environmentally damaging alternatives that exist which would not result in the construction of a bulkhead in the high intertidal area. Since the purpose of this project is not an allowable use under the City's LUP and other less environmentally damaging alternatives exist, such as beach replenishment, the proposed project, again, is inconsistent with City's LUP.

6. Review of Project By Staff Coastal Engineer

The proposed project was reviewed by the Commission's Coastal Engineer (Exhibit #11). The analysis states: "*The proposed bulkhead/seawall will address all concerns raised by the applicant's experts. It will retain sediment and prevent further erosion from this site into Newport Bay. There has been no quantification of the amount of sediment that would be added to Newport Bay if this site remains unarmored; however, it is unlikely that this property alone would be responsible for enough sedimentation into the bay that this one proposed bulkhead/seawall would eliminate the need for further dredging of the bay. There are cumulative effects, both positive and negative, from erosion into the bay and from fixing the bay boundary. This proposed structure would contribute to both, albeit in a small way.*" Furthermore, the analysis states: "*The proposed bulkhead/seawall will support the soils beneath the existing patio and boundary walls and greatly reduce the potential for further cracking. The submitted material does not provide any information about the main residential structure, but it does not appear that the proposed bulkhead/seawall is needed to protect the main structure at this location. Thus, while it will provide several positive benefits to the existing property owner and adjacent neighbors, it does not seem that this proposed bulkhead is needed to protect the existing structure from erosion. As such, the proposed bulkhead/seawall should be considered for its impacts to coastal resources,*

for fill in open coastal waters, and for its compliance with sections of the Coastal Act other than 30235."

Although the proposed bulkhead, from an engineering perspective, accomplishes its intended use, the standard of review for approving the proposed bulkhead is its consistency with the Coastal Act, such as with Section 30233. Section 30233 of the Coastal Act limits the fill of wetlands and coastal waters to the eight enumerated uses discussed previously. Fill of wetland or coastal waters for private residential development is not one of the allowable uses identified under Section 30233. In addition, the submitted coastal assessment does not demonstrate that the bulkhead would be the least environmentally damaging alternative. Therefore, the proposed project would be incompatible with Section 30233 of the Coastal Act since the proposed fill resulting from the construction of the bulkhead is not one of the allowable uses under Section 30233.

7. Conclusion

The proposed development would result in 914 square feet of fill in coastal waters. The area of proposed fill would provide yard space for the residence and allegedly provide greater protection to the existing landward development. Although the proposed bulkhead, from an engineering perspective, accomplishes its intended use, the standard of review for determining its approvability is its consistency with the Coastal Act, such as Section 30233. Fill of wetland or coastal waters for private residential development is not one of the allowable uses identified under Section 30233. In addition, the submitted coastal assessment does not demonstrate that the bulkhead would be the least environmentally damaging alternative. Alternatives to the installation of the bulkhead which are less damaging are available. One alternative could be soil nourishment, which would prevent the overall loss of sands at the site and is an alternative to the bulkhead which is environmentally less damaging since a new man made structure would not be installed on the beach. As stated previously, before the Commission can approve the project, the project must meet all the requirements of Section 30233, which are that the project must be an allowable use, be the least environmentally damaging alternative and provide adequate mitigation. In this case, the proposed project fails to satisfy at least two of the three requirements in that it is neither an allowable use nor the least environmentally damaging alternative. The City's LUP has similar, though even more restrictive, conditions, and thus, the proposed project is inconsistent with it as well.

Therefore, the Commission finds that the proposed project is inconsistent with Section 30233 of the Coastal Act and the City's LUP.

C. Protective Structures and Hazards

Section 30235 of the Coastal Act states:

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.

The proposed project consists of the construction of a new bulkhead fronting Newport Bay. Although the proposed bulkhead, from an engineering perspective, accomplishes its intended use which is, the standard of review for approving the proposed bulkhead is its consistency with the Coastal Act, such as with Section 30235. Although not specifically listed as a type of construction that alters natural shoreline processes covered in Section 30235 of the Coastal Act, the proposed bulkhead is a type of seawall, which is discussed in Section 30235 of the Coastal Act. Moreover, the presence of a bulkhead at this location would alter natural shoreline processes. Consequently, the proposed development is covered by Section 30235.

Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. Although the subject site is apparently experiencing nominal erosion which appears to be the result of natural processes as discussed in the evaluation conducted by *Skelly Engineering* dated November 27, 2002 discussing the need for the new bulkhead, the applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. The proposed project was reviewed by the Commission's Coastal Engineer (Exhibit #11) who concluded that the bulkhead is not needed to protect the existing principal structure from erosion. In addition, the applicant did not submit evidence that a bulkhead was needed when they submitted an application to demolish and construct a new house at the project site. Coastal Development Permit 5-01-356-W for the demolition and construction of a new single family residence was approved by the Commission on March 5, 2002. Therefore, the Commission cannot find that the proposed development is approvable pursuant to Section 30235 of the Coastal Act.

An evaluation conducted by *Skelly Engineering* dated November 27, 2002 discusses the need for the new bulkhead. The letter states that there are three primary reasons why the bulkhead is necessary: 1) to provide continuity of the bulkhead which would be in place along the approved bulkhead line; 2) to prevent movement of land into the water (erosion of the shoreline); and 3) to eliminate damage to the neighboring boundary walls (Exhibit #12).

<u>Reason #1</u>

The first reason the letter states is that the new bulkhead is needed is to provide continuity of the bulkhead with other adjacent and existing bulkheads. It further states: "*The Bulkhead's primary function is to fix the geometry of the Newport Bay channels. Without the bulkhead system in place the circulation within the bay would change as erosion and accretion takes place over time. Because of the docks, pier and wharfs within the bay, the sediment transport within the bay needs to be in quasi equilibrium. Erosion and accretion can adversely impact the berthing facilities which can only be mitigated by dredging. Filling in the gap in the bulkhead line will contribute to the continued proper functioning of the bay system and possibly help to reduce the need for dredging.*"

Analysis

The applicant states that the new bulkhead is needed to provide continuity of the already existing bulkheads located in the area in order to prevent erosion; however, the natural state of the beach is that sand moves on and off shore and the construction of a bulkhead will prevent the natural sand movement process. Moreover, the applicant makes no argument that the proposed bulkhead is therefore "*required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion*," as required in order to satisfy Section 30235. Though erosion can adversely impact the existing beach profile and berthing facilities, dredging to maintain the existing beach profile and berthing facility is a feasible alternative that is allowed pursuant to Section 30233 of the Coastal Act and would not result in the placement of a man made structure on the beach. This alternative would not result in the fill of open coastal waters resulting in the permanent elimination of the existing high intertidal habitat. In addition, this alternative would be environmentally superior to the loss of habitat. Thus, the proposed bulkhead is not needed to provide continuity of the bulkhead and since dredging to maintain the existing beach profile and berthing facility is a feasible alternative that is allowed pursuant to Section 30233 of the Coastal Act, the first reason offered by *Skelly Engineering* does not satisfy the criteria of Section 30235 or require approval of the proposed project.

Reason #2

The second reason why the letter states that the new bulkhead is needed is to prevent movement of land into the water (erosion of the shoreline). The letter goes on to say that the site has been subject to soil movement and erosion over time, which has caused damage to the patio and building slabs.

Analysis

As previously discussed above, erosion and accretion are natural process. The natural state of the beach is that sand moves on and off shore, and the construction of a bulkhead will prevent the natural sand movement process. If, in spite of that, they produce results unacceptable to the applicant, periodic dredging of the berthing facilities with deposition on the beach (beach replenishment) would be a preferable method of maintaining the existing beach profile and the functionality of the berthing facilities, as opposed to the construction of the bulkhead, a permanent structure. This approach has been taken by the City of Newport Beach on Coastal Development Permit #5-99-282 (City of Newport Beach) approved by the Coastal Commission. Under this permit, navigable channels and berthing slips are periodically dredged and the sand is placed back on the beach to maintain the beach profiles. The proposed project is adjacent to a navigable channel and has a berthing facility. The dredging of beach material that has eroded into Newport Bay back onto the beach would achieve the applicant's project purpose of mitigating the erosion of beach material by maintaining the existing beach profile. Section 30233 of the Coastal Act allows the dredging of open coastal waters for: "*Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning*

basins, vessel berthing and mooring areas, and boat launching ramps." Section 30233 also states: "*Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.*" This method of dealing with the erosion on site is the "best" approach for solving these problems. Additionally, even if the applicant had demonstrated that the bulkhead was necessary to protect the existing development, the position of the bulkhead could have been moved more landward in order to minimize the adverse impacts to coastal resources. The construction of a bulkhead does not entitle the applicant to maximize the yard space, which is not a coastal-dependent use. The bulkhead should be as far landward as possible to be consistent with the goal of protecting existing development, which minimizes adverse impacts to intertidal habitat area. Thus, the proposed bulkhead is not needed to protect an existing structure and so the second reason offered by *Skelly Engineering* does not satisfy the criteria of Section 30235 or require approval of the proposed project.

Reason #3

The third and final reason the letter states is that the new bulkhead is needed is to eliminate damage to the neighboring boundary walls. The letter states: "*the damage is primarily cracking of the masonry due to soil movement from the lack of lateral support of the soil, and erosion on one side of the boundary wall.*"

Analysis

The assertion that the masonry is cracking does not justify a new bulkhead, as the masonry could be repaired or removed. The proposed project was reviewed by the Commission's Coastal Engineer (Exhibit #11) who concluded that the bulkhead is not needed to protect the existing principal structure from erosion. In addition, lateral support can be "fixed" through periodic dredging to maintain the existing beach profile. Thus, the proposed bulkhead is not "required to protect existing structures," as there are other means of protecting those structures. Additionally, even if the applicant had demonstrated that the bulkhead was necessary to protect the existing development, the position of the bulkhead could have been moved more landward in order to minimize the adverse impacts to coastal resources. The construction of a bulkhead does not entitle the applicant to maximize the yard space, which is not a coastal-dependent use. The bulkhead should be as far landward as possible to be consistent with the goal of protecting existing development, which minimizes adverse impacts to intertidal habitat area. Once again, then, this reason offered by *Skelly Engineering* does not satisfy the criteria of Section 30235 or require approval of the proposed project.

Review of Project By Staff Coastal Engineer

The proposed project was reviewed by the Commission's Coastal Engineer (Exhibit #11). The analysis states: "*The proposed bulkhead/seawall will address all concerns raised by the applicant's experts. It will retain sediment and prevent further erosion from this site into Newport Bay. There has been no quantification of the amount of sediment that would be added to Newport Bay if this site remains unarmored; however, it is*

unlikely that this property alone would be responsible for enough sedimentation into the bay that this one proposed bulkhead/seawall would eliminate the need for further dredging of the bay. There are cumulative effects, both positive and negative, from erosion into the bay and from fixing the bay boundary. This proposed structure would contribute to both, albeit in a small way." Furthermore, the analysis states: "*The proposed bulkhead/seawall will support the soils beneath the existing patio and boundary walls and greatly reduce the potential for further cracking. The submitted material does not provide any information about the main residential structure, but it does not appear that the proposed bulkhead/seawall is needed to protect the main structure at this location. Thus, while it will provide several positive benefits to the existing property owner and adjacent neighbors, it does not seem that this proposed bulkhead is needed to protect the existing structure from erosion. As such, the proposed bulkhead/seawall should be considered for its impacts to coastal resources, for fill in open coastal waters, and for its compliance with sections of the Coastal Act other than 30235.*"

Although the proposed bulkhead, from an engineering perspective, accomplishes its intended use, the standard of review for approving the proposed bulkhead is its consistency with the Coastal Act, such as with Section 30235. Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. Although the subject site is apparently experiencing nominal erosion which appears to be the result of natural processes as discussed in the evaluation conducted by *Skelly Engineering* discussing the need for the new bulkhead, the applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. In addition, the applicant did not submit evidence that a bulkhead was needed when they submitted an application to demolish and construct a new house at the project site. Therefore, the proposed project would be incompatible with Section 30235 of the Coastal Act since a bulkhead is not necessary to protect an existing structure.

Conclusion

Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. Even though the proposed bulkhead, from an engineering perspective, accomplishes its intended use, the standard of review for determining its approvability is its consistency with the Coastal Act, such as Section 30235. Although the subject site is apparently experiencing nominal erosion, which appears to be the result of natural processes, the applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. Therefore, the Commission cannot find that the proposed development is approvable pursuant to Section 30235 of the Coastal Act.

As indicated previously, Section 30233 of the Coastal Act limits the fill of wetlands and coastal waters to eight enumerated uses. The proposed fill of an intertidal area that would provide yard space for the residence is not designed to satisfy any of the

allowable uses identified by Section 30233. Therefore, the Commission found that the proposed development was inconsistent with Section 30233 of the Coastal Act as well.

Additional Concerns

Besides the reasons stated above, the Commission has two additional concerns which deter approval of the proposed development.

Issue #1

The first issue concerns the use of a protective device such as a bulkhead. Consistent with Section 30253(2) of the Coastal Act, the Commission requires that new development be sited and designed to avoid the need for protective structures such as bulkheads. One method of achieving this objective is to require that new development be setback sufficiently so that no protective devices are needed. The applicant submitted an application for the construction of a new bulkhead in June 2001, and, in September 2001, the applicant submitted an application to demolish and construct a house at the project site. No evidence was submitted by the applicant with the September 2001 application to demolish and construct a house at the project site that a bulkhead was necessary or would be required in the future.

Though the applicant did not document the need for a bulkhead in September 2001, a separate application was received for the bulkhead. The analysis in this staff report reviews the proposed need for the bulkhead and has determined that the bulkhead is not necessary since the applicant has not demonstrated that the erosion that is occurring on site is at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead pursuant to Section 30235. There are other less environmentally damaging alternatives available, such as beach replenishment.

In addition, the proposed fill of an intertidal area that would provide yard space for the residence is not designed to satisfy any of the allowable uses identified by Section 30233. In addition, the applicant did not chose to combine the two applications when asked by Commission staff. In a letter dated October 4, 2001, staff offered the applicant the option to combine these two permit applications. In a letter dated October 8, 2001, the applicant decided that they would not combine the two applications. At the time the applicant submitted the application for the home, the applicant also submitted a geotechnical report for the house. Commission staff reviewed the Geotechnical Report by Petra dated July 3, 2001 to evaluate the potential need for a bulkhead. The only reference to a bulkhead in the geotechnical report was the following: " *We also understand that the existing bulkhead wall along the northern perimeter of the lot will be replaced with a new wall.*" Coastal Development Permit 5-01-356-W for the demolition and construction of a new single family residence was approved by the Commission on March 5, 2002. No evidence was submitted that stated that the existing home or the new home required the construction of the bulkhead now or in the future. The Commission finds that the appropriate time for the applicant to document geotechnical issues that would need to be resolved was at the time the application for the single family residence was submitted so that the Commission could fully evaluate the proposed development as a whole.

Issue #2

The second issue of concern is the proposed location of the bulkhead. As a standard practice the Commission requires that adverse environmental impacts to coastal resources be avoided through appropriate siting and design. In the event that adverse project impacts on the environment cannot be avoided, then mitigation would be appropriate.

The proposed project would result in the fill of 914 square feet. of intertidal habitat, which is an adverse environmental impact due to the loss of intertidal habitat. This adverse impact could be avoided, for example, by siting the bulkhead further inland outside of the intertidal zone. The California Depart of Fish and Game (DF&G) in their letter of November 6, 2001 discussed this potential solution. The letter states that the bulkhead does not seem necessary for the continued protection of the property and that the bulkhead should be modified to eliminate the loss of any intertidal habitat. In addition, the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) also reviewed the project and stated that the cumulative impacts to habitat of this project are significant due to history of many similar small projects being implemented in Newport Harbor. They also state that it seems that the applicant is merely trying to gain additional property by constructing this bulkhead.

Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. The applicant has not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. Therefore, the Commission cannot find that the proposed development is approvable pursuant to Section 30235 of the Coastal Act. In addition, before the Commission can approve the project, the project must meet all the requirements of Section 30233 which are that the project must be an allowable use, be the least environmentally damaging alternative and provide adequate mitigation. In this case, the proposed project does not meet two of the three requirements in that it is neither an allowable use nor the least environmentally damaging alternative.

Additionally, even if the applicant had demonstrated that the bulkhead was necessary to protect the existing development, the position of the bulkhead could have been moved more landward in order to minimize the adverse impacts to coastal resources. The construction of a bulkhead does not entitle the applicant to maximize the yard space, which is not a coastal-dependent use. The bulkhead should be as far landward as possible to be consistent with the goal of protecting existing development, which minimizes adverse impacts to intertidal habitat area.

Therefore, the Commission finds that the proposed development is inconsistent with Section 30233 of the Coastal Act and is not required by Section 30235.

D. Project Alternatives

Denial of the proposed project will neither eliminate all economically beneficial or productive use of the applicant's property, nor unreasonably limit the owners' reasonable investment backed

expectations of the subject property. The applicant already possesses a substantial residential development of significant economic value of the property. In addition, several alternatives to the proposed development exist. Among those possible alternative developments are the following (though this list is not intended to be, nor is it, comprehensive of the possible alternatives):

1. **No Project**

No changes to the existing site conditions would result from the "no project" alternative. However, the applicant did not submit information on the current rate of erosion which would substantiate when this alternative may result in damage to the existing structures. In addition, the applicant did not submit evidence that a bulkhead was needed when they submitted an application to demolish and construct a new house at the project site. Coastal Development Permit 5-01-356-W for the demolition and construction of a new single family residence was approved by the Commission on March 5, 2002. This alternative would not alter the existing site conditions, result in the loss of 914 square feet of high intertidal habitat, or result in the establishment of a new man made structure on the beach. In addition, this alternative would maintain the beach and sand movement in its "natural" state and result in the least amount of effects to the environment. Based on the information provided, the "No Project" alternative appears to be a viable alternative here.

2. **Beach Replenishment**

Another alternative to the proposed project would be beach replenishment. This alternative would not result in the loss of 914 square feet of high intertidal habitat and is an alternative to the bulkhead that is environmentally less damaging since a new man made structure would not be installed on the beach. The Commission approved Coastal Development Permit #5-99-282 (City of Newport Beach) for beach nourishment to occur in the City of Newport Beach. Under this permit, navigable channels and berthing slips are periodically dredged and the sand is placed back on the beach to maintain the beach profiles. The proposed project is adjacent to a navigable channel and has a berthing facility. The dredging of beach material that has eroded into Newport Bay back onto the beach would achieve the applicant's project purpose of mitigating the erosion of beach material by maintaining the existing beach profile. Section 30233 of the Coastal Act allows the dredging of open coastal waters for: "*Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*" Section 30233 also states: "*Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.*" Furthermore, unlike the applicant's proposal, beach nourishment would be consistent with Section 30233 of the Coastal Act and would be less environmentally damaging alternative to the proposed bulkhead.

E. Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government

having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

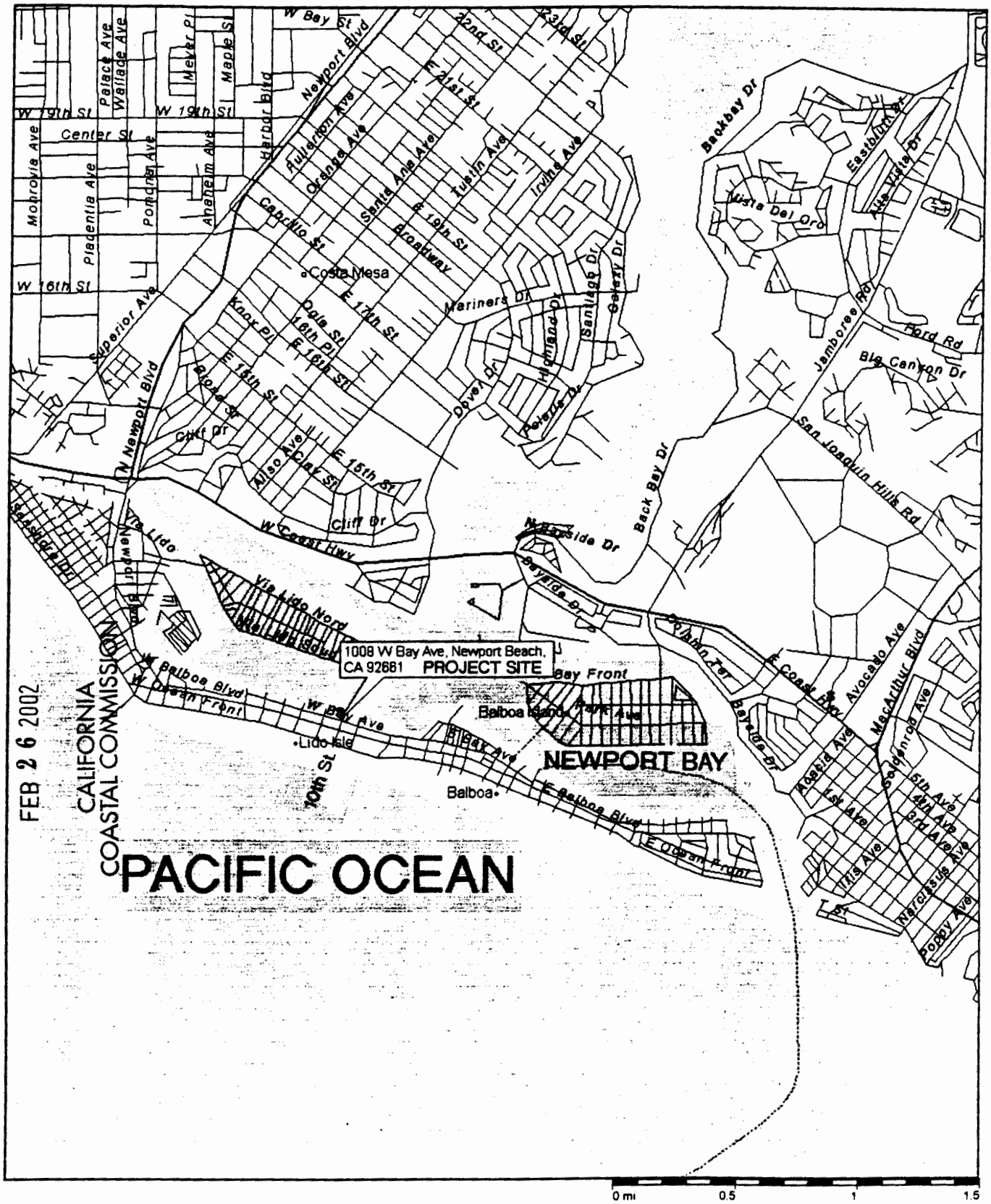
The LUP for the City of Newport Beach was effectively certified on May 19, 1982. The certified LUP was updated on January 9, 1990. Since the City has an LUP but no LCP, the policies of the LUP are used only as guidance. The proposed project is in conflict with City's LUP regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries, for the reasons explained above, in Section II.B.5.

The construction of the proposed project is inconsistent with the Chapter 3 policies of the Coastal Act discussed previously, specifically Sections 30233 and 30235 of the Coastal Act, as well as with the City's LUP. Section 30233 of the Coastal Act states the uses for which fill of open coastal waters is allowed. Section 30235 of the Coastal Act states when construction of a bulkhead must be permitted. The proposed development would prejudice the City's ability to prepare a Local Coastal Program for Newport Beach that is consistent with the Chapter 3 policies of the Coastal Act, as required by Section 30604(a). Therefore, the project is found inconsistent with the policies in the City's certified LUP and the Chapter 3 policies of the Coastal Act and must be denied.

F. California Environmental Quality Act

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, 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, which the activity may have on the environment.

As described above, the proposed project would have significant adverse environmental impacts. There are feasible alternatives available, such as the no project alternative and/or beach replenishment, as well as mitigation measures. Therefore, the proposed project is not consistent with CEQA or the policies of the Coastal Act because there are feasible alternatives that would lessen significant adverse impacts that the activity would have on the environment. Therefore, the project must be denied.



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Streets Plus

Johnson Residence Vicinity Map
Map Title 2

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COASTAL COMMISSION

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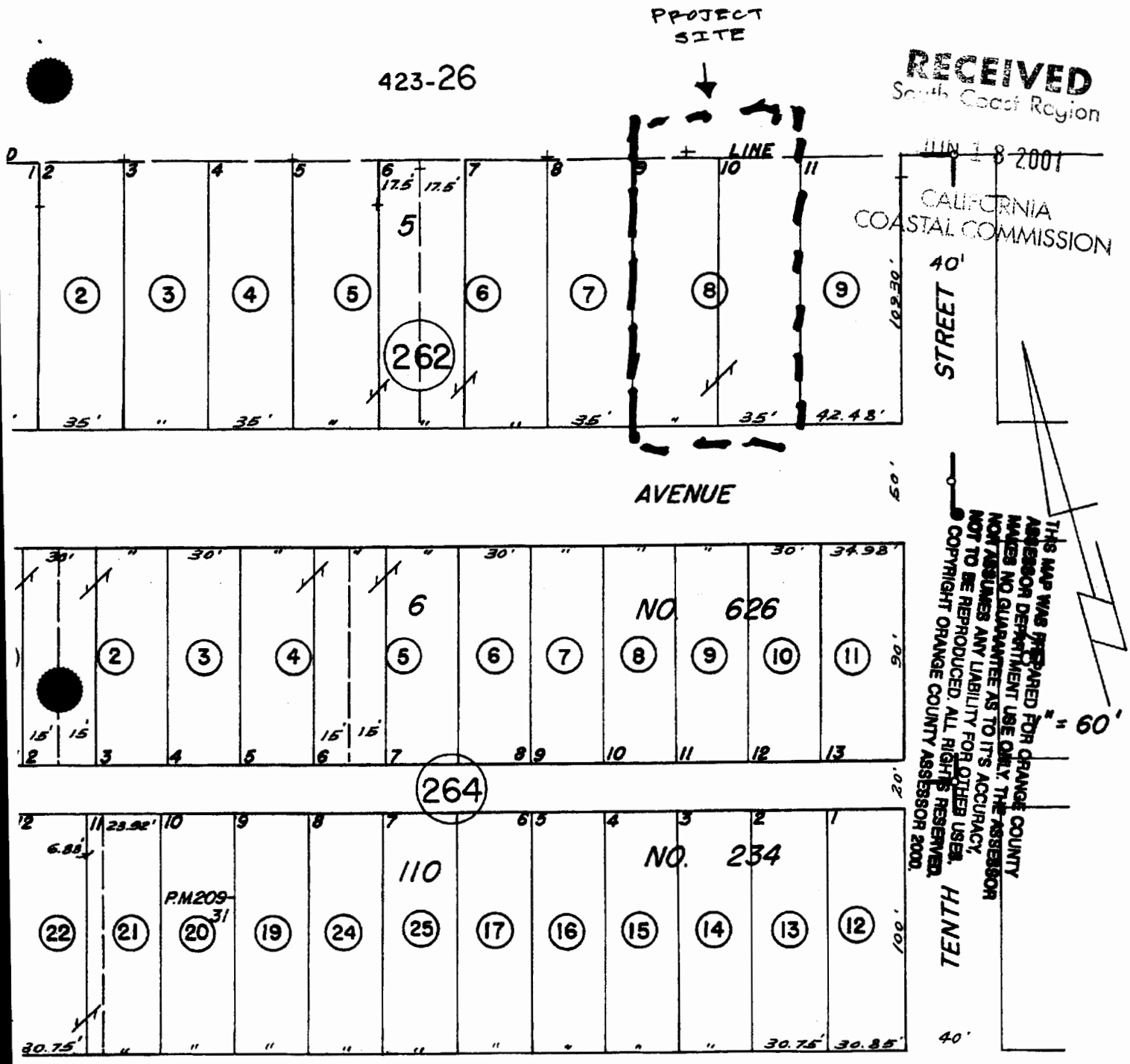
PAGE 1 OF 1



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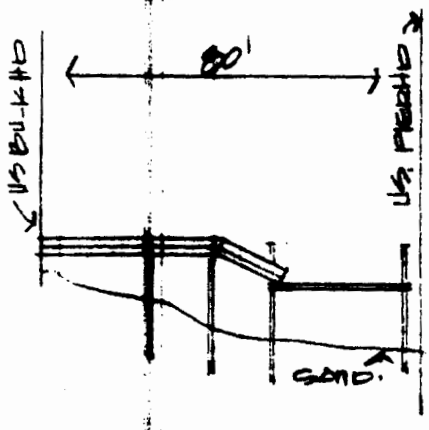
NOTE - ASSESSOR'S BLOCK & PARCEL NUMBERS SHOWN IN CIRCLES

ASSESSOR'S MAP BOOK 47 PAGE 26 COUNTY OF ORANGE

1-1-00

116-1008

CITY OF NEWPORT BEACH



PROFILE: SCALE: 1" = 40'-0"

VICINITY SKETCH
NEWPORT BAY, CALIFORNIA

EEL GRASS INSPECTION

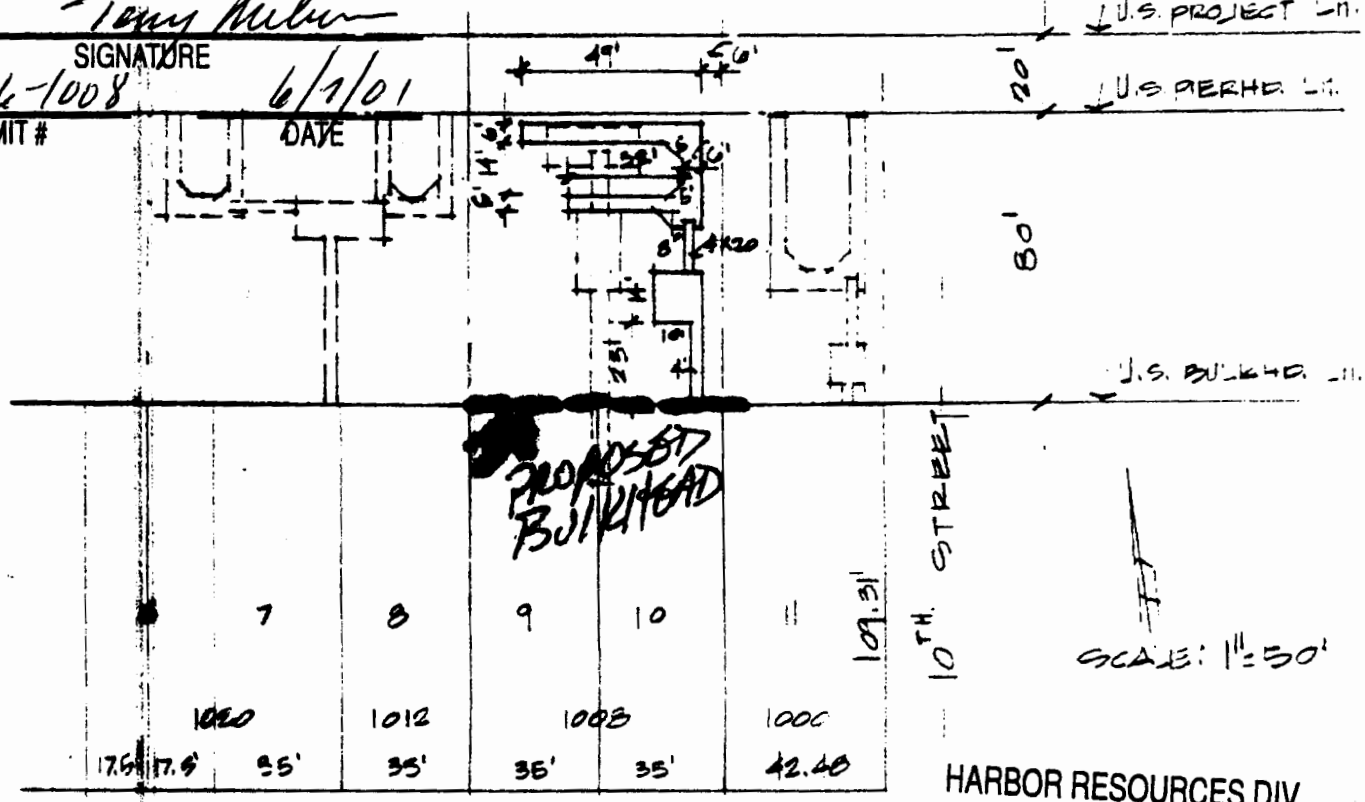
☒ NO EEL GRASS WITHIN 15' OF PROJECT

☐ EEL GRASS IN THE PROJECT AREA

Tony Melun
SIGNATURE

116-1008 6/7/01
PERMIT # DATE

Soundings are expressed in feet [illegible] depths below Mean Lower Low Water [illegible] range of tide approximately [illegible] are established in this section of Newport Bay.



HARBOR RESOURCES DIV.
CITY OF NEWPORT BEACH
Tony Melun
6/7/01

APPLICANTS NAME MEIL BERGT	LOT BLK 5 TRACT 606
JOB ADDRESS 1008 W. BAY AVE. NEWPORT BLVD.	CONTRACTOR [illegible] DATE 1/10/83

COASTAL COMMISSION

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South Coast Region
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CALIFORNIA
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EXHIBIT # 4
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South Coast Region

STRUCTURAL GENERAL NOTES

GENERAL REQUIREMENTS

1. CONSTRUCTION SHALL BE IN CONFORMITY WITH THE MOST RECENT OF THE CALIFORNIA BUILDING CODE (UBC) AND ALL APPLICABLE LOCAL AND STATE CODES AND ORDINANCES.
2. [illegible] THE CONTRACTOR SHALL PROVIDE THE PROJECT SITE A [illegible] SHALL CONTAIN A [illegible] OF THE CONTRACT DOCUMENTS, ALL APPLICABLE [illegible] AND ALL [illegible] SHALL BE MADE AVAILABLE TO THE [illegible] AT ALL TIMES.
3. CONTRACTOR SHALL PROVIDE ADEQUATE AND PERSONNEL PROTECTION AS REQUIRED BY [illegible] AND [illegible].
4. [illegible] THE CONTRACTOR OF SITE AND VERIFY [illegible] AND [illegible] AS REQUIRED BY [illegible].
5. [illegible] OF CONCRETE [illegible] VERIFY [illegible] OF THE PROPOSED [illegible] AND ALL [illegible] SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER [illegible] PRIOR TO [illegible].
6. [illegible] SHALL INSTALL TEMPORARY [illegible] DURING [illegible] OF [illegible].
7. [illegible] AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER NOTES [illegible].
8. [illegible] SHALL ENTER SHALL APPLY [illegible] AS SPECIAL DETAIL IS SHOWN.
9. [illegible] SHALL BE PROVIDED [illegible] AS NOTED.
10. [illegible] SHALL BE [illegible] AS NOTED.
11. [illegible] SHALL BE [illegible] AS NOTED.
12. [illegible] ANY [illegible].
13. [illegible] SHALL BE [illegible] AS NOTED.
14. [illegible] SHALL BE [illegible] AS NOTED.
15. [illegible] SHALL BE [illegible] AS NOTED.
16. [illegible] THE LATEST "GENERAL STATES SPECIFICATIONS" OF THE BUILDING DEPARTMENT, CITY OF NEWPORT BEACH, FOR THE CITY'S "GENERAL NOTES, GENERAL SPECIFICATIONS, GRADING PLAN NOTES & ALL [illegible] SPECIFICATIONS.

GRADING NOTES

1. IF NO GRADING IS ANTICIPATED ON THE PLANS - SEE THE CIVIL & ARCHITECTURAL PLANS FOR THE PROPOSED [illegible] ON THE [illegible] SIDE OF THE GRADING.
2. [illegible] ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL.
3. THE GRADING CONTRACTOR IS TO BE ENGAGED TO PERFORM A SITE PRE-GRADING [illegible].
4. [illegible] THE [illegible] OF THE [illegible] SHALL REVIEW & APPROVE ALL AREAS [illegible] OF [illegible].
5. ALL PLANS SHALL BE [illegible] BY THE ARCHITECT AND APPROVED BY THE [illegible] PRIOR TO [illegible] OF [illegible] AS-BUILT DRAWINGS AS THE [illegible] AS-BUILT.
6. ALL [illegible] FOR [illegible] SHALL BE REVIEWED & APPROVED BY THE [illegible].
7. A FINAL SOIL REPORT OF [illegible] & [illegible] SHALL BE PREPARED BY THE PROJECT GEOTECHNICAL ENGINEER & SUBMITTED FOR BUILDING DEPARTMENT [illegible] AT THE COMPLETION OF THE PROJECT.
8. CONTACT [illegible] IN THE [illegible] BUILDING DEPARTMENT FOR [illegible] DO NOT [illegible] ON THE [illegible].
9. [illegible] THE [illegible] OF THE [illegible] PROPERTY LINE [illegible] THE [illegible] SHALL BE [illegible] AS NOTED.

BACKFILLING & COMPACTION

1. ALL BACKFILL SHALL CONFORM TO THE SOILS ENGINEER'S REPORT AND RECOMMENDATIONS.
2. UTILITY TRENCH BACKFILL AND ANY OTHER BACKFILL MUST BE MECHANICALLY COMPACTED. [illegible] AND FLOODING SHALL NOT BE PERMITTED.
3. [illegible] SHALL BE [illegible] ON THE [illegible] PROVIDE [illegible] OF [illegible] BACKFILL OF LATERAL SUPPORT [illegible] BACKFILL ARE [illegible] PLACE AND TAMPER [illegible] BACKFILL [illegible] SHALL BE [illegible] PLACE ON THE [illegible] OF THE [illegible] SHALL BE [illegible] AS NOTED.
4. [illegible] THE [illegible] OF THE [illegible] SHALL BE [illegible] AS NOTED.
5. [illegible] SHALL BE [illegible] AS NOTED.
6. [illegible] SHALL BE [illegible] AS NOTED.
7. [illegible] SHALL BE [illegible] AS NOTED.
8. [illegible] SHALL BE [illegible] AS NOTED.
9. [illegible] SHALL BE [illegible] AS NOTED.
10. [illegible] SHALL BE [illegible] AS NOTED.
11. [illegible] SHALL BE [illegible] AS NOTED.
12. [illegible] SHALL BE [illegible] AS NOTED.
13. [illegible] SHALL BE [illegible] AS NOTED.
14. [illegible] SHALL BE [illegible] AS NOTED.
15. [illegible] SHALL BE [illegible] AS NOTED.
16. [illegible] SHALL BE [illegible] AS NOTED.

FOUNDATIONS

1. THE CONTRACTOR SHALL INSTALLED ALL CONSTRUCTION JOINTS AND POURED WITH THE EXCEPTION OF ALL PROPOSED JOINTS SHOWN ON THE [illegible] PLANS.
2. [illegible] PLAN [illegible] SHALL BE [illegible] AS NOTED.
3. [illegible] STEEL AND TO CONCRETE SHALL BE PLACED IN ANY EXCAVATION PRIOR TO APPROVAL BY THE PLANNING DEPARTMENT.
4. THE USE OF ALL CONTAMINATED SOILS OR PROPERTIES AGAINST HEAVY EXCAVATION [illegible] AND [illegible] DUE TO EXISTING OR PROPOSED [illegible] SHALL BE [illegible].
5. [illegible] SHALL BE [illegible] AS NOTED.
6. [illegible] SHALL BE [illegible] AS NOTED.
7. [illegible] SHALL BE [illegible] AS NOTED.

SOILS REPORT PREPARED BY: _____ PETRA GEOTECHNICAL, INC.
ADDRESS: _____ 7420-A ADMIRY AVENUE, COSTA MESA, CA 92626
PHONE NUMBER: _____ (714) 545-7192
FAX NUMBER: _____ (714) 545-7193
SOILS REPORT DATE: _____ MAY 28, 2002
SOILS REPORT JOB NUMBER: _____ LA. 7192-01

CONCRETE

1. ALL CONCRETE WE PROPOSE CONFORMS TO THE [illegible] SHALL BE [illegible] AS NOTED.
2. CONCRETE SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OVER [illegible]:

   WALLS AND PRECAST PANELS _____ [illegible] PSI
   ALL OTHER CONCRETE _____ [illegible] PSI

   TO MINIMUM 7.5 [illegible]. GROUT UNDER PLATES SHALL BE "NON-[illegible]" OR THE [illegible] THE MINIMUM CONCRETE [illegible] SHALL NOT EXCEED 1". PLACED AT ANY [illegible] SHALL BE [illegible] BY A [illegible] ENGINEER WHO HAS PREVIOUSLY [illegible] BY THE OWNER.
3. GROUT MUST HAVE A MINIMUM 28-DAY STRENGTH THE SAME AS THAT OF THE [illegible] THE CONCRETE GROUT SHALL BE A DURABLE NON-SHRINKING OF FULL [illegible] AND [illegible]. MINIMUM GROUT [illegible] SHALL BE [illegible] AS APPROVED [illegible] MAY BE [illegible] TO [illegible] THE [illegible] GROUT ON AN APPROVED [illegible].
4. [illegible] SHALL BE TYPE V LIKE MEANS CONFORMING TO A.S.T.M. [illegible] AND [illegible] SHALL BE [illegible] CEMENT THAT [illegible] TO A.S.T.M. [illegible] AND [illegible] SHALL BE [illegible] AS NOTED.
5. [illegible] SHALL BE [illegible] AS NOTED.
6. [illegible] SHALL BE [illegible] AS NOTED.
7. ALL [illegible] SHALL BE [illegible] AS NOTED.
8. ALL [illegible] SHALL BE [illegible] AS NOTED.
9. [illegible] SHALL BE [illegible] AS NOTED.
10. NO FLY ASH SHALL BE USED IN ANY CONCRETE. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
11. [illegible] TO BE CURED FOR A MINIMUM OF 3 DAYS BY A METHOD ACCEPTABLE TO THE [illegible].
12. [illegible] ONLY AFTER THE CONCRETE HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF [illegible] PSI.

REINFORCED STEEL

1. ALL REINFORCING STEEL, UNLESS NOTED OTHERWISE, SHALL CONFORM TO A.S.T.M. [illegible] AND SHALL BE [illegible] AS NOTED.
2. [illegible] SHALL BE [illegible] AS NOTED.
3. [illegible] SHALL BE [illegible] AS NOTED.
4. [illegible] SHALL BE [illegible] AS NOTED.
5. [illegible] SHALL BE [illegible] AS NOTED.
6. [illegible] SHALL BE [illegible] AS NOTED.
7. REINFORCEMENT DETAILED SHALL BE IN ACCORDANCE WITH UBC EDITION 1997.

PRECAST CONCRETE PANELS

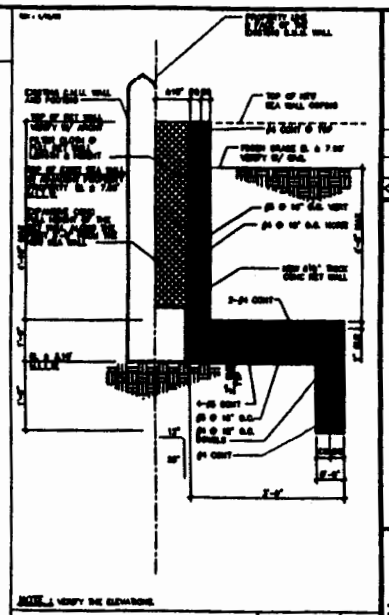
1. PANEL REINFORCEMENT IS CALLED OUT ON THE PANEL ELEVATION.
2. MISCELLANEOUS [illegible] FOR PANEL CONNECTIONS TO CONFORM TO A.S.T.M. A36 STEEL.
3. PANEL JOINTS SHALL BE SEALED WITH 1/4" DIAMETER BUTYL ROD AND TAPERED AT EXTERIOR AND EXPOSED FACE OF PANELS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PLACEMENT OF ALL [illegible] SHALL BE [illegible] AS NOTED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL [illegible] AS NOTED.

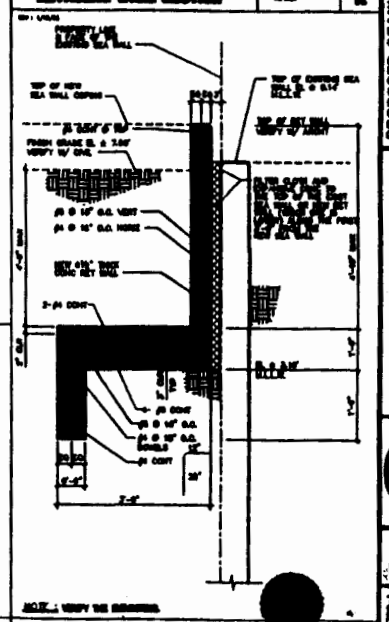
SPECIAL INSPECTIONS

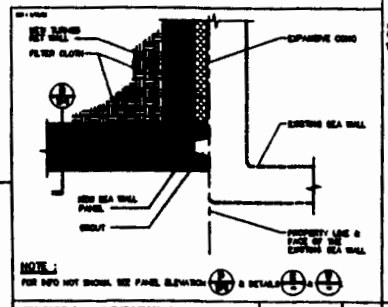
1. [illegible] FOR SEAWALL PANEL CONCRETE IF NOT CAST IN A CONTROL YARD.
2. THE INSTALLATION OF ANCHOR BOLTS, ADHESIVE ROD ANCHORS AND EXPANSION BOLTS IN ALL CONCRETE AND MASONRY YARDS.
3. [illegible] SHALL BE [illegible] BY THE BUILDING DEPARTMENT [illegible] AS NOTED.
4. [illegible] BY THE OWNER ARE SOLELY FOR OBSERVATION.
5. [illegible] ONLY AND IS NOT CONSIDERED AS PART OF THE [illegible] INSPECTION [illegible] TO THE PROJECT ENGINEER UNLESS NOTED OTHERWISE.
6. [illegible] THE [illegible] OF THE [illegible] SHALL BE [illegible] AS NOTED.

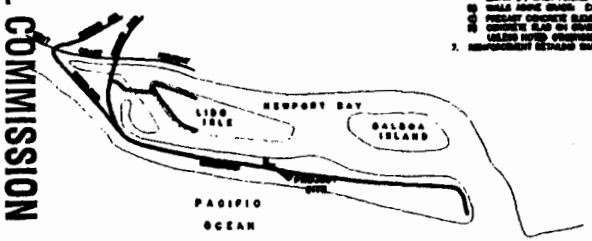
ANCHOR RODS

1. ANCHOR RODS SHALL BE MIN 1"Ø A.S.T.M. A722-90 OR MIN TYPE 3 THREADED RODS AS [illegible].
2. [illegible] ANCHOR BOLTS [illegible] AS NOTED.









NOTE TO THE ENGINEER:

AFTER THOROUGHLY CHANGING THE CONSTRUCTION DOCUMENTS AND THE SITE:

1. NOTIFY THE ARCHITECT AND/OR THE ENGINEER IF VISUAL REVISIONS OR DISCREPANCIES REQUIRING CLARIFICATION, PRIOR TO THE "BID SUBMITTAL".
2. IF THE ARCHITECT AND/OR THE ENGINEER IS NOT NOTIFIED, AS REQUIRED FOR THE [illegible] IT SHALL NEAR THAT THE CONTRACTOR HAS [illegible] ALL COSTS TO COMPLY WITH THE [illegible] CONDITIONS.
3. THE CONTRACTOR SHALL NOT DE [illegible] ADDITIONAL COMPENSATION FOR ANY [illegible] OF THE [illegible].

PROPOSED SEAWALL
PIN, SIL, [illegible]
[illegible]
[illegible]
[illegible]

WILLIAM SIMPSON & ASSOCIATES, INC.
CONSULTING STRUCTURAL ENGINEERS
[illegible]

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PAGE 1 OF 3
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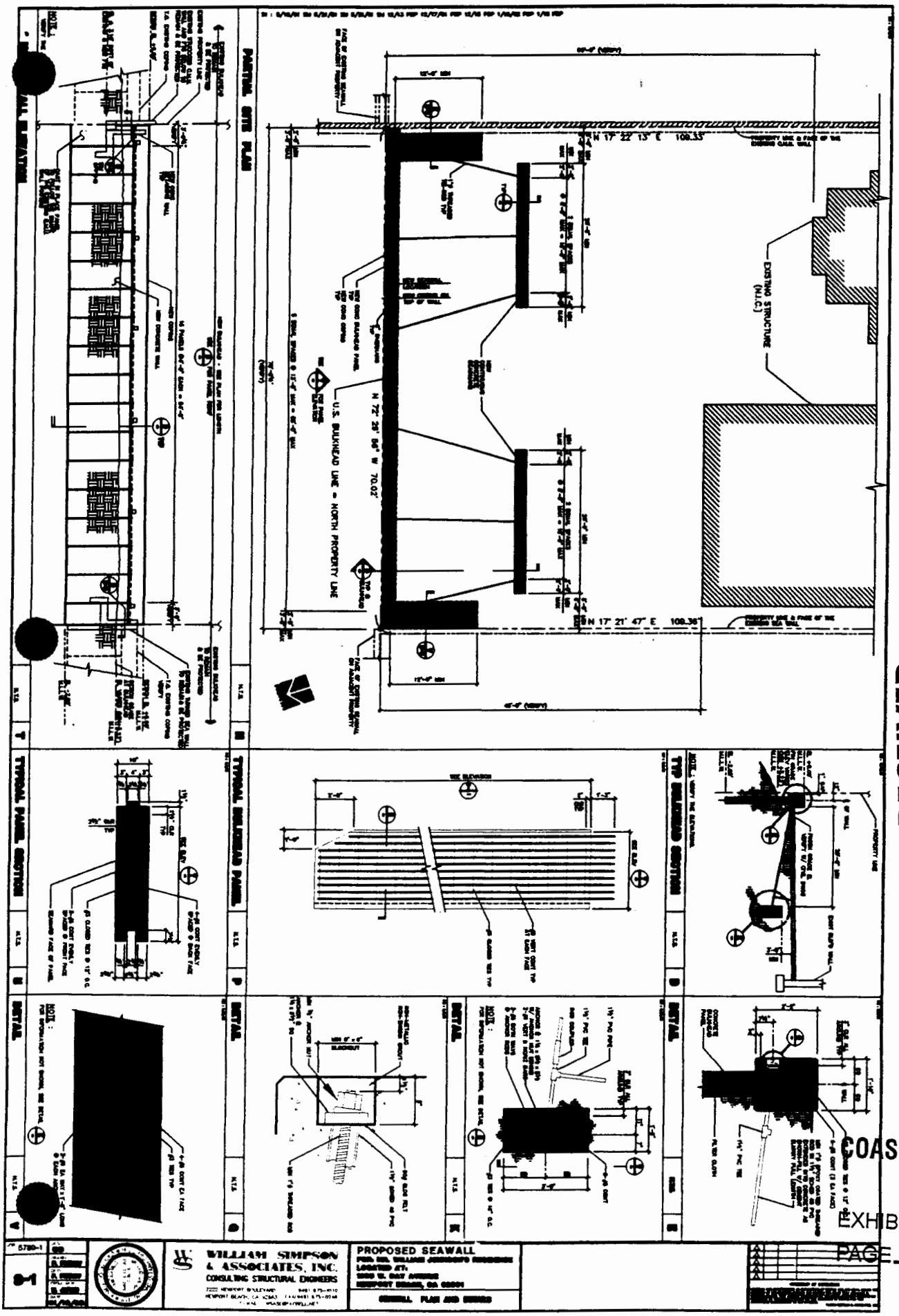
H:\JOBFILES\Jobsed\Struct\S0.dwg Mon Jan 21 13:54:16 2002

H:\JOBFILES\Johnson\Seawall Struct\S1.dwg Mon Jan 21 13:44:30 2002



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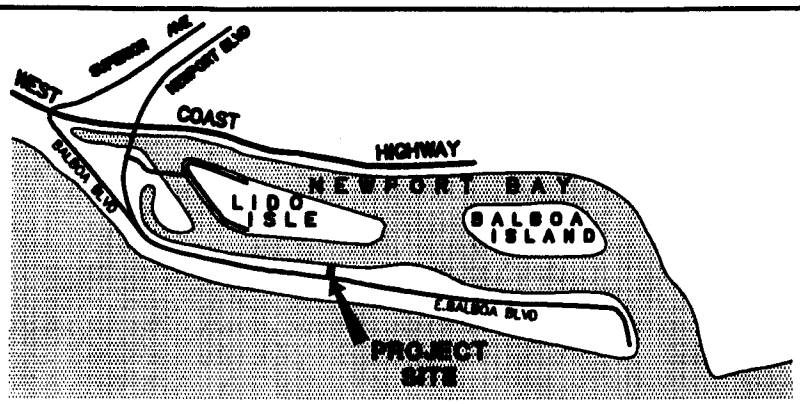
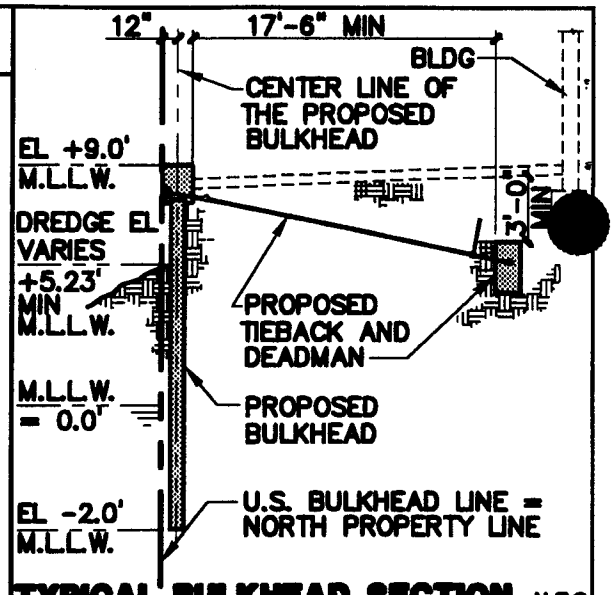
CITY OF NEWPORT BEACH



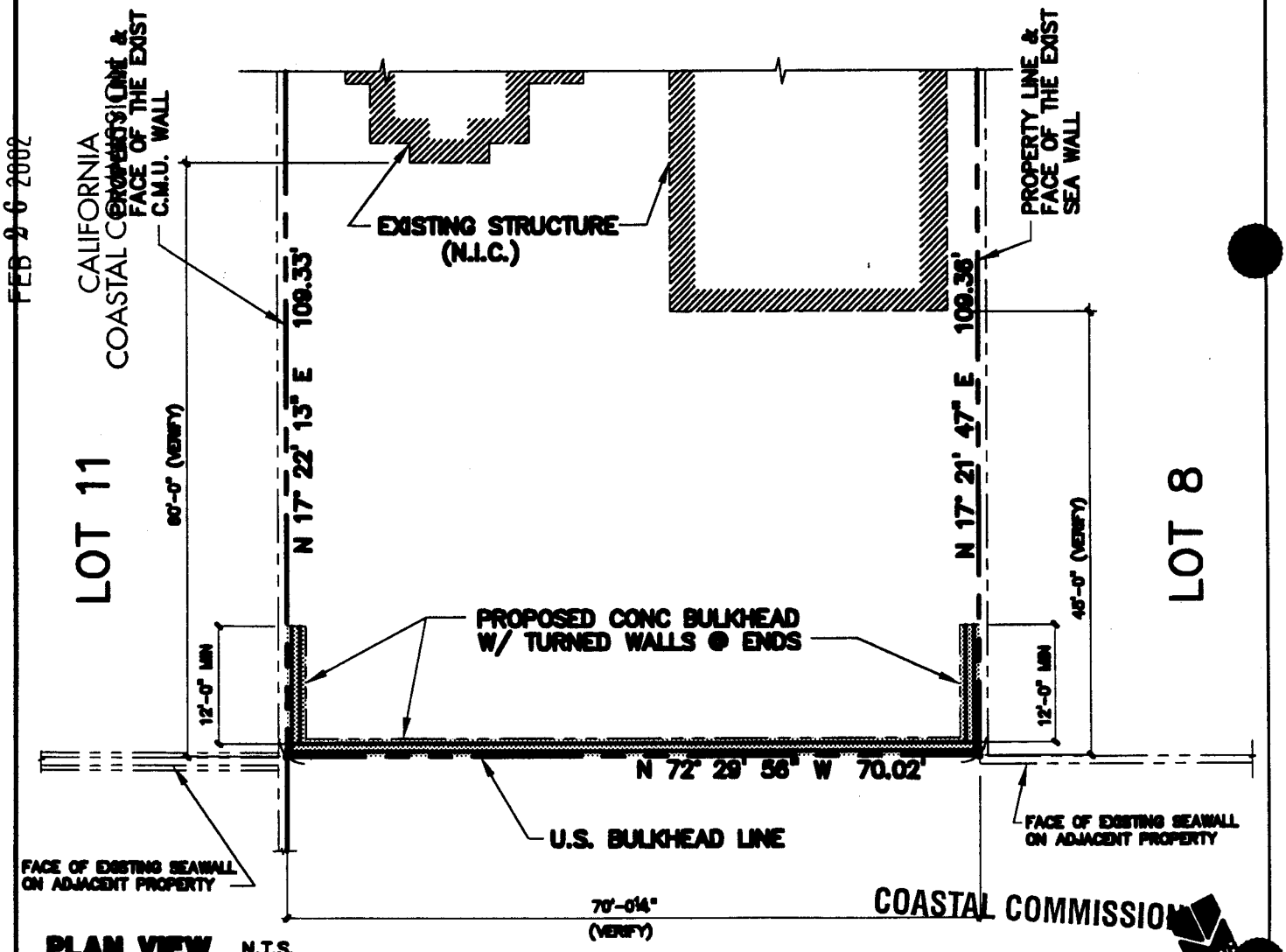
VICINITY MAP N.T.S.

NEWPORT BAY, CALIFORNIA



TYPICAL BULKHEAD SECTION N.T.S.

SOUNDINGS ARE EXPECTED IN FEET AND DENOTE ELEVATIONS BASED ON MEAN LOWER LOW WATER.



PLAN VIEW N.T.S.

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APLICANTS NAME : MR. WILLIAM JOHNSON	LOTS 9 & 10	EXHIBIT # 5	BLOCK
JOB ADDRESS : 1008 W. BAY AVENUE NEWPORT BEACH, CA 92661	CONTRACTOR :	PAGE 3 OF 3	DATE : 01/29/02

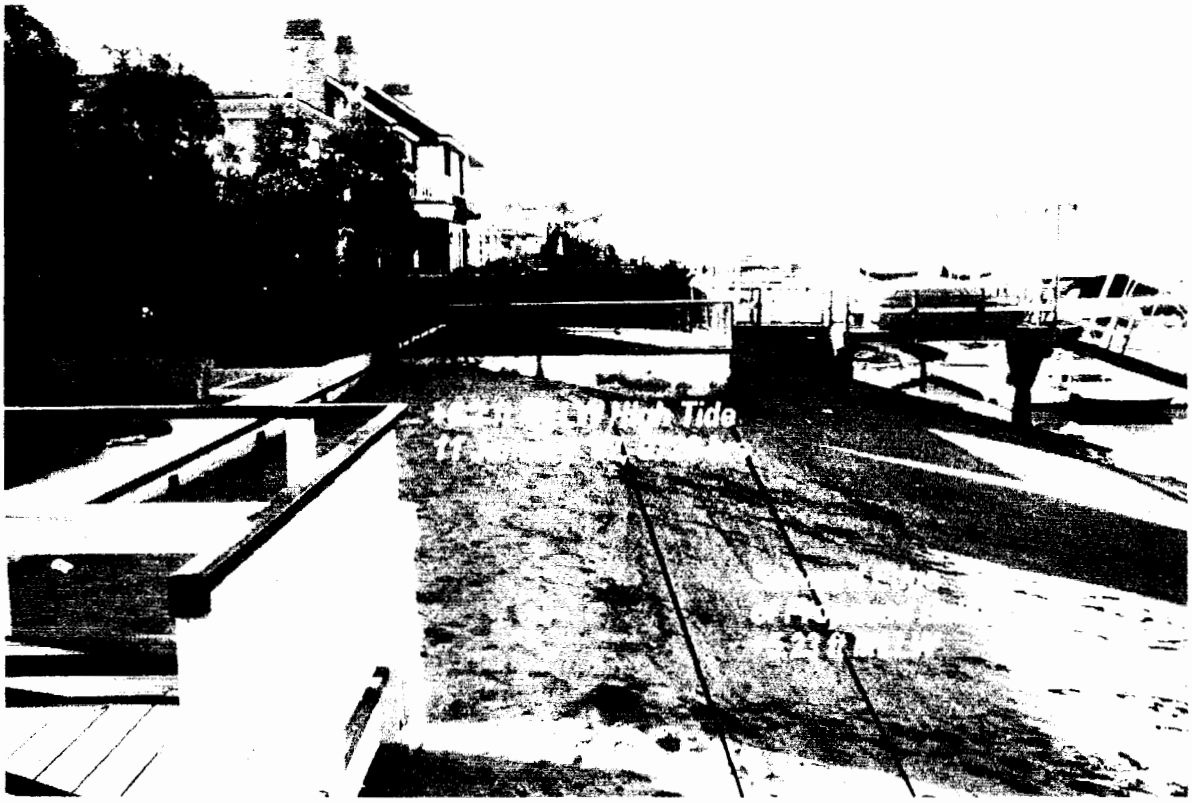

Photo 1. 1008 West Bay Project Site. Facing West

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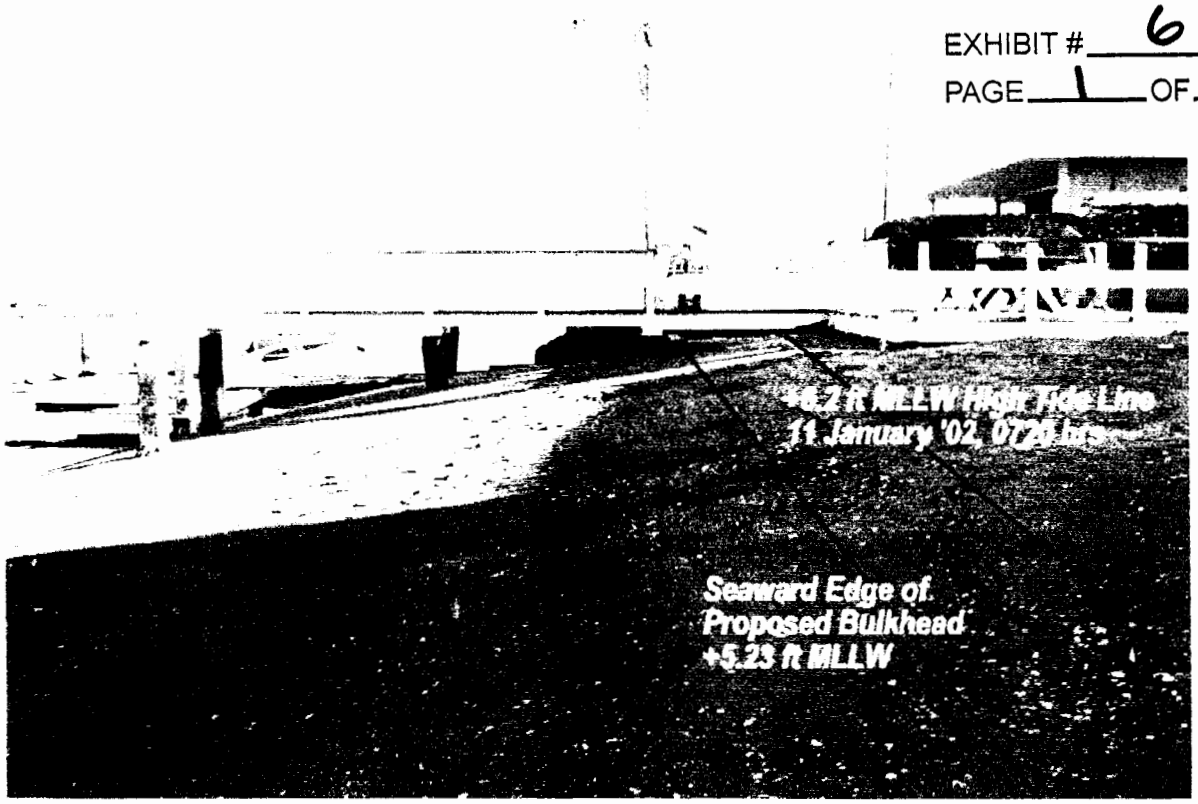

Photo 2. 1008 West Bay Project Site. Facing East

Photo 3. 1008 West Bay Project Site. View of Beach Slope

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EXHIBIT # 6
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Photo 4. Bulkhead Immediately West of Site. +5 ft MLLW (base)

STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF FISH AND GAME
MARINE REGION
20 LOWER RAGSDALE DRIVE, SUITE 100
MONTEREY, CA 93940
(831) 649-2870

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November 6, 2001

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Mr. Fernie Sy
California Coastal Commission
South Coast Area
200 Oceangate Ave., 10th Floor
Long Beach, California 90802-4325

Dear Mr. Sy:

Department of Fish and Game (Department) staff have reviewed the project description for the William Johnson single-family residence project located at 1008 West Bay Avenue, City of Newport Beach, California. The subject property is comprised of two lots, Lot 9 and Lot 10, and is approximately 70-foot by 110-foot, bordered on the north by Newport Bay. The owner wishes to remove the existing two residences and garages, and construct a new two-story single-family residence with an attached garage. Additionally, there will be exterior walkways, planters, patios, and a new seawall located seaward of the existing seawall and wooden patio. This letter addresses the proposed seawall.

Based on the engineering drawings, the proposed seawall would be more than 15 feet seaward from the existing seawall in Lot 9 and approximately 7 to 20 feet seaward of an "L" shaped existing wooden patio in Lot 10 (there does not appear to be an existing concrete seawall in Lot 10 on the drawing). The applicant is proposing to place the new seawall in the mid-intertidal zone and fill behind it, resulting in a loss of marine intertidal habitat. It is the Department's position to recommend that seawall/bulkhead projects be constructed in such a manner to be least environmentally damaging, with minimal impacts to marine habitats. The loss of marine intertidal habitat associated with the proposed seawall does not appear to be necessary for the continued protection of the property. Therefore, we recommend that the seawall proposal be modified to eliminate any loss of intertidal habitat.

Thank you for the opportunity to review this proposal. As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To

arrange for a discussion, please contact Ms. Marilyn Fluharty, Environmental Scientist, California Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

Robert N. Tasto, Supervisor
Project Review and Water Quality Program
Marine Region

cc: Ms. Marilyn Fluharty
Department of Fish and Game
San Diego, California

Mr. Robert Hoffman
National Marine Fisheries Service
Long Beach, California

Mr. Marshall Steele
Marshall Steele Marine Construction and Consulting
2149 Orange Avenue
Costa Mesa, California

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State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
Marine Region
20 Lower Ragsdale Drive, Suite #100
Monterey, CA 93940
(831) 649-2870

GRAY DAVIS, Gover

Flex your POWER

August 1, 2002

U.S. Army Corps of Engineers, Los Angeles District
Regulatory Branch
ATTN: CESPL-CO-R-200101390-DPS
P.O. Box 532711
Los Angeles CA 90053-2325
Attention: Mr. Dan Swenson

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Dear Mr. Swenson:

Department of Fish and Game (Department) staff have reviewed the Public Notice (PN) No. 200101390-DPS for the William Johnson bulkhead project located at 1008 West Bay Avenue, City of Newport Beach, California. The subject property is comprised of two lots, Lot 9 and Lot 10, and is approximately 70-foot by 110-foot, bordered on the north by Newport Bay. The PN concerns the temporary removal of a pier and floating dock and construction of a new bulkhead.

The Department became aware of this project in October 2001 when staff visited the project site with Mr. Marshall Steele (Marshall Steele Marine Construction and Consulting) and were presented with the site plans. We were asked to provide our assessment to the California Coastal Commission (Commission) for the project's coastal development permit (CDP). The construction of the bulkhead is one element of the CDP. The owner of the property also wishes to remove the existing two residences and garages, and construct a new two-story single-family residence with an attached garage, exterior walkways, planters, and patios. At the time, the bulkhead was proposed to be aligned with the existing bulkheads at the two adjacent properties. This approach would place the new bulkhead in the intertidal zone (defined as +7.5 to -2.5 Mean Lower Low Water, MLLW), which would be backfilled, resulting in a loss of marine intertidal habitat. It is the Department's position to recommend that bulkhead/seawall project be constructed in such a manner as to be the least environmentally damaging alternative, with minimal impacts to marine habitats. Because the loss of marine intertidal habitat associated with the proposed bulkhead did not appear to be necessary for the continued protection of the property, we recommended that the bulkhead proposal be modified to eliminate loss of intertidal habitat, e.g. place the bulkhead further shoreward.

We sent a letter to Commission in November 2001 recommending that the bulkhead proposal be modified to eliminate loss of intertidal habitat. In January 2002, another consultant, The Arthur Valdes Co., Inc., sent us modified drawings and stated that the bulkhead [illegible] relocated to a point fully south of the U.S. Bulkhead Line as the original alignment (with the

COASTAL COMMISSION

isting bulkheads at the two adjacent properties) was actually beyond the property boundary. However, this was a slight modification and the bulkhead was still proposed within the intertidal zone.

The current proposal in the PN continues to place the bulkhead within the intertidal zone, with a loss of 0.01 acres of intertidal habitat, at a minimum elevation of +5.23 MLLW (however, a note at the bottom of Figure 3 indicates the elevation needs to be verified). The PN also provides alternatives to the proposed project including a rip-rap berm, and beach nourishment. However, differing bulkhead designs are not presented. The PN also states that the loss of 0.01 acre or 435 square feet of unvegetated soft-bottom habitat is not considered significant. However, the loss of intertidal bay habitat associated with this project, although small, is of concern to the Department because of cumulative impacts from this kind of activity. Impacts to intertidal habitat are considered significant because these areas are utilized by shorebirds, wading birds, and marine fish and invertebrates.

Accordingly, we recommend to the Corps that the applicant not be granted a permit until the project is modified to eliminate the further loss of intertidal habitat. To accomplish this goal, the seawall could be placed shoreward so that its installation results in no loss or reduced loss of intertidal habitat. If this approach is deemed infeasible, the applicant should be required to mitigate for the loss of intertidal habitat and a mitigation plan submitted prior to any construction. The mitigation plan would need to contain the following elements: baseline information for the project impact zone and mitigation site; environmental goals/objectives that describe the mitigation project purpose; a detailed work plan that includes written specifications and description of mitigation techniques, construction sequencing, and site diagrams; performance standards, specific criteria to either verify fulfillment of environmental goals of to trigger initiation of remedial action or contingency measures; a monitoring program with post-project assessment requirements, survey or sampling methods and provisions for interagency review; a contingency plan for courses of action or corrective measures to be implemented in the event performance standards are not met; and a performance bond to ensure fulfillment of mitigation and/or contingency measures. The mitigation plan should be required as a special condition in the Corps permit prior to any construction.

Thank you for the opportunity to review and comment on this PN. As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To arrange for a discussion, please contact Ms. Marilyn Fluharty, Environmental Scientist, California Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

COPY ORIGINAL SIGNED BY ROBERT N. TASTO

Robert N. Tasto, Supervisor
Environmental Services Program
Marine Region

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008

RECE
South Coas
AUG 8 20
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COASTAL COMMIS
AUG 5 2002

In Reply Refer To:
FWS-OR-3018.1

Mark Sudol, Chief
U.S. Army Corps of Engineers
Regulatory Branch, Los Angeles District
P.O. Box 532711
Los Angeles, California 90053-2325

Attn: Daniel P. Swenson, Regulatory Branch (No.200101390-DPS)

Re: New Bulkhead Construction Project for Tract 626, Lots 9 and 10, in Newport Bay, Newport Beach, Orange County, California

Dear Mr. Sudol:

We have reviewed Public Notice 200101390-DPS (PN) for the proposed New Bulkhead Construction Project for Tract 626, Lots 9 and 10, in Newport Bay, Newport Beach, Orange County, California. These comments have been prepared under the authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), the Endangered Species Act of 1973, as amended (Act), and other authorities mandating Department of the Interior concern for environmental values.

According to the PN, the proposed project is construction of a new bulkhead, two retaining walls and two buried concrete dead-mans tied into the bulkhead that would require discharge of approximately 107 cubic yards of fill into 0.01 acre of tidal waters of the U.S. Currently, bulkheads and retaining walls exist on both adjacent properties and erosion has occurred within the project site that has led to cracking of the adjacent retaining walls due to lack of lateral support. The Corps has determined that the purpose of the proposed project is to construct a bulkhead to protect private property from further erosion. No mitigation is proposed in the PN to offset the loss of 0.01 acre of tidal waters of the U.S.

We are concerned for the loss of biological resources associated with the proposed fill into waters of the U.S. As discussed in the PN, the intertidal soft bottom areas that would be filled provide habitat for burrowing and epibenthic invertebrates and can be used for foraging by invertebrates, fish and birds including the federally listed California least tern (*Sterna antillarum browni*). Such projects could cause significant cumulative impacts to these important biological resources in Newport Bay. Given the small amount of proposed fill, it appears that relatively minor changes in the bulkhead design would allow the project to avoid any fill into waters of the

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U.S. Therefore, the practicability of alternative bulkhead designs that would avoid fill into waters of the U.S. should be evaluated.

If avoidance of fill into waters of the U.S. is determined to be impracticable, the applicant should mitigate for the loss of any intertidal habitat by creating and preserving a minimum of 0.01 acre of intertidal habitat within Newport Bay. Any Corps permit issued for the project should require that a mitigation plan be submitted to the Corps and Carlsbad Fish and Wildlife Office for review and approval prior to initiating construction.

We are available to meet with the Corps and applicant to discuss our concerns and comments regarding the proposed project. If you have any questions regarding these comments or would like to set up a meeting to discuss our concerns, please contact Mr. Zoutendyk of my staff at (760) 431-9440.

Sincerely,

Karen A. Evans
Assistant Field Supervisor

cc: Marilyn Fluharty, California Department of Fish and Game, San Diego, CA
Stephen John, Environmental Protection Agency, c/o Corps Los Angeles District, CA
Bob Hoffman, National Marine Fisheries Service, Long Beach, CA
Steven Rynas, California Coastal Commission, Long Beach, CA

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

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Colonel Richard G. Thompson
District Engineer
Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

Dear Colonel Thompson:

Thank you for the opportunity to review Public Notice No. 200101390-DPS for the construction of a new bulkhead in Newport Bay. This letter is provided in accordance with the Fish and Wildlife Coordination Act and PL 94-265 - the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

The proposed project is located in an area identified as Essential Fish Habitat (EFH) for fish species federally managed under the Pacific Groundfish Fishery Management Plan and Coastal Pelagic Fishery Management Plan. While we do concur with your assessment that the impacts associated with this individual project are insignificant, the cumulative impacts of many such projects are significant. Given the history of many similar small projects being implemented in Newport Bay, we believe the impacts of this project must be considered to be significant in a cumulative context.

In addition, it is not clear from the information supplied in the Public Notice what the distance is between the existing Mean High Water (MHW) mark and the proposed location of the new bulkhead. Regardless of what distance this may be, we disagree with your conclusion that this bulkhead work is water dependant. It appears that the applicant is simply attempting to gain additional property at the expense of existing marine habitats. The location of adjacent property bulkheads is not justification for further loss of aquatic habitats.

To ensure the conservation and enhancement of EFH and associated fishery resources, the National Marine Fisheries Service (NOAA Fisheries) recommends that the following provisions be incorporated into the project:

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EFH Conservation Recommendations

1) The construction of any bulkhead only occur at or above the MHW elevation.

2) Should the need for the construction of the bulkhead below the Mean High Water Level be clearly demonstrated, mitigation satisfactory to NOAA Fisheries to offset the loss of any marine habitat will be agreed to prior to the issuance of a permit.

3) Any required mitigation will be completed prior to or concurrent with the construction of the bulkhead.

Please be advised that regulations (50 CFR Sections 600.920) to implement the EFH provisions of the MSFCMA require your office to provide a written response to this letter within 30 days of its receipt and at least 10 days prior to final approval of the action. A preliminary response is acceptable if final action cannot be completed within 30 days. Your final response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendations, you must provide an explanation of the reasons for not implementing those recommendations.

Thank you for your consideration of our recommendations. Should you have any questions, please contact me at 562-980-4043 or via email at: bob.hoffman@noaa.gov.

Sincerely,

Robert S. Hoffman
Acting Assistant Regional Administrator
for Habitat Conservation

cc:
USFWS - Carlsbad (David Zoutendyk)
CDFG - San Diego (Marilyn Fluharty)

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STATE OF CALIFORNIA – THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

October 14, 2002

TO: Fernie Sy, Coastal Program Analyst

FROM: Lesley Ewing, Coastal Engineer

SUBJECT: CDP Application #5-01-229; 1008 West Bay Avenue, Newport Beach (Johnson)

I have received and reviewed the following material relating to the above mentioned project:

Skelly Engineering, Letter Report dated November 27, 2001, 8 pages.

William Simpson & Associates, Inc. "Structural Calculations for A New Seawall and Turned Retaining Walls" January 16, 2002.

William Simpson & Associates, Inc. "Structural Calculations for Fill Volume behind the proposed Seawall" January 29, 2002.

William F. Carr, Site Plan/Topographic Survey, Johnson Residence Seawall, 1/25/2002.

The Arthur Valdes Company, Inc. Site Plan, Johnson Residence, 11/08/2001; revised 1/24/2002.

William Simpson & Associates, Inc. Proposed Seawall for Mr. William Johnson's Residence; Structural General Notes Vicinity Map & Details, 1/28/02.

The provided material is for a bulkhead/seawall at the existing residence located at 1008 West Bay Avenue, Newport Beach, CA. As noted in the material above, the applicants' experts call this proposed structure both a seawall and a bulkhead. The letter report discusses the main differences between a seawall and a bulkhead, but even with this discussion there may be some disagreement over what the applicants want to call this proposed structure. The exact term for the structure is less important than its purpose and its impacts.

The proposed structure has been designed well and should provide the intended function. As noted in the material from Skelly Engineering, "The site is subject to soil sliding, which the proposed bulkhead will mitigate." As noted later in the Skelly Engineering report, the bulkhead will fill in a section of shoreline that is now not armored, and it will fix the geometry of the Newport Bay channels. The proposed bulkhead/seawall would reduce sedimentation of Newport Bay and thus, the need for future dredging. In addition to this main function, the bulkhead/seawall will halt the landward migration of the shoreline, will prevent further undermining of the applicants' patio and will prevent further damage to the neighbors' boundary walls. As further identification of the need for this proposed bulkhead/seawall, there are

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photographs in the Skelly Engineering report that show some of the cracking and separation that has occurred on site, without the proposed bulkhead/seawall.

The proposed bulkhead/seawall will address all the concerns raised by the applicants' experts. It will retain sediment and prevent further erosion from this site into Newport Bay. There has been no quantification of the amount of sediment that would be added to Newport Bay if this site remains unarmored; however, it is unlikely that this property alone would be responsible for enough sedimentation into the bay that this one proposed bulkhead/seawall would eliminate the need for future dredging of the bay. There are cumulative effects, both positive and negative, from erosion into the bay and from fixing the bay boundary. This proposed structure would contribute to both, albeit in a small way.

The proposed bulkhead/seawall will support the soils beneath the existing patio and boundary walls and greatly reduce the potential for further cracking. The submitted material does not provide any information about the main residential structure, but it does not appear that the proposed bulkhead/seawall is needed to protect the main structure at this location. Thus, while it will provide several positive benefits to the existing property owner and the adjacent neighbors, it does not seem that this proposed bulkhead/seawall is needed to protect the existing structure from erosion. As such, the proposed bulkhead/seawall should be considered for its impacts to the coastal resources, for fill in open coastal waters, and for its compliance with sections of the Coastal Act other than Section 30235.

Please feel free to contact me if you have questions about this memo or wish to discuss this project further.

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November 27, 2001

Mr. William Johnson
C/O Paul Weinberg
18201 Von Karmen Ave. Suite 1160
Irvine, CA 92612-1005

SUBJECT: 1008 West Bay Ave, Coastal Development Permit Application #5-01-229

Dear Mr. Johnson:

At your request we are pleased to present the following letter report providing additional information to support your application to the California Coastal Commission. In particular this letter is intended to provide responses to the questions raised by Coastal Commission analyst Fernie Sy in a letter dated July 16, 2001. For ease of additional review by the Commission the analyst's question is provided first in italics, followed by the response.

Why must the proposed seawall be constructed?

The applicant is requesting to construct a bulkhead which is not exactly a seawall. A bulkhead's primary purpose is to retain or prevent the sliding of land (into the water), with a secondary purpose of protecting the upland area against damage from wave action (USACOE 1984). In slight contrast to a bulkhead, a seawall is primarily designed to prevent erosion due to wave action (USACOE 1984). The site is not subject to significant waves and wave erosion. The site is subject to soil sliding, which the proposed bulkhead will mitigate.

There are three primary reasons, from a coastal engineering point of view, for the need to construct the missing bulkhead segment at the subject property. The first reason is to provide continuity of the bulkhead which is supposed to be in place along the approved bulkhead line. The bulkhead's primary function is to fix the geometry of the Newport Bay channels. Without the bulkhead system in place the circulation within the bay would change as erosion and accretion takes place over time. Because of the docks, pier and wharfs within the bay, the sediment transport within the bay needs to be in quasi equilibrium. Erosion and accretion can adversely impact the berthing facilities which can only be mitigated by dredging. Filling in this gap in the bulkhead line will contribute to the continued proper functioning of the bay system and possibly help to reduce the need for dredging.

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The second reason is to prevent movement of land into the water (erosion of the shoreline). The site has been subject to problems due to soil movement and erosion over time, and will be subject to continued erosion. This potential for soil movement is evidenced by the erosion that has taken place on the nearby public bay-side beach. Photograph 1, taken from the subject site, shows the bulkhead line, the string line, and the extent of shoreline erosion. The landward extend of sediment movement (erosion) is seen about 15 feet landward of the building string line. Photograph 2 shows the damage to the patio slab (cracks) as a result of having unconfined soils on the site. The bulkhead would confine the soils and prevent damage to the patio and building slabs on the site.

Photograph 1. Adjacent public beach showing the bulkhead line, the string line, and the extend of soil movement (erosion limit) landward of the string line in the beach area not confined by a bulkhead.

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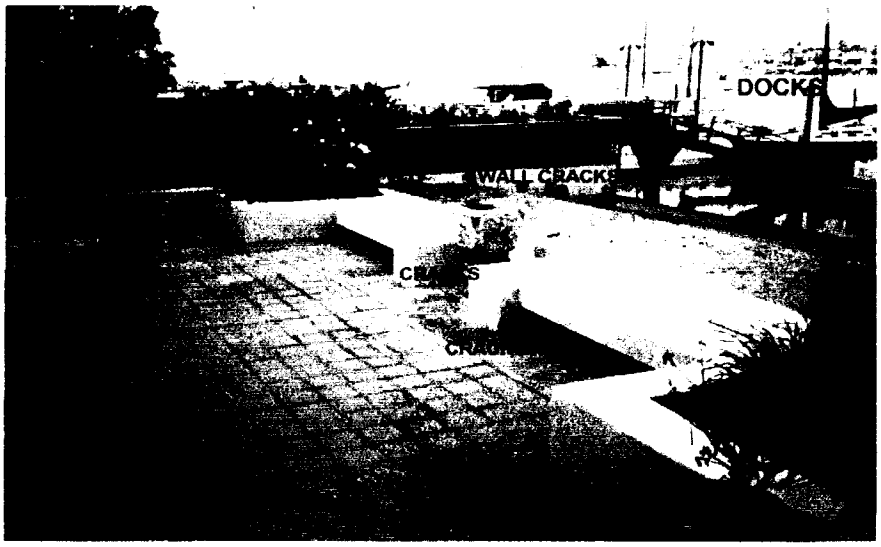
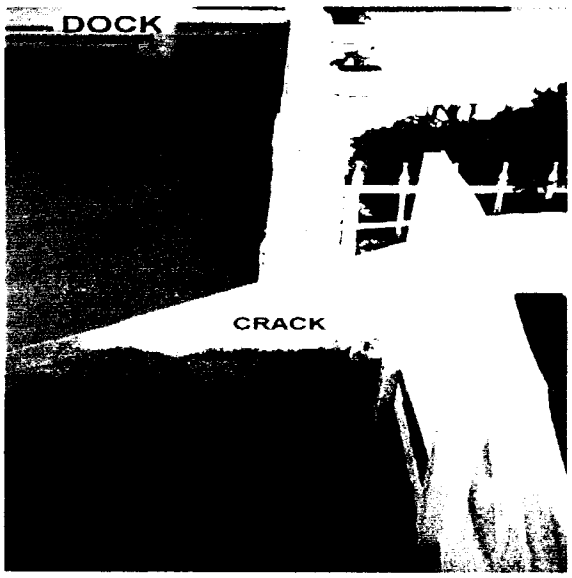


Photograph 2 showing location of cracks in wall and slab.

The third reason is to eliminate damage to the neighboring boundary walls. The damage is primarily cracking of the masonry due to soil movement from lack of lateral support of the soil, and erosion on one side of the boundary wall. Some of the damage to a boundary wall is shown in Photograph 3. The ends of the bulkheads on the adjacent property are returned back down the property lines by garden walls. These boundary walls as not as deep or as structurally competent as the bulkhead.



Photograph 3. Boundary wall cracks.

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How will the proposed seawall mitigate the circumstances, which requires the seawall to be constructed?

The proposed bulkhead will mitigate all three of the oceanographic reasons for the construction of the bulkhead. The bulkhead will "fill the gap" in the present bulkhead. It will become part of the design bulkhead system for proper bay circulation. The bulkhead will prevent the sliding of soils into the bay system. The bulkhead will retain the soils providing lateral support for the patio and house slabs. Finally the bulkhead will eliminate the damage to the adjacent boundary walls by providing lateral support to the walls.

How will the proposed seawall affect coastal processes, including impact on shoreline sand supply?

The physical coastal processes that occur within the Newport Bay system are driven by tides and winds. The proposed project will not alter the winds or the tides. The bay sediment transport system can be characterized as a closed system in that sediment is not added or removed from the system. While sediment is transported within the system, any significant movement of sediment that changes the design configuration is mitigated by dredging. The construction of a bulkhead at the subject site will not significantly change the circulation within the bay and will not impact coastal processes.

Also, will the proposed seawall be connected to any existing seawalls located adjacent to the project site?

Because the actual condition and strength of the adjacent bulkheads is unknown it is not recommended that the new bulkhead be mechanically connected to the adjacent bulkheads. Failure of the adjacent bulkhead could result in damage to the proposed new bulkhead. The new bulkhead should butt up to the adjacent bulkheads. A filter fabric or other suitable joint material can be used to prevent any soils from piping out the butt joint.

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Alternatives to the proposed project.

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1. Do nothing.

The do nothing alternative would not address the need for the bulkhead and would not mitigate the soil movement/sloughing from the site and the resulting in damage to the adjacent boundary walls, patio slabs and building slabs.

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2. Quarry stone revetment

A quarry stone revetment could be constructed that would prevent movement of the site soils. However, the revetment is not the best choice because it has a large footprint which would encroach into the intertidal and sub-tidal areas, and because a bulkhead is already the chosen method in the area for sediment stabilization.

3. Soil nourishment

The continual addition of soil would prevent the over all net loss of soil at the site. However, the additional of soil/sand would not mitigate for the lack of lateral support for the soils. It is this movement of soils that has resulted in the damage to the boundary walls and the slab(s). So the nourishment alternative would not mitigate the need to prevent additional damage to the boundary walls and slab(s).

Information Requested in California Coastal Commission Memo Dated December 13, 1993.

The following information is intended to supplement the geotechnical report that has been prepared for the site. The information is provided in the order requested in the above referenced Coastal Commission memo.

Design wave height and maximum expected wave height.

Because the proposed bulkhead is within Newport Bay no significant surface gravity waves (long swell) will be present. The two sources of waves are winds and wakes. The water area adjacent to the site has a very limited fetch so no significant wind waves can develop (waves over 1 foot). In addition, the speed of boats in the area is closely regulated and wakes are usually under 6 inches in height. Wave energy from wakes or wind driven waves will be insignificant and need not be considered in the design of the bulkhead.

Frequency of overtopping.

Because the proposed bulkhead will not be subject to any significant waves, no overtopping is anticipated. The bulkhead will be the same height as nearby bulkheads. Neither of the adjacent bulkheads have been overtopped in the past.

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Normal and maximum tidal ranges.

The National Oceanographic and Atmospheric National Ocean Survey tidal data station closest to the site is the Newport Beach Newport Bay Entrance station (NOAA 1999). The elevations in meters are as follows:

HIGHEST OBSERVED WATER LEVEL (01/28/1983) = 2.395
MEAN HIGHER HIGH WATER (MHHW) = 1.643
MEAN HIGH WATER (MHW) = 1.416
MEAN TIDE LEVEL (MTL) = 0.849
MEAN SEA LEVEL (MSL) = 0.841
MEAN LOW WATER (MLW) = 0.283
NORTH AMERICAN VERTICAL DATUM-1988 (NAVD) = 0.113
MEAN LOWER LOW WATER (MLLW) = 0.000
LOWEST OBSERVED WATER LEVEL (01/20/1988) = -0.659
(Elevations in meters)

Erosion Rate with and without the bulkhead.

The erosion rate with the bulkhead is essentially zero. The bulkhead fixes the location of the land relative to the water and thereby prevents erosion. The bulkhead prevents the sloughing of soils at the site. The erosion rate without the bulkhead is difficult to quantify but it can be discussed in a conceptual way. Without the bulkhead the boundary between the land and the water is mobile, horizontally. The tidal driven water weakens the soils beneath the adjacent slab(s) and adjacent wall because the soils are unconfined. These soils/sands can then move away to other areas within the bay system.

Effects of the bulkhead on adjoining properties.

Because the proposed bulkhead will be part of a continuous bulkhead system continuing on the adjacent properties, the new bulkhead will have no adverse effects on the adjacent property. The new bulkhead will provide lateral support for the boundary walls on the adjacent properties.

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Potential for and the effect of scour at the base.

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Due to the weak tidal and wind driven circulation of the harbor, and the site specific geometry, there is little sediment transport adjacent to the bulkhead. The existing grade seaward of the adjacent bulkhead is about +2.5 MSL. This is landward

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of the Mean High Tide Line (+1.86' MSL). Scour at the based is not expected below Mean Sea Level. The panel design also incorporates a factor of safety which would allow for additional scour depth without bulkhead failure. However, there is no reason to anticipate this additional scouring.

Design life and maintenance.

The design life should be in excess of 25 years. It is recommended that the bulkhead be inspected every few years. The inspection should assess the condition of the wall and the need for maintenance. Maintenance could include repair of damaged concrete cap and replacement of damaged tiebacks.

Quantification of loss of sand to the beach because of the amount of armoring of the bluff.

No bluff armoring is proposed.

Effects of the project upon public access to and along adjacent public tidelands.

The proposed bulkhead will not impact public access along the shoreline. The bulkhead is located above (landward of) the mean high tide line and along the approved US Bulkhead Line. There is a public beach about 70 feet from the site that provides excellent access to the shoreline. It is important to point out that lateral access along the tidelands is difficult due to the docking structures and piers in the area. The space between the bottom of the piers and to top of the intertidal sand is small and requires one to duck or crawl beneath the structure. There is no lateral access at high tide along this section of shoreline.

The information provided herein is intended to provide the necessary coastal processes and oceanographic information for the Coastal Commission Coastal Development Application. If you have any questions or require additional information please contact me at the number below.

Sincerely,

David W. Skelly MS,PE
RCE#47857

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