CALIFORNIA COASTAL COMMISSION
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Filed:	February 28, 2008
49th Day:	April 17, 2008
180th Day:	August 26, 2008
Staff:	Liliana Roman-LB
Staff Report:	June 19, 2008
Hearing Date:	July 9-11, 2008
Commission Action:	

Item W6b

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-07-370

APPLICANT: County of Orange, Resources and Development Management Department, Attn: Nardy Drew, Project Manager

AGENT: Chambers Group

PROJECT LOCATION: U.S. Coast Guard Station
1911 Bayside Drive, Newport Beach, CA

PROJECT DESCRIPTION: Demolition of the existing Coast Guard Station building and portion of surface parking lot for the installation of a new 174 foot long bulkhead seaward of the existing bulkhead, replacement of existing County of Orange Harbor Patrol official use and guest docks, 1,200 cubic yards dredging, eelgrass habitat mitigation, new surface parking lot and storm drain system, on-site placement of temporary Coast Guard facility.

LOCAL APPROVALS RECEIVED: Mitigated Negative Declaration, IP 07-584 by Orange County, County of Orange Encroachment Permit 2007-01593

OTHER AGENCY APPROVALS RECEIVED: Regional Water Quality Control Board 401 Water Quality Certification

SUBSTANTIVE FILE DOCUMENTS:
Exemption for 5-84-315(County of Orange); 5-87-958(County of Orange); 5-94-255(County of Orange). *Inspection and Evaluation of Marine Facilities U.S. Coast Guard Station, Newport Beach, CA* prepared by Noble Consultants, Inc., dated January 2005; *Eelgrass Field Survey Results, Impact Assessment, and Eelgrass Mitigation Plan U.S. Coast Guard Base Facilities Refurbishment and County of Orange Harbor Patrol Guest Dock Project*, prepared by Coastal Resources Management, Inc. dated June 6, 2007 and revised February 12, 2008; *Sampling and Testing for Dredge Material Evaluation, Coast Guard Station, Newport Harbor* prepared by Kinnetic Laboratories, Inc. dated January 2008.

SUMMARY OF STAFF RECOMMENDATION:

The applicant is proposing reinforcing an existing highly deteriorated bulkhead with a new bulkhead seaward of the existing one, 1,200 cu. yds. dredging, replacement of existing docks, demolition of Coast Guard Station and placement of a temporary Coast Guard facility. The subject site is subject to tidal action, but not to direct wave attack because the site is located within a protected channel of the Newport Harbor. The proposed bulkhead is necessary to protect existing structures from tidal induced erosion. The major issues before the Commission relate to hazards

associated with the development and the effects of the proposed development on the marine environment and water quality.

Commission staff is recommending **APPROVAL** of the proposed project with **TWELVE (12) SPECIAL CONDITIONS** regarding: **1)** final plans conforming to geotechnical recommendations; **2)** construction responsibilities and debris removal; **3)** location of debris disposal site; **4)** construction staging area **5)** Water Quality Management Plan (WQMP); **6)** marina best management practices; **7)** turbidity control; **8)** eelgrass mitigation; and **9)** pre-construction *caulerpa taxifolia* survey; **10)** steel coating on submerged structures subject to marine erosion; **11)** no future seaward extension of shoreline protection device; **12)** future improvements return to the Commission.

Section 30600(c) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified Local Coastal Program. The City of Newport Beach currently has a certified Land Use Plan and has not exercised the options provided in 30600(b) or 30600.5 to issue its own permits. Furthermore, a portion of the project is within the Commission's original jurisdiction. Therefore, the Coastal Commission is the permit issuing entity and the standard of review is Chapter 3 of the Coastal Act. The certified Land Use Plan may be used for guidance.

LIST OF EXHIBITS

1. Vicinity Map
2. Site Plan/Limits of Demolition
3. Pictures of Existing Bulkhead Conditions
4. Bulkhead Replacement Plan
5. Storm Drainage Plan
6. Dock Replacement Plan
7. Eelgrass Impact Zones
8. Eelgrass Mitigation Sites
9. Location of Temporary Coast Guard Facility

STAFF RECOMMENDATION:

MOTION: ***I move that the Commission approve Coastal Development Permit No. 5-07-370 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

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

to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

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

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

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

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

III. SPECIAL CONDITIONS:

1. FINAL PLANS CONFORMING TO GEOTECHNICAL RECOMMENDATIONS

A. All final bulkhead replacement design and construction plans shall be consistent with all recommendations contained in *Inspection and Evaluation of Marine Facilities U.S. Coast Guard Station Newport Beach, CA* prepared by Noble Consultants, Inc. dated January 2005. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, two full sets of plans with evidence that an appropriately licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all the recommendations specified in the above-referenced geologic engineering report.

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

2. CONSTRUCTION RESPONSIBILITIES AND DEBRIS REMOVAL

The permittee shall comply with the following dredging and construction-related requirements:

a. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave/wind erosion and dispersion;

b. Any and all debris resulting from construction activities shall be removed from the site within 10 days of completion of construction;

c. Machinery or construction materials not essential for project improvements shall not be allowed at any time in the intertidal zone;

d. Sand from the beach, cobbles, or shoreline rocks shall not be used for construction material;

e. If turbid conditions are generated during construction; a silt curtain shall be utilized to control turbidity;

f. Floating booms shall be used to contain debris discharged into coastal waters and any debris discharged shall be removed as soon as possible but no later than the end of each day;

g. Divers shall recover non-buoyant debris discharged into coastal waters as soon as possible after loss.

3. LOCATION OF DEBRIS DISPOSAL SITE

PRIOR TO ISSUANCE OF A COASTAL DEVELOPMENT PERMIT, the applicant shall identify in writing, for the review and approval of the Executive Director, the location of the disposal site of the construction debris resulting from the proposed project and the proposed location of the disposal site of approximately 1,200 cubic yards of dredge material. Disposal of construction debris and dredge material shall occur at the approved disposal site. If the disposal site for the construction debris is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place. If the disposal site for the dredge material is located in the coastal zone, a coastal development permit or amendment to this permit shall be required before disposal can take place. If off-shore disposal of the dredge material is proposed, a federal consistency certification is required before disposal can take place.

4. STAGING AREA DURING CONSTRUCTION

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a plan for the review and approval of the Executive Director which indicates that the

construction staging area(s) will avoid impacts to public access, beach areas or to sensitive habitat areas.

(1) The plan shall demonstrate that:

a. Construction equipment or activity shall not occur outside the staging area

b. Public parking areas shall not be used for staging or storage of equipment

c. Sandy beach or habitat (vegetated) areas shall not be used for staging or storage of equipment

d. The staging area for construction of the project shall not obstruct vertical or lateral access to the beach, marina or other recreational facilities

(2) The plan shall include, at a minimum, the limits of the staging area(s) and location of construction fencing and temporary job trailers, if any.

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

5. WATER QUALITY MANAGEMENT PLAN (WQMP)

A. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the permittee shall submit for the review and approval of the Executive Director, two (2) copies of a Final Water Quality Management Plan (WQMP) for the post-construction project site, prepared by a licensed water quality professional, and shall include plans, descriptions, and supporting calculations. In addition to the specifications above, the plan shall include structural BMPs, non-structural BMPs, treatment control BMPs; an operation and maintenance plan for over-water sewer lines that, at a minimum, addresses the following points: the over-water sewer lines include all pipes from sewage pump-out facilities, the on-dock boating facilities, and any other pipe which leads to a sanitary sewer. The over-water sewer lines shall be visually inspected at least once per week and dye- or pressure-tested at least once every six months. All leaks shall be repaired immediately upon discovery. If the applicant determines that a more stringent procedure is necessary to ensure protection of coastal water quality, then the applicant shall update the operation and maintenance plan.

B. All structural and/or treatment control BMPs shall be designed, installed, and maintained for the life of the project in accordance with well-recognized and accepted design principles and guidelines, such as those contained in the California Stormwater Quality Association Best Management Practice Manuals;

C. All BMP traps/separators and/or filters shall be, at a minimum, inspected and cleaned/repaired or otherwise maintained in accordance with the following schedule: (1) prior to the start of the winter storm season, no later than October 15th each year, (2) inspected monthly thereafter for the duration of the rainy season (October 15th -April 30), and cleaned/maintained as necessary based on inspection and, (3) inspected and maintained where needed throughout the dry season;

D. Debris and other water pollutants removed from structural BMP(s) during clean out shall be contained and disposed of in a proper manner;

E. It is the permitee's responsibility to maintain the drainage system and the associated structures and BMPs according to manufacturer's specifications.

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

6. MARINA BEST MANAGEMENT PRACTICES PROGRAM

By acceptance of this permit the applicant agrees that the long-term water-borne berthing of boat(s) in the approved dock and/or boat slip will be managed in a manner that protects water quality pursuant to the implementation of the following BMPs.

(1) Boat Cleaning and Maintenance Measures:

A. In-water top-side and bottom-side boat cleaning shall minimize the discharge of soaps, paints, and debris.

B. In-the-water hull scraping or any process that occurs under water that results in the removal of paint from boat hulls shall be prohibited. Only detergents and cleaning components that are designated by the manufacturer as phosphate-free and biodegradable shall be used, and the amounts used minimized.

C. The applicant shall minimize the use of detergents and boat cleaning and maintenance products containing ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates or lye.

(2) Solid and Liquid Waste Management Measures:

A. All trash, recyclables, and hazardous wastes or potential water contaminants, including old gasoline or gasoline with water, absorbent materials, oily rags, lead acid batteries, anti-freeze, waste diesel, kerosene and mineral spirits will be disposed of in a proper manner and will not at any time be disposed of in the water or gutter.

(3) Petroleum Control Management Measures:

A. Boaters will practice preventive engine maintenance and will use oil absorbents in the bilge and under the engine to prevent oil and fuel discharges. Oil absorbent materials shall be examined at least once a year and replaced as necessary. Used oil absorbents are hazardous waste in California. Used oil absorbents must therefore be disposed in accordance with hazardous waste disposal regulations. The boaters will regularly inspect and maintain engines, seals, gaskets, lines and hoses in order to prevent oil and fuel spills. The use of soaps that can be discharged by bilge pumps is prohibited.

B. If the bilge needs more extensive cleaning (e.g., due to spills of engine fuels, lubricants or other liquid materials), the boaters will use a bilge pump-out facility or steam cleaning services that recover and properly dispose or recycle all contaminated liquids.

C. Bilge cleaners containing detergents or emulsifiers will not be used for bilge cleaning since they may be discharged to surface waters by the bilge pumps.

7. TURBIDITY CONTROL

The applicant shall ensure that the project does not result in: 1) increases of water turbidity by more than twenty percent (20%) of the natural turbidity during non-storm conditions, nor 2) dissolved oxygen in the receiving waters being depressed below 5.0 mg/l.

8. EELGRASS MITIGATION

A. Compliance with Eelgrass Mitigation Plan. The applicant shall implement and comply with the recommendations and Mitigation Alternative #2 contained within *the Eelgrass Field Survey Results, Impact Assessment and Eelgrass Mitigation Plan, U.S. Coastguard Base Facilities Refurbishment and County of Orange Harbor Patrol Guest Dock Project* prepared by Coastal Resources Management, Inc., revised on February 12, 2008 as they pertain to the development that is the subject of this coastal development permit. The mitigation plan shall be undertaken in full compliance with the "Southern California Eelgrass Mitigation Policy" (SCEMP) adopted by the National Marine Fisheries Service. All impacts to eelgrass habitat shall be mitigated at a ratio of 1.2:1 (mitigation:impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Eelgrass from the donor site(s) shall be transplanted at the proposed transplantation location(s) prior to commencement of the dredging or other development that causes impacts to eelgrass authorized under this permit. Any changes to the approved mitigation plan, including but not limited to changes to the monitoring program to ensure success of the eelgrass mitigation site, shall require an amendment to this permit from the Coastal Commission or written concurrence from the Executive Director that the changes do not require a permit amendment.

B. Pre-construction Eelgrass Survey. A valid pre-construction eelgrass survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of construction and shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the new eelgrass survey for the review and approval of the Executive Director within five (5) working days of completion of the new eelgrass survey and in any event no later than fifteen (15) working days prior to commencement of construction. If the new survey identifies, within the proposed project area, any eelgrass which is not documented in the eelgrass survey described in Special Condition No. 9.A. above, the newly identified eelgrass shall be transplanted prior to commencement of construction at a 1.2:1 ratio at the same transplantation locations identified in the eelgrass mitigation plan described in Special Condition No. 9.A. above. The transplantation shall occur consistent with all provisions of the mitigation plan described in Special Condition 9.A. above.

C. Post-construction Eelgrass Survey. After completion of project construction, the applicant shall survey the project site to determine if any eelgrass was adversely impacted. This post-construction survey shall be completed in the same month as the

pre-construction survey during the next growing season immediately following the completion of construction within coastal waters. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a 1.2:1 ratio at the transplantation site and in accordance with the mitigation plan described in Special Condition No. 9.A. above.

9. PRE-CONSTRUCTION *CAULERPA TAXIFOLIA* SURVEY

A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit (the "project"), the applicant shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

C. Within five (5) business days of completion of the survey, the applicant shall submit the survey:

(1) for the review and approval of the Executive Director; and

(2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043), or their successors.

D. If *Caulerpa taxifolia* is found within the project or buffer areas, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director that all *C. taxifolia* discovered within the project and buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicant has revised the project to avoid any contact with *C. taxifolia*. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

10. STEEL COATING ON SUBMERGED STRUCTURES SUBJECT TO MARINE CORROSION

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, final revised plans for the proposed project which shall specify use of a steel coating on submerged structures subject to

marine corrosion that is inert/non-toxic in the marine environment (e.g. NSP 120 or Carboguard 890). A coating that is toxic in an uncured state may be used if applied off-site in an appropriate facility and, once cured, is inert and non-toxic upon delivery to the project site. The applicant shall provide information and data, as necessary, to demonstrate that the proposed coating will be non-toxic in the marine environment over the life of the coating. The coating shall be subject to review and approval by the Executive Director.

11. NO FUTURE SEAWARD EXTENSION OF SHORELINE PROTECTIVE DEVICE

A. By acceptance of this Permit, the applicant agrees, on behalf of itself and all successors and assigns, that no future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protective device approved pursuant to Coastal Development Permit No. 5-07-370, as described and depicted on an Exhibit attached to the Notice of Intent to Issue Permit (NOI) that the Executive Director issues for this permit, shall be undertaken if such activity extends the footprint seaward of the subject shoreline protective device. By acceptance of this Permit, the applicant waives, on behalf of itself (or himself or herself, as applicable) and all successors and assigns, any rights to such activity that may exist under Public Resources Code Section 30235.

B. **Prior to the issuance by the Executive Director of the NOI FOR THIS PERMIT**, the applicant shall submit for the review and approval of the Executive Director, and upon such approval, for attachment as an Exhibit to the NOI, a formal legal description and graphic depiction of the shoreline protective device approved by this permit, as generally described above and shown on Exhibit 4 attached to this staff report, showing the footprint of the device and the elevation of the device referenced to NGVD (National Geodetic Vertical Datum).

12. FUTURE DEVELOPMENT RESTRICTION

A. This permit is only for the development described in coastal development permit No. 5-07-370. Pursuant to Title 14 California Code of Regulations section 13253(b)(6), the exemptions otherwise provided in Public Resources Code section 30610 (b) shall not apply to the development governed by the coastal development permit No. 5-07-370. Accordingly, any future improvements to the structure authorized by this permit, including but not limited to repair and maintenance identified as requiring a permit in Public Resources section 30610(d) and Title 14 California Code of Regulations sections 13252(a)-(b), shall require an amendment to Permit No. 5-07-370 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description and Location

Project Location

The project site is the U.S. Coast Guard Station located at 1911 Bayside Drive, near the Newport Harbor Entrance Channel in the City of Newport Beach, Orange County (Exhibit 1). The Coast Guard Station shares the site with the Orange County Sheriff Department Harbor Patrol facilities located immediately adjacent to the north. The site consists of a Coast Guard operations building, floating dock to berth the USCGC *Narwhal* (used to conduct law enforcement, search and rescue and homeland security operations), a Harbor Patrol dock with nine slips accommodating four official use slips docks (primarily for Harbor Patrol lifeguard vessels) and five guest slips, and a pumpout float adjacent to the *Narwhal* berth. A 174 foot steel bulkhead parallel to the harbor channel comprised of interlocking steel sheet piling, supports the Coast Guard station, parking lot and gangways that access the adjacent guest docks (Exhibit 2). A public beach is located immediately northeast of the U.S. Coast Guard Station providing picnic tables, volleyball net, bathrooms and a surface parking lot clearly designating 11 parking spaces for beach use. Another on-site surface parking lot provides parking for the Coast Guard and Harbor Patrol crews. The City of Newport Beach Land Use Plan (LUP) designates use of the site as Open Space. Single-family residential uses surround the site.

Previous Permits

Approximately 642 feet of steel sheet pile bulkhead were constructed as part of the original County harbor facilities waterfront development in 1952. Following is the Commission's permit history for the site:

- 5-84-315(County of Orange) – Exemption of Coastal Development Permit Requirements for the repair and replacement of approximately 40 feet of failed bulkhead with the same material at the same location.

- 5-87-958(County of Orange) – Waiver of Coastal Development Permit Requirements for the addition of a 200 sq. ft. enclosed structure for waste oil storage to the existing County Harbor Patrol facilities.

- 5-94-255(County of Orange) – Coastal Development Permit for the installation of a new 550 foot long seawall approximately 3' seaward of original seawall, demolition and re-construction of a 1,000 sq. ft. Coast Guard Building, demolition and reconstruction of an 8,485 sq. ft. Harbor Patrol building, upgrade of site utilities, temporary facilities, replacement of an underground fuel storage tank.

The proposed project would replace the remaining 174 feet of bulkhead and upgrade the official use and guest docks at the site.

Project Description

The applicant proposes the demolition of the existing Coast Guard Station building and portion of surface parking lot to facilitate the replacement/installation of a new 174' tied back bulkhead, removal and replacement of the County of Orange Harbor Patrol official use docks, guest docks, and pumpout float, dredging of 1,200 cubic yards in the vicinity of the docks, eelgrass habitat mitigation, the reconstruction of the surface parking lot with an updated storm drain system and on-site placement of a temporary Coast Guard facility on the surface parking lot.

1. Bulkhead Replacement

The bulkhead is beyond its useful life. It is in an extremely deteriorated condition. The proposed project is to replace an extremely deteriorated 174-foot long section of bulkhead fronting the U.S. Coast Guard station. The bulkhead extends from a top elevation of +11 feet MLLW at the cap to a depth of about -14 feet MLLW at the tip of the sheetpiles. The wall consists of Bethlehem Steel D2 U-shaped sheet pile sections. Lateral restraints is provided at the toe via penetration of the sheet piles into the sandstone bedrock and at the cap with steel rod tiebacks connected to a continuous reinforced concrete deadman.

The new bulkhead design consists of a Z-section sheet pile, thicker than the original with a larger section modulus and higher structural capacity. The anchor pile tieback system is intended to resist the larger lateral forces that are associated with localized soil liquefaction and ground movement during an earthquake. The new bulkhead consists of sheetpile that would be driven with a vibratory hammer into bedrock. The applicant proposes the new bulkhead be placed in front (seaward) of the existing bulkhead, which would not be removed. The new bulkhead and cap would be extended approximately 3 feet into the bay compared to its current location. This will result in approximately 522 square feet of fill, which will be offset through dredging that will create 4,200 square feet of subtidal bay habitat.

The bulkhead replacement requires the demolition of the existing Coast Guard building, a portion of the pavement on the surface parking lot and existing storm drains in order to access the bulkhead and install the buried tie back system (Exhibit 2). This would result in a temporary loss of 8 or 9 parking spaces used by Coast Guard staff during construction. In the reconstruction of the surface parking lot pavement, the applicant proposes to include storm water drainage improvements meeting all new best management practices to improve water quality (Exhibits 6 and 7).

A temporary Coast Guard building is also proposed to be placed on the parking lot (Exhibit 11). Public beach parking spaces will not be impacted. The County of Orange has issued an encroachment permit for this temporary structure. Construction of a new Coast Guard building will require a future coastal development permit. The temporary structure will be removed once the new Coast Guard building is constructed (approximately 2-3 years time).

Construction would be performed using conventional earth moving equipment including a truck mounted crane, hydraulic crane, backhoe, excavator, front-end loader, pavement machine, air compressors, vibratory and impact pile driving equipment and down hole drilling equipment.

As proposed, access to the adjacent public beach will be maintained during construction including availability of the 11 parking spaces designated for beach use.

2. Dock Replacement

The existing timber guest docks, pumpout float and official use docks are proposed to be replaced due to their deteriorated state. The existing dock float area is approximately 3,400 sq. ft. and accommodates nine vessels. All existing docks, gangways and landings are proposed for removal and replacement in the same footprint as the existing docks; however, the new dock would be 236 sq. ft. smaller at approximately 3,164 sq. ft. No change to existing slip lengths is proposed. Eleven guide piles would be removed and replaced with seven new guide piles. Seven 14”

diameter piles and four 6" diameter piles would be removed and replaced with six new 14" diameter piles and two new 18" diameter piles, resulting in a decreased footprint of 0.09 sq. ft. Dock replacement plans are included in Exhibit 8. Floating barges and a small tug may be used during demolition and construction.

3. Dredging

The proposed routine maintenance dredging of 1,200 cu. yds. of sediment from the dock area is exempt from coastal development permit requirements, as it involves the routine maintenance dredging of less than 100,000 cubic yards of sediment. However, a small portion of dredging is proposed for the creation of the eelgrass habitat restoration/mitigation site - in which case, that dredging is not exempt because it is not considered a "routine maintenance dredging" activity. The applicant proposes to dispose of the dredge sediments outside of the coastal zone. Both grain size and sediment chemistry testing was conducted. According to the grain size analysis, the dredge sediments consist of 56.2% sand, 19.1% silt, 19% clay and 5.74% gravel. In order to be considered for beach replenishment, dredge sediments must typically be at least 80% sand as coarser grain material is less likely to be a carrier of contamination. Furthermore, the sediment chemistry results raised public health concerns regarding copper, PCB, DDT and arsenic levels above the total threshold limiting concentrations allowed by the EPA and therefore would not be suitable for beach replenishment. Dredging is proposed to be performed from the land using a truck-mounted crane with a clamshell bucket.

4. Eelgrass Mitigation

The bulkhead construction and dredging activities would result in the total loss of 2,778 sq. ft of eelgrass. This direct impact to eelgrass is proposed to be mitigated at a ratio of 1.2 to 1 in conformance with the Southern California Eelgrass Mitigation Policy (NMFS 1991) resulting in 3,333.6 sq. ft. of transplanted eelgrass. The applicant has provided two eelgrass mitigation alternatives for Commission review. These are discussed later on in the staff report.

B. SHORELINE PROTECTIVE STRUCTURES

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.*

Section 30253 of the Coastal Act states in relevant part:

> *New development shall:*
>
> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or*

surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Site conditions include an existing, aging steel sheet piling bulkhead. The applicant submitted an assessment study of the existing bulkhead and replacement recommendations titled: *Inspection and Evaluation of Marine Facilities U.S. Coast Guard Station Newport Beach, CA* prepared by Noble Consultants, Inc. dated January 2005. The investigation determined the following*: "Based on corrosion observed on the face of the bulkhead, stresses in critical components exceed safe working limits. Critical structural components that were not visible, such as the anchor rods, are also likely to be found corroded due to the severity and duration of exposure in this marine environment. To bring to closure the successful service and performance delivered by this facility, replacement of the bulkhead should be expedited."* The report further concludes as follows: *"The condition assessment study has determined that the remaining portion of the 1952 bulkhead is deteriorated to the point where it cannot be feasibly repaired. The cumulative effects of corrosion damage over the past 50 years have significantly reduced the cross section of the sheet piles to the point where the bulkhead's structural capacity is reduced below desired factors of safety."*

Due to age, corrosion (such as the one at the subject site) aging steel sheet pile bulkheads in Newport Beach are commonly replaced.

The bulkhead at the subject site is required to protect the structural integrity of the site from tidal activity. If the bulkhead were removed and not replaced, tidal activity would erode and destabilize the lot and the development landward of the bulkhead (i.e., Orange County Harbor Patrol Headquarters, U.S. Coast Guard Station, etc.). Therefore, the proposed replacement of the bulkhead is necessary to protect existing structures and the activities performed by the public agencies at this site.

The existing bulkhead does not meet present engineering standards and poses a risk to life and property because lot stability may be threatened by failure of the aging, corroding existing bulkhead. The proposed development will protect lot stability and reduce risks to life and property with a structurally superior bulkhead system. **SPECIAL CONDITION NO. 1** requires final plans incorporating the recommendations in the bulkhead evaluation. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Section 30235 and 30253 of the Coastal Act.

C. MARINE RESOURCES

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30233 of the Coastal Act states in part:

> *(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:*
>
> > *(1) New 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 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.*
> >
> > *(4) 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.*
> >
> > *(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
> >
> > *(6) Restoration purposes.*
> >
> > *(7) Nature study, aquaculture, or similar resource dependent activities.*

The proposed project is located in and over the coastal waters of Lower Newport Bay. Newport Harbor (Lower Newport Bay) is included on the Federal Clean Water Act 303(d) list of "impaired" water bodies. The designation as “impaired” means the quality of the water body cannot support the beneficial uses for which the water body has been designated – in this case secondary contact recreation and aquatic uses. The listing is made by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB), and the State Water Resources Control Board (SWRCB), and confirmed by the U.S. Environmental Protection Agency. Further, the RWQCB has targeted the Newport Bay watershed, which would include the Lower Newport Bay, for increased scrutiny as a higher priority watershed under its Watershed Management Initiative. Consequently, projects which could have an adverse impact on water quality should be examined to assure that potential impacts are minimized. The standard of review for development proposed in coastal waters is the

Chapter 3 policies of the Coastal Act, including the following water quality policies. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity and water quality.

The construction will occur over and in the water. Construction of any kind adjacent to or in coastal waters has the potential to impact marine environment. The Bay provides an opportunity for water oriented recreational activities and also serves as a home for marine habitat. Because of the coastal recreational activities and the sensitivity of the Bay habitat, water quality issues are essential in review of this project

Water Quality Impacts

The Regional Water Quality Control Board (RWQCB) oversees impacts upon water quality in the region. Since the proposed project has the potential to affect water quality, the development requires review by the RWQCB. In order to assess impacts upon water quality, the proposed project was submitted to the California Regional Water Quality Control Board (RWQCB). The RWQCB determined that if standard dock construction methods and materials are utilized, the project should not adversely impact water quality. The RWCQB reviewed the project and issued a Clean Water Act Section 401 Water Quality Standards Certification contingent upon special conditions relating to discharge into coastal waters and turbidity control.

Due to the proposed project's location on the water, demolition and construction activities may have adverse impacts upon water quality and the marine environment. Storage or placement of construction materials, debris, or waste in a location subject to wave erosion and dispersion would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, the use of machinery in coastal waters not designed for such use may result in the release of lubricants or oils that are toxic to marine life. Sediment discharged into coastal waters may cause turbidity, which can shade and reduce the productivity of foraging avian and marine species ability to see food in the water column. The applicant has stated that they intend to implement the following best management practices (BMPs) to reduce impacts to water quality and biological resources. These measures include: 1) removal of debris that accidentally enters the water; 2) use silt curtains to confine sediments during construction activities; 3) operating any construction related vessels during higher tides to limit re-suspension of bottom sediments; and 4) preventing discharges/disposal of fuel or oily waste from project equipment into the waters of Newport Bay. In addition to these BMPs, additional best management practices are necessary. Thus, in order to avoid adverse construction-related impacts upon marine resources, **SPECIAL CONDITION NO. 2** has been imposed, which outlines additional construction-related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris. This condition requires the applicant to incorporate silt curtains and/or floating booms when necessary to control turbidity and debris discharge. Divers shall remove any non-floatable debris not contained in such structures that sink to the ocean bottom as soon as possible.

Since the applicant has not identified a disposal site for either the construction debris or the dredge material (sediment tests found it unsuitable for beach replenishment), in order to prevent impacts to coastal waters from construction debris and dredge sediments re-entering coastal waters, the Commission imposes **SPECIAL CONDITION NO. 3**, requiring all construction debris and dredge soils disposed of at a legal site approved by the Executive Director. Choice of a site for construction debris disposal and/or dredge sediment disposal within the coastal zone shall require an amendment to this permit or a new coastal development permit; choice of off-shore disposal of approximately 1,200 cubic yards of dredge sediments does not require a coastal development

permit but does require federal consistency certification from the Commission for the transport of sediments through coastal waters.

Post-Construction Impacts to Water Quality

The proposed project involves the removal of a deteriorated interlocking steel sheet piling bulkhead section and replacement with epoxy coated interlocking steel sheet pilings. It is necessary to evaluate the material used to treat and coat any steel sheet piles, as certain substances may have an adverse impact on water quality. A protective coating for steel elements of "Carboguard 890" is proposed. The Commission has approved a variety of marine structures using epoxy coated steel, including support piles for offshore bird platforms, dock pilings, and bulkheads. **SPECIAL CONDITION NO. 10** requires the applicant provide final revised plans for the proposed project which shall specify use of a non-toxic steel coating on submerged structures subject to marine corrosion. The Commission's water quality unit has reviewed the proposed Carboguard 890 coating and found no evidence that it will have a measurable impact on water quality. While there may be short term local impacts from the volatile compounds during application of the material, after curing it is very resistant to chemical and physical impacts. Special Condition 10 requires that if the selected coating is toxic in an uncured state, it may be used if applied off-site in an appropriate facility and, once cured, is inert and non-toxic upon delivery to the project site. Once cured, the water quality unit has stated that the Carboguard 890 is much harder and less likely to leach than older materials used on pier pilings and bulkheads (e.g., creosote) and there are no foreseeable issues with its use in this circumstance. Thus, the applicant may use the proposed Carboguard 890. If the applicant wishes to select a different coating, Special Condition 10 required review and approval by the Executive Director and requires the applicant to provide information and data, as necessary, to demonstrate that the proposed coating will be non-toxic in the marine environment over the life of the coating. Furthermore, **SPECIAL CONDITION NO. 12** is a future development restriction that requires the applicant return to the Commission for review of future development on the site including repair and maintenance activities to the seawall (such as re-coating of steel elements) as they may impact coastal resources.

The Coastal Act policies identified above are intended to protect the water quality and biological productivity of coastal water resources. Aside from potential construction impacts on water quality, the berthing of boats by the boat dock users and associated boating activities also has the potential to adversely impact coastal water quality and marine environment through the introduction of pollutants associated with boating activities. Cleaning and scraping of boats, improper discharges of contaminated bilge water and sewage waste, and the use of caustic detergents and solvents, among other things, adversely impact water quality in coastal waters. The discharge of chemicals, petroleum, cleaning agents, sewage and other pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity, which reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, reduce optimum populations of marine organisms, and have adverse impacts on human health. Such cumulative impacts can be minimized through the implementation of certain BMPs. The site has an existing pumpout float allowing boat owners to pump wastewater from boat holding tanks for appropriate disposal. The project proposes to replace/update the existing pumpout float to protect water quality at these docks and Newport Bay. Furthermore, as proposed, the project includes

improvements to the parking lot storm drain system with new filtration measures added to improve water quality.

SPECIAL CONDITION NO. 5 requires the applicant to submit a Water Quality Management Plan (WQMP) that includes appropriate Best Management Practices (BMPs) such as specific details and requirements ensuring that boating activity in the project area will be managed in a manner that protects water quality, regular inspection and maintenance of the pumpout sewer line and of the proposed parking lot BMPs. Furthermore, **SPECIAL CONDITION NO. 6** requires best management practices to ensure avoidance of adverse impacts coastal water quality and the marine environment through the introduction of pollutants associated with boating activities at the docks.

Dredging Impacts on Water Quality

As proposed, the project will meet best management practices pertinent to dredging activities including the maintenance of dredge project limits and use of a floating silt curtain around the dredge vessels during dredging operations for turbidity control. Dredging is proposed from the land using a truck-mounted crane with a clamshell bucket to avoid water quality impacts and minimize impacts to eelgrass habitat in the channel. **SPECIAL CONDITION NO. 7** further requires measures for turbidity control in coastal waters to further lessen the project's impacts on water quality.

In summary, special conditions require the applicant to implement construction and post-construction BMPs to minimize adverse impacts on water quality from both the construction and operation of the proposed boating docks.

The Commission finds it necessary to identify the permittee's responsibilities regarding construction and the utilization of best management practices and has conditioned the project accordingly. Therefore, only as conditioned does the Commission find that the proposed project conforms with Sections 30230 and 30231 of the Coastal Act and will assure the protection of water quality.

Fill of Coastal Waters and Loss of Marine Habitat

The project proposes to keep the existing bulkhead and place a new bulkhead approximately 3' – 2" seaward of the existing one resulting in fill of 522 square feet of coastal waters.

Section 30233(a) limits the diking, filling and dredging of open coastal waters to certain specific allowable uses. In order for fill of open coastal waters to be approved, the proposed project must be found to be an allowable use, the project must also be the least environmentally damaging alternative, and the project must have adequate mitigation measures to minimize adverse impacts. Alternatives to the proposed project include no project, replacement of the bulkhead in precisely the same alignment, replacement of the bulkhead landward of its existing alignment or replacement of the bulkhead seaward of its existing alignment.

Under the no project alternative, the applicant could only pursue simple maintenance activity. However, simple maintenance could not feasibly repair the bulkhead, nor to bring it up to present engineering, seismic and safety standards. Simple maintenance would only prolong the condition of the existing bulkhead and docks.

The second alternative, replacement of the bulkhead on or behind the existing alignment according to the applicant would require extraordinary design measures that would be very dangerous and

pose high risk to the construction operations. Replacing the bulkhead in the same alignment would require cutting existing tierods to allow for the removal of the existing sheet piles and driving of new sheets, shoring installed behind the existing tieback/deadman system placed at least 35 feet behind the existing wall in order to clear the existing structures, and temporary large diameter pipe pile shoring drilled in front of the existing bulkhead with steel wales and framing. The construction is high risk due partly to specific site constraints related to subsurface soil conditions. Predominantly sandy subsurface soil conditions within most of Newport Harbor allow for concrete sheet pile bulkheads driven into deeper depths; however, at this location near the Newport Harbor entrance, hard bedrock is located at a relatively shallow depth necessitating the use of steel sheet piles. The existing sheet piles at the project site are estimated to penetrate only about 4' into sandy soil then only 2' – 4' into bedrock. This shallow depth wall foundation means that the existing wall would be very unstable without tieback support and may not be strong enough to hold itself free standing. Even with temporary pipe pile shoring, it is uncertain if the earth pressure loads can be uniformly transferred to the shoring system causing areas of load imbalance and overstressing leading to wall failures. Unless special measures are taken (such as removal of as much existing back fill as possible to relieve lateral earth pressure and reinforcement of the wall during its removal) it is likely that all of portion of it will collapse into the bay.

The third alternative, keeping the existing bulkhead in place and the installation of a new bulkhead approximately 3' – 2" seaward of the existing wall that results in fill of 522 sq. ft of soft bottom bay habitat can be considered to be an allowable use under incidental public service purposes as the bulkhead protects the U.S. Coast Guard Station and the Orange County Sheriff Harbor Patrol facilities which provide public services. This was the same findings for CDP 5-94-255(Orange County) for the replacement of a 550 foot section of this bulkhead. The proposed project would replace the remaining 174 feet of bulkhead and upgrade the official use and guest docks at the site. Due to the site constraints, this project can also be considered to be the least environmentally damaging alternative. The applicant notes that as the project also involves dredging of 1,300 sq. ft. of accumulated sediment that is above mean lower low water adjacent to the bulkhead and docks, even with the loss of 522 sq. ft of bay habitat from the extension of the bulkhead, the project would provide a net gain in subtidal bay habitat. Furthermore, **SPECIAL CONDITION NO. 11** requires no future seaward extension of the bulkhead into coastal waters to avoid future fill of coastal waters. The applicant agrees that installing a new bulkhead in front of the existing bulkhead would facilitate the eventual replacement of the new bulkhead in the future in a more landward location.

The placement of piles in open coastal waters for the re-construction of a new boating dock is an allowable use under Section 30233(a)(3) of the Coastal Act. Safe use of the docks for marine recreational purposes would be precluded without replacement of the deteriorated docks.

Eelgrass

Eelgrass (Zostera marina) is an aquatic plant consisting of tough cellulose leaves which grows in dense beds in shallow, subtidal or intertidal unconsolidated sediments. Eelgrass is considered worthy of protection because it functions as important habitat and foraging area for a variety of fish and other wildlife, according to the Southern California Eelgrass Mitigation Policy (SCEMP) adopted by the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG). For instance, eelgrass beds provide areas for fish egg laying, juvenile fish rearing, and water fowl foraging. Sensitive species, such as the California least tern, a federally listed endangered species, utilize eelgrass beds as foraging grounds.

An eelgrass habitat survey was conducted on 2/1/07, 2/13/07, 3/20/07 and 3/30/07. Within the project limits, eelgrass was located at depths between -0.2 and -12.3 feet Mean Lower Low Water MLLW. Although eelgrass extended farther into the channel, it was not mapped further than 100 ft from outside of the O.C. Harbor Patrol docks as it was outside the project area. A total of 53,102 sq. ft. of eelgrass was mapped in the vicinity of the project area. The proposed project (dredging and new bulkhead) will result in the direct loss of 2,778 sq. ft. of eelgrass vegetation which must be mitigated at a 1.2 to 1 impact to mitigation ratio according to the Southern California Eelgrass Mitigation Policy such that 3,333.6 sq. ft. of eelgrass must be successfully mitigated over a five-year period. No eelgrass currently grows beneath the docks, consequently, no additional impacts are associated with the dock replacement portion of the project. The following two mitigation alternatives are proposed by the applicant:

Mitigation Alternative 1 consists of an on-site transplant area located at the south end of the guest dock where the proposed dredging will result in eelgrass habitat loss. Following the completion of dredging, aprox. 1,000 sq. ft. of eelgrass can replanted within this zone at depths between -1 and -6 ft MLLW. A second 4,200 sq. ft. transplant area could be created from excavating sandy beach habitat at the public recreational beach immediately northeast of the project site. Beach sands would be removed between 0.0 and +4 ft MLLW and graded to an elevation consistent to that where eelgrass currently grows along the beach's perimeter. This would result in the beach shoreline to be moved landward approximately 40 feet back. A buffer area at the upper end of the newly created habitat would be created to allow for beach-goers to wade in the shallow area. Planting would be conducted at the lower two-thirds of the created habitat within a 42' wide x 100' long (approx 4,200 sq. ft.) area.

Mitigation Alternative 2 consists of the same 1,000 sq. ft. on-site transplant area located at the south end of the guest dock proposed for dredging however, the second 4,200 sq. ft. transplant area at the adjacent public beach is modified so that beach sands would only be removed between 0.0 and +2 ft MLLW and graded to an elevation consistent to that where eelgrass currently grows along the beach's perimeter. This would result in the beach shoreline to be moved landward approximately 20 feet back. The same buffer area at the upper end of the newly created habitat would be created to allow for beach-goers to wade in the shallow area. Planting would be conducted at the lower two-thirds of the created habitat within a 42' wide x 100' long (approx 4,200 sq. ft.) area.

The Commission supports approval of Mitigation Alternative 2 as this alternative would not significantly impact the public recreational beach. **SPECIAL CONDITION NO. 8** requires compliance with the proposed Eelgrass Mitigation Plan utilizing Alternative 2.

Caulerpa Taxifolia – Invasive Algae

As noted above, eelgrass is a sensitive aquatic plant species which provides important habitat for marine life. Eelgrass grows in shallow sandy aquatic environments which provide plenty of sunlight. In 2000, a non-native and invasive aquatic plant species, *Caulerpa taxifolia* was discovered in parts of Huntington Harbor in Orange County and in Agua Hedionda Lagoon in San Diego County, which both occupy similar habitat. C. taxifolia is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. Other infestations are likely. Although a tropical species, C. taxifolia has been shown to tolerate water temperatures down to at least 50ºF. Although warmer southern California habitats are most vulnerable, until better information if available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

If C. taxifolia is present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. A C. taxifolia survey for the site was completed along with the eelgrass survey in 2007. A NMFS certified Caulerpa field biologist did not observe any invasive algae at the project site. Furthermore, **SPECIAL CONDITION NO. 9** requires the applicant conduct a pre-construction C. taxifolia survey to protect the shallow marine habitat in the vicinity of the project area from a possible infestation.

D. PUBLIC ACCESS

Section 30210 of the Coastal Act states:

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

Section 30212 of the Coastal Act states, in part:

> *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
>
> *(2) Adequate access exists nearby, or,*

The project site is located within a lot that consists of a waterfront bulkhead, U.S. Coast Guard and Harbor Patrol facilities, a parking lot, an adjacent public beach and public restrooms. A dock and other boating related structures are located bayward of the bulkhead. Public lateral and vertical access is available from the public beach to the Harbor Patrol guest docks. U.S. Coast Guard and Harbor Patrol facilities are open to the public as are the Harbor Patrol guest docks; public access is limited to the *USS Narwahl.* The proposed project intends to improve access and use of the public guest docks by dredging accumulated sediment from the dock and stabilizing the bulkhead that supports the docks and landward developments. The adjacent public beach will remain open and parking available during construction. **SPECIAL CONDITION NO. 4** requires the applicant to provide a staging area plan prior to the issuance of the coastal development permit ensuring that public parking areas shall not be used for staging or storage of equipment, that sandy beach or habitat (vegetated) areas shall not be used as staging areas and that the staging area for construction of the project shall not obstruct vertical or lateral access to the beach, marina or other recreational facilities. Therefore, the Commission finds that the proposed development would be consistent with Sections 30210 and 30212 of the Coastal Act regarding public access.

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 that conforms with the Chapter 3 policies of the Coastal Act.

The City of Newport Beach Land Use Plan (LUP) was certified on May 19, 1982. At the October 2005 Coastal Commission Hearing, the certified LUP was updated. 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:

Hazards and Protective Devices, Policy 2.8.1-4 states,

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

Artificial Coastal Protection, Policy 2.8.6-5 states,

Permit revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls and other structures altering natural shoreline processes or retaining walls when required to serve coastal-dependent uses or to protect existing principal structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply, unless a waiver of future shoreline protection was required by a previous coastal development permit.

Water Quality, Policy 4.1.2-1 states,

Maintain, enhance, and, where feasible, restore marine resources.

Water Quality, Policy 4.1.2-5 states,

Continue to require Caulerpa protocol surveys as a condition of City approval of projects in the Newport Bay and immediately notify the SCCAT when found.

Eelgrass Meadows, Policy 4.1.4-1 states,

Continue to protect eelgrass meadows for their important ecological function as a nursery and foraging habitat within the Newport Bay ecosystem.

Eelgrass Meadows, Policy 4.1.4-1 states

Where applicable require eelgrass and Caulerpa taxifolia surveys to be conducted as a condition of City approval for projects in Newport Bay in accordance with operative protocols of the Southern California Eelgrass Mitigation Policy and Caulerpa taxifolia Survey protocols.

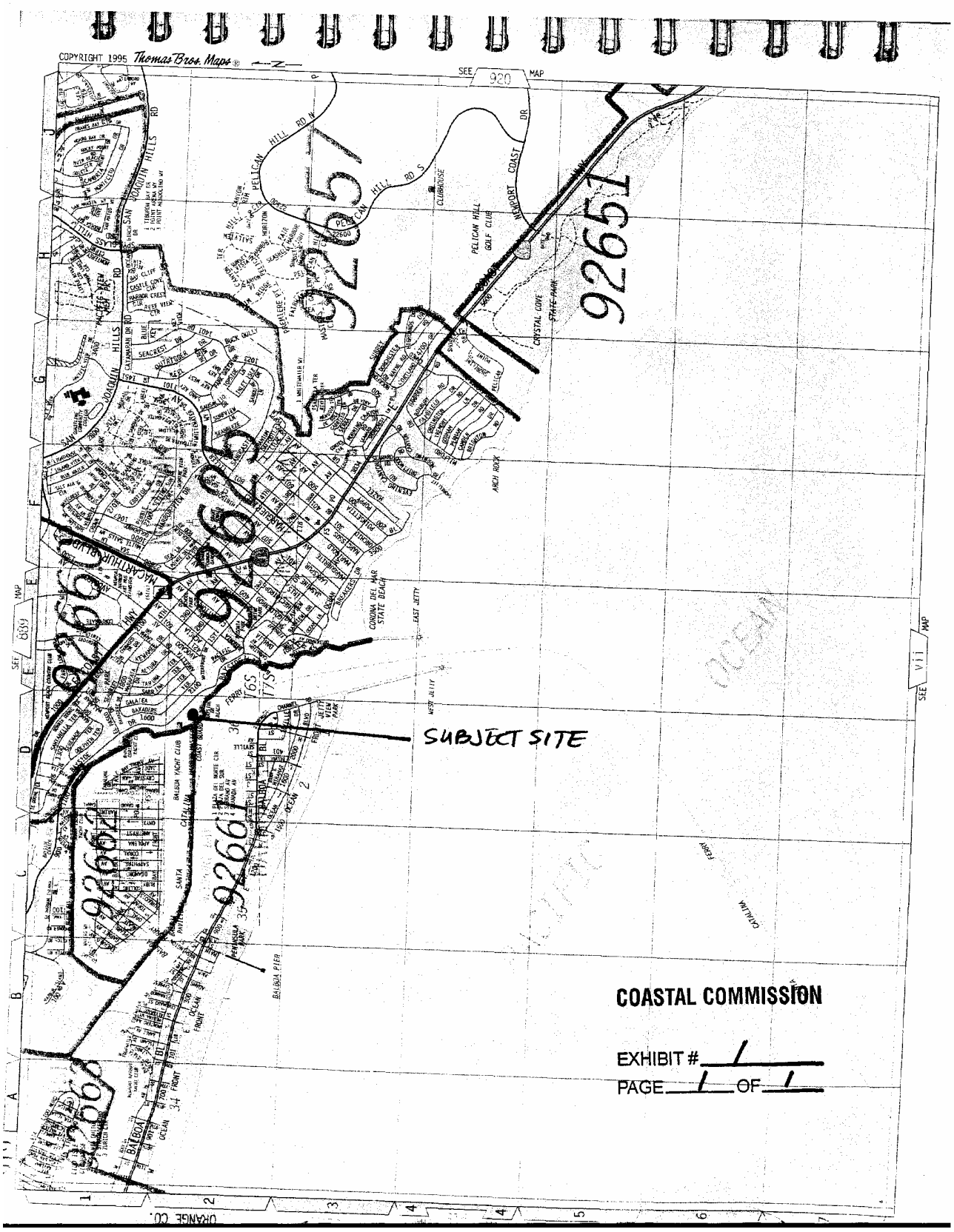
The proposed development, as conditioned, is consistent with Chapter 3 of the Coastal Act and with the certified Land Use Plan for the area. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3.

F. California Environmental Quality Act

Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, 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.

The County of Orange, Planning & Development Services Department is the lead agency for California Environmental Quality Act (CEQA) purposes. In December 2007, the Orange County Board of Supervisors adopted a Mitigated Negative Declaration IP 07-584 in compliance with CEQA Guidelines. Mitigation measures were required with approval of this CEQA document. The Coastal Commission adopts additional mitigation measures, found below, to ensure that the proposed project will conform with the requirements of the Coastal Act.

The project is located in an existing harbor in an urbanized area. Development already exists on the subject site. Mitigation is provided for project impacts to sensitive marine resources; therefore, the impacts arising from the proposed project will be minimal. In addition, the proposed development has been conditioned, as follows:**1)** final plans conforming to geotechnical recommendations; **2)** construction responsibilities and debris removal; **3)** location of debris disposal site; **4)** construction staging area **5)** Water Quality Management Plan (WQMP); **6)** marina best management practices; **7)** turbidity control; **8)** eelgrass mitigation; and **9)** pre-construction *caulerpa taxifolia* survey; **10)** steel coating on submerged structures subject to marine erosion; **11)** no future seaward extension of shoreline protection device; **12)** future improvements return to the Commission. As conditioned, no feasible alternatives or feasible mitigation measures are known, beyond those required, which would substantially lessen any identified significant effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, is the least environmentally damaging feasible alternative and is consistent with CEQA and the policies of the Coastal Act.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SUBJECT SITE
COASTAL COMMISSION
EXHIBIT # 1
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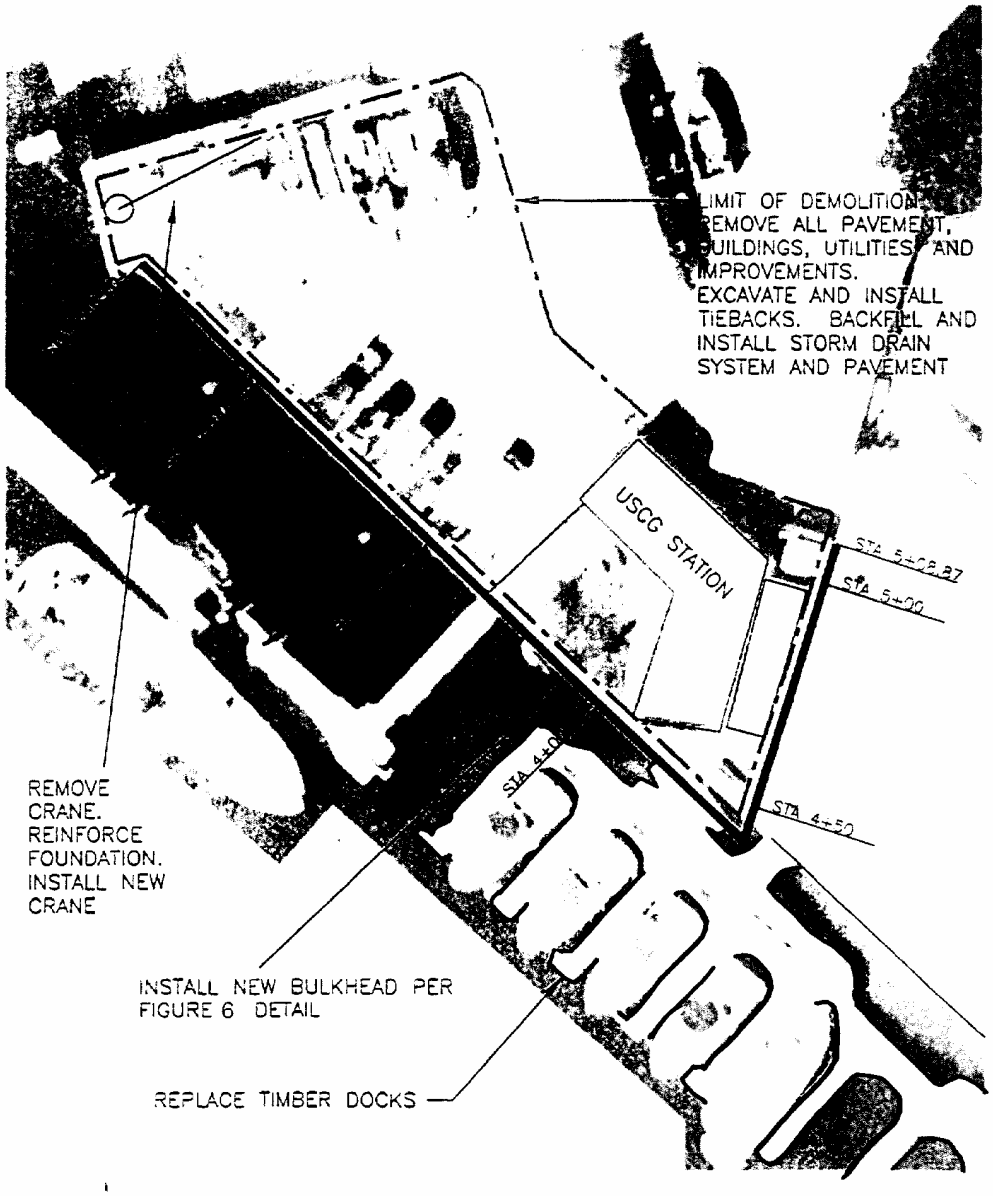


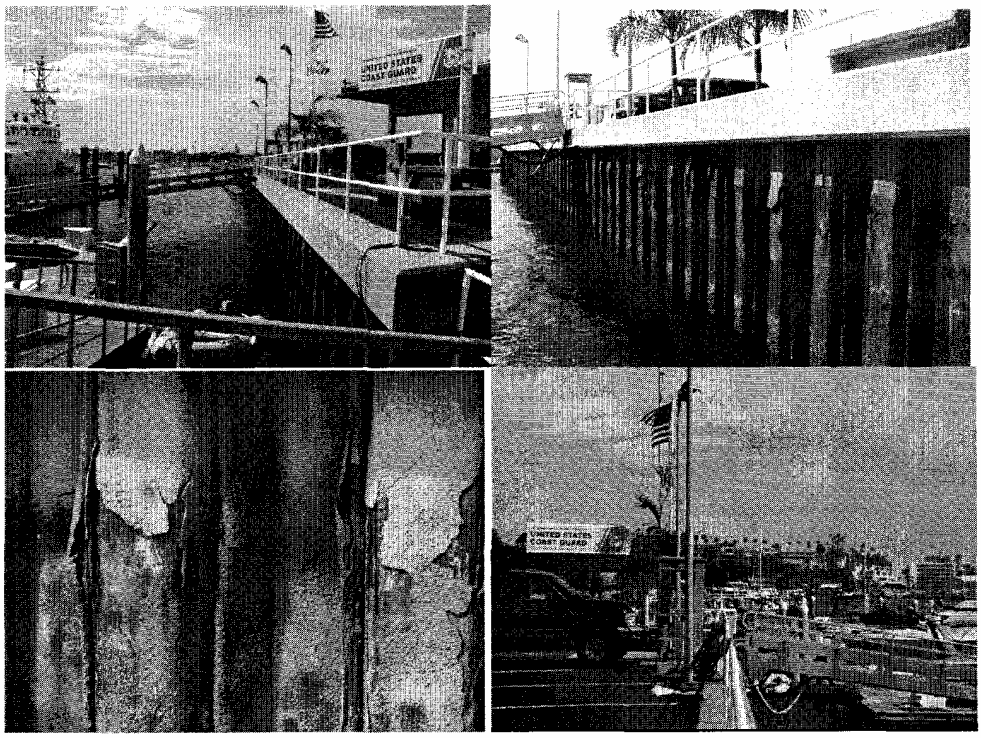
COASTAL COMMISSION

EXHIBIT # 2

PAGE 1 OF 1

SOURCE: Noble Consultants, Inc.

AREA TO BE DEMOLISHED
Figure 8



COASTAL COMMISSION

EXHIBIT # 3
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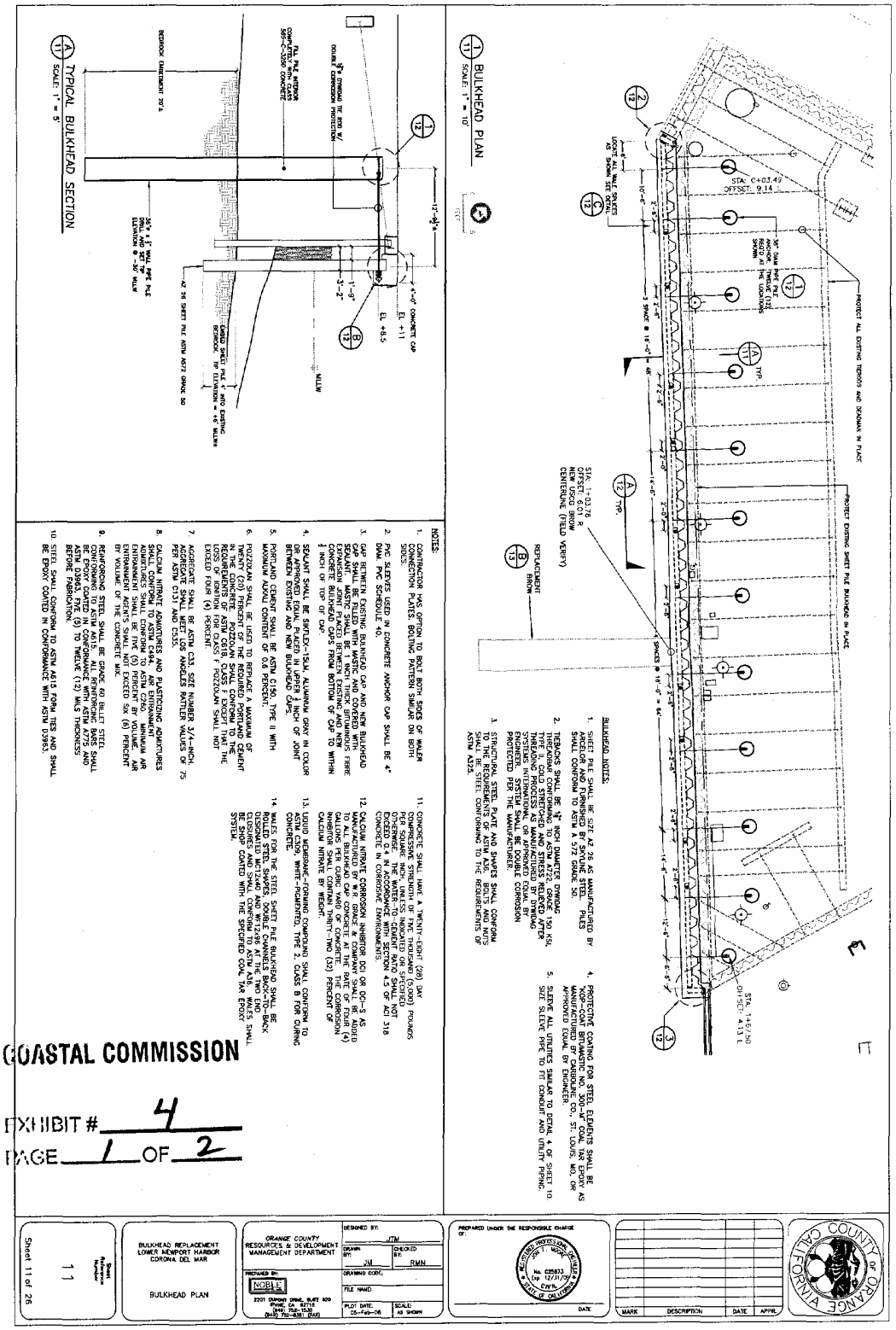

BULKHEAD NOTES:

1. SHEET PILE SHALL BE SIZE AZ 26 AS MANUFACTURED BY ARCELOR AND FURNISHED BY SKYLINE STEEL PILES SHALL CONFORM TO ASTM A 572 GRADE 50.
2. TIEBACKS SHALL BE 1¾" INCH DIAMETER DYWIDAG THREADBAR CONFORMING TO ASTM A722, GRADE 150 KSI TYPE II CORROSION PROTECTION WITH ROLLED THREADING PROCESS AS MANUFACTURED BY DYWIDAG SYSTEMS INTERNATIONAL OR APPROVED EQUAL BY MANUFACTURER PROTECTED PER THE MANUFACTURER RECOMMENDATIONS FOR DOUBLE CORROSION PROTECTION.
3. STRUCTURAL STEEL PLATE AND SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. BOLTS AND NUTS SHALL BE STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A325.
4. PROTECTIVE COATING FOR STEEL ELEMENTS SHALL BE "KOP-COAT BITUMASTIC NO. 300-M" COAL TAR EPOXY AS MANUFACTURED BY CARBOLINE CO., ST. LOUIS MO, OR APPROVED EQUAL BY ENGINEER.
5. SLEEVE ALL UTILITIES SIMILAR TO DETAIL 4 OF SHEET 10 SIZE SLEEVE PIPE TO FIT CONDUIT AND UTILITY PIPING.

NOTES:

1. CONTRACTOR HAS OPTION TO BOLT BOTH SIDES OF WALER CONNECTION PLATES. BOLTING PATTERN SHOWN ON BOTH SIDES.
2. PVC SLEEVES USED IN CONCRETE ANCHOR CAP SHALL BE 4" DIAM. PVC SCHEDULE 40.
3. GAP BETWEEN EXISTING BULKHEAD CAP AND NEW BULKHEAD CAP SHALL BE FILLED WITH MASTIC AND COVERED WITH EXPANSION JOINT STRIP. EXISTING BITUMINOUS FIBRE EXPANSION JOINT SHALL BE REMOVED FROM EXISTING CONCRETE BULKHEAD CAPS FROM BOTTOM OF CAP TO WITHIN ½ INCH OF TOP OF CAP.
4. SEALANT SHALL BE SIKFLEX-15LM, ALUMINUM GRAY IN COLOR OR APPROVED EQUAL PLACED IN UPPER ½ INCH OF JOINT BETWEEN EXISTING AND NEW BULKHEAD CAPS.
5. PORTLAND CEMENT SHALL BE ASTM C150, TYPE II WITH MAXIMUM ALKALI CONTENT OF 0.6 PERCENT.
6. POZZOLAN SHALL BE USED TO REPLACE A MAXIMUM OF 15 PERCENT OF THE CEMENT IN THE CONCRETE MIX. THE POZZOLAN SHALL CONFORM TO THE REQUIREMENTS OF ASTM C618, CLASS F POZZOLAN SHALL NOT EXCEED FOUR (4) PERCENT.
7. AGGREGATE SHALL BE ASTM C33, SIZE NUMBER 3/4-INCH TO NO. 4 SIEVE, WITH LOS ANGELES RATTLER VALUES OF 75 PER ASTM C131 AND C535.
8. CALCIUM NITRATE ADMIXTURES AND PLASTICIZING ADMIXTURES SHALL CONFORM TO ASTM C494. AIR ENTRAINMENT ADMIXTURES SHALL CONFORM TO ASTM C260. MINIMUM AIR ENTRAINMENT SHALL BE FIVE (5) PERCENT AND MAXIMUM AIR ENTRAINMENT AGENTS SHALL NOT EXCEED SIX (6) PERCENT BY VOLUME OF THE CONCRETE MIX.
9. REINFORCING STEEL SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A615. ALL REINFORCING BARS SHALL BE TESTED IN ACCORDANCE WITH SUPPLEMENTARY REQUIREMENT S1 OF ASTM A615. BARS SHALL BE BENT COLD TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLANS AND SHALL BE BENT BEFORE FABRICATION.
10. STEEL SHALL CONFORM TO ASTM A615 FORM TIES AND SHALL BE EPOXY COATED IN CONFORMANCE WITH ASTM D3963.
11. CONCRETE SHALL HAVE A TWENTY-EIGHT (28) DAY COMPRESSIVE STRENGTH OF FIVE THOUSAND (5,000) POUNDS PER SQUARE INCH, UNLESS INDICATED OR SPECIFIED OTHERWISE. THE WATER-TO-CEMENT RATIO SHALL NOT EXCEED 0.40 FOR REINFORCED CONCRETE IN CORROSIVE ENVIRONMENTS.
12. CALCIUM NITRATE CORROSION INHIBITOR (CI) OR DCI-S AS MANUFACTURED BY W.R. GRACE & COMPANY SHALL BE ADDED TO ALL BULKHEAD CAP CONCRETE AT THE RATE OF FOUR (4) GALLONS PER CUBIC YARD OF CONCRETE. CALCIUM NITRATE INHIBITOR SHALL CONTAIN THIRTY-TWO (32) PERCENT OF CALCIUM NITRATE BY WEIGHT.
13. LIQUID MEMBRANE-FORMING COMPOUND SHALL CONFORM TO ASTM C309, WHITE-PIGMENTED, TYPE 2, CLASS B FOR CURING CONCRETE.
14. WALES FOR THE STEEL SHEET PILE BULKHEAD SHALL BE DOUBLE CHANNELS BACK-TO-BACK DESIGNATED MC12x40 AND MC12x35 AT THE TWO END CLOSURES AND SHALL CONFORM TO ASTM A36. WALES SHALL BE PRIMED AND COATED WITH THE SPECIFIED COAL TAR EPOXY SYSTEM.

COASTAL COMMISSION

EXHIBIT # 4

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ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

DESIGNED BY: JTM
DRAWN BY: JM
CHECKED BY: RMN
DRAWING CODE:
FILE NAME:
PLOT DATE: 05-Feb-08
SCALE: AS SHOWN

PREPARED BY: NOBLE, 2201 DUPONT DRIVE, SUITE 109, IRVINE, CA 92715, PHONE: 752-1538, (949) 752-6181 (FAX)

PREPARED UNDER THE RESPONSIBLE CHARGE OF: No. C35673, 12/31/08, CIVIL, STATE OF CALIFORNIA

DATE

MARK | DESCRIPTION | DATE | APPR.

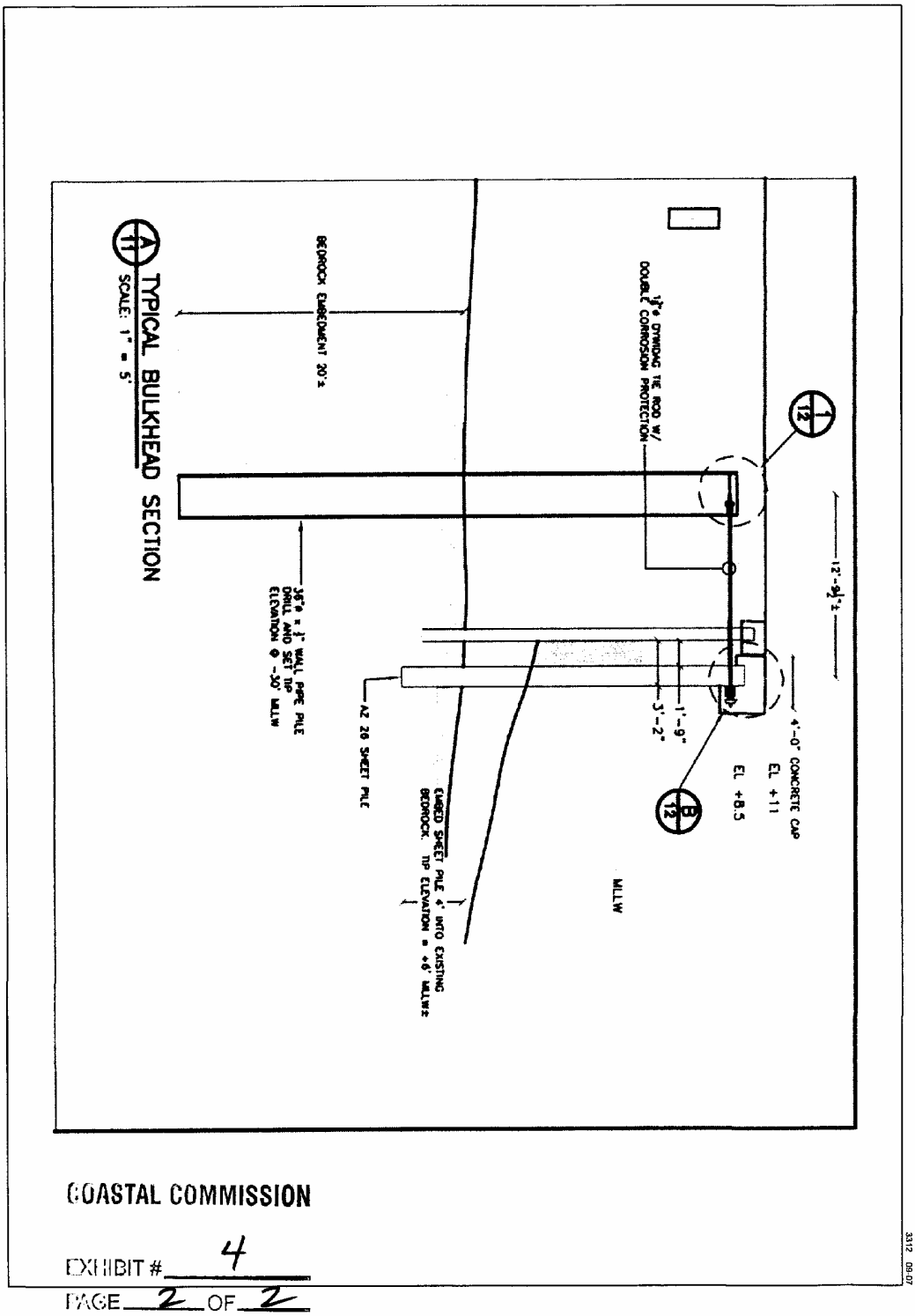
COUNTY OF ORANGE, CALIFORNIA

BULKHEAD REPLACEMENT
LOWER NEWPORT HARBOR
CORONA DEL MAR

BULKHEAD PLAN

Sheet Reference Number: 11

Sheet 11 of 26



SOURCE: Noble Consultants, Inc.

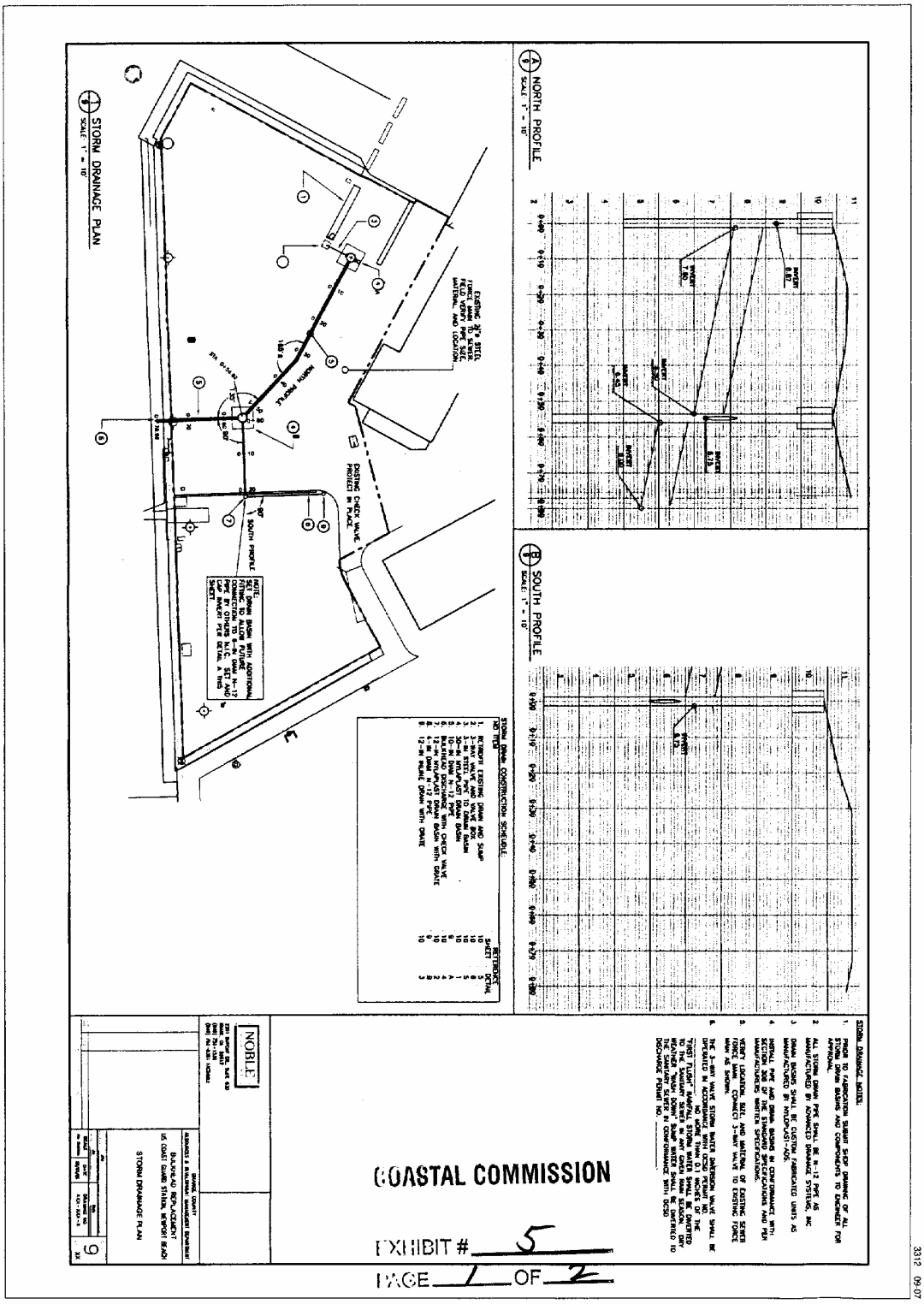
BULKHEAD PLAN DETAILS
Figure 5

3312 09.07

COASTAL COMMISSION

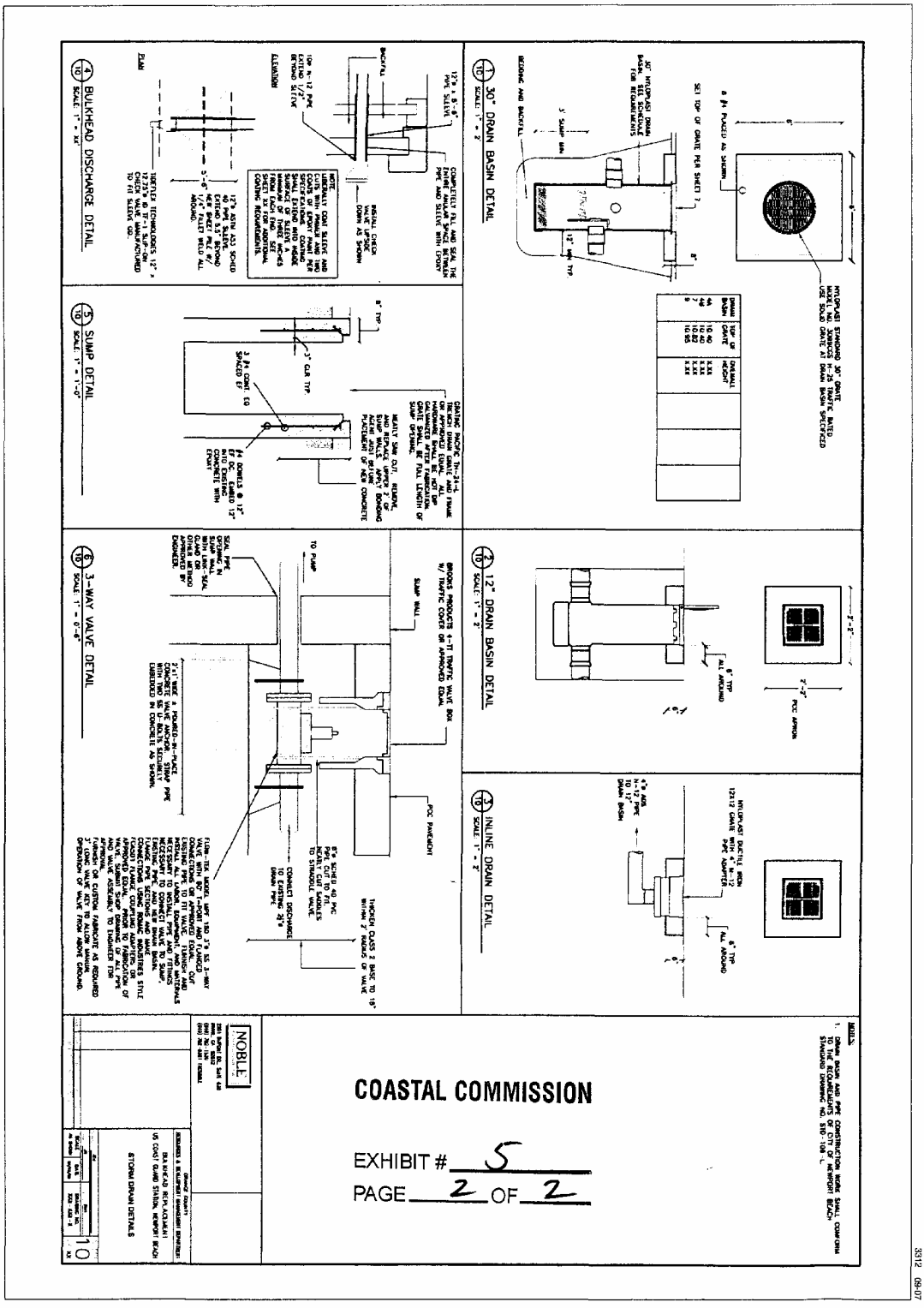
EXHIBIT # 4

PAGE 2 OF 2



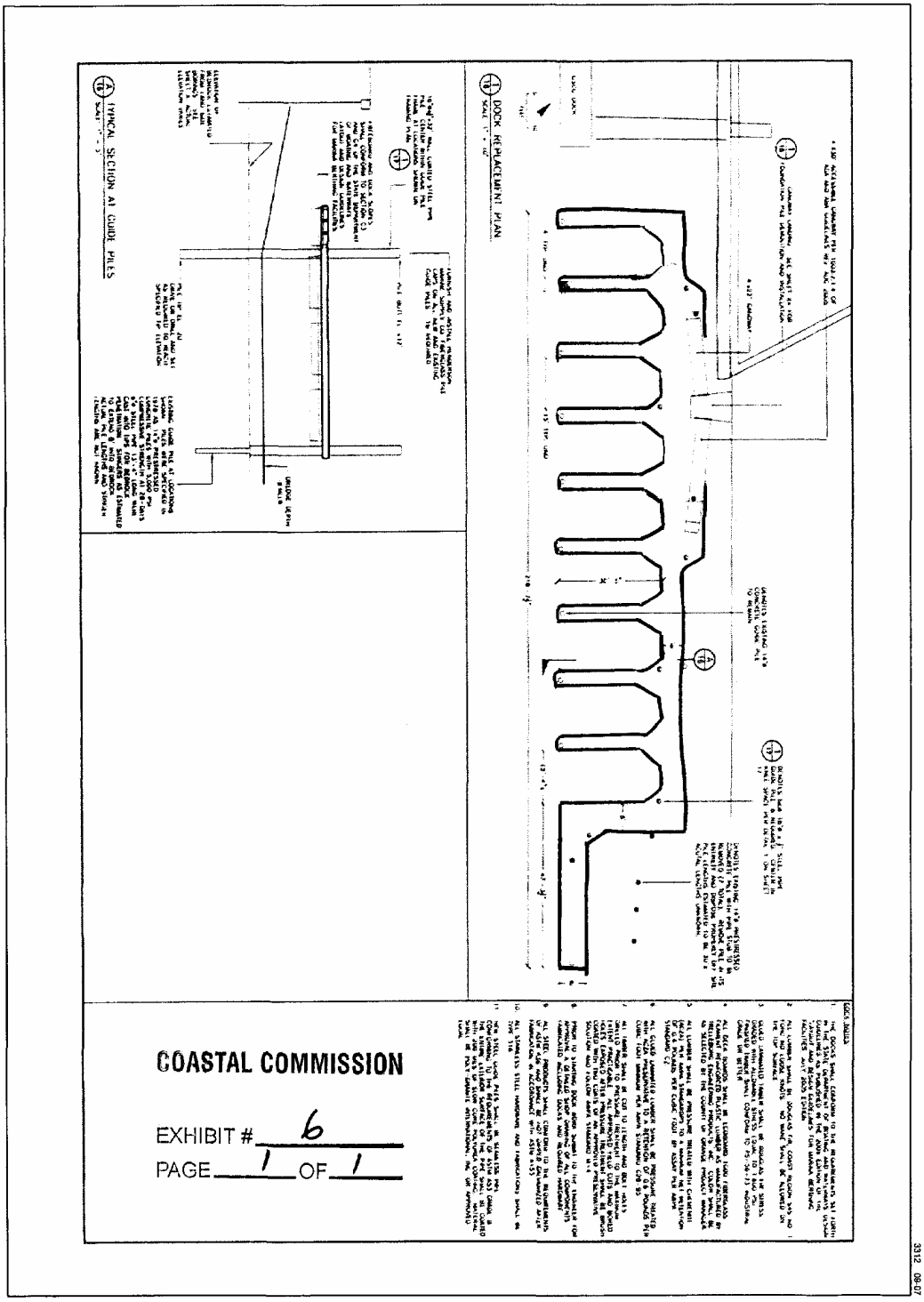
SOURCE: Noble Consultants, Inc.

NEW STORM DRAIN DESIGN
Figure 9



SOURCE: Noble Consultants, Inc.

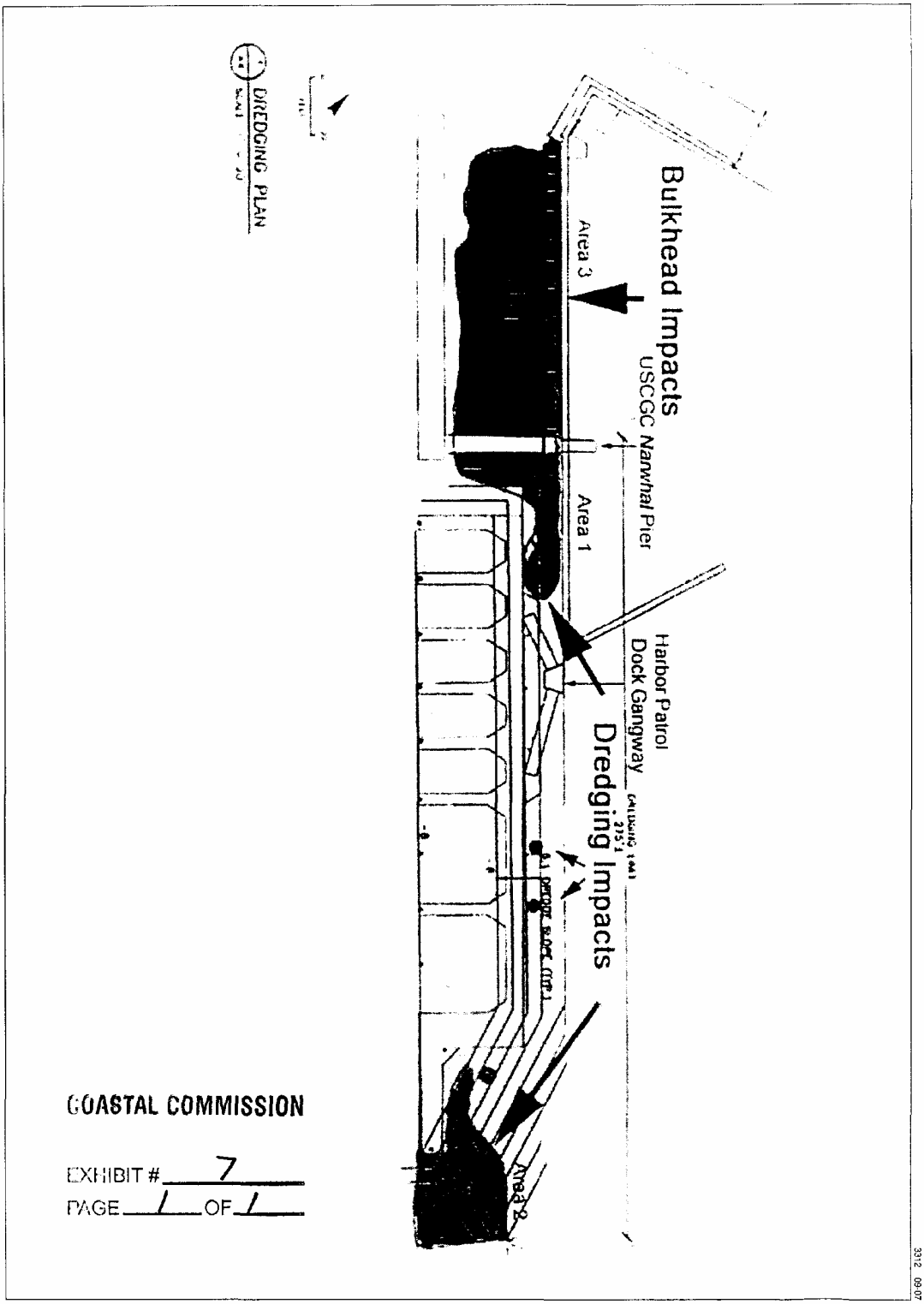
NEW STORM DRAIN DETAILS
Figure 10



SOURCE: Noble Consultants, Inc.

DOCK REPLACEMENT PLAN
Figure 7

3312 08-07



SOURCE: Coastal Resources Management 2007

HARBOR PATROL FACILITY EELGRASS IMPACT ZONES
Figure 11

3312 09-07

COASTAL COMMISSION

EXHIBIT # 7
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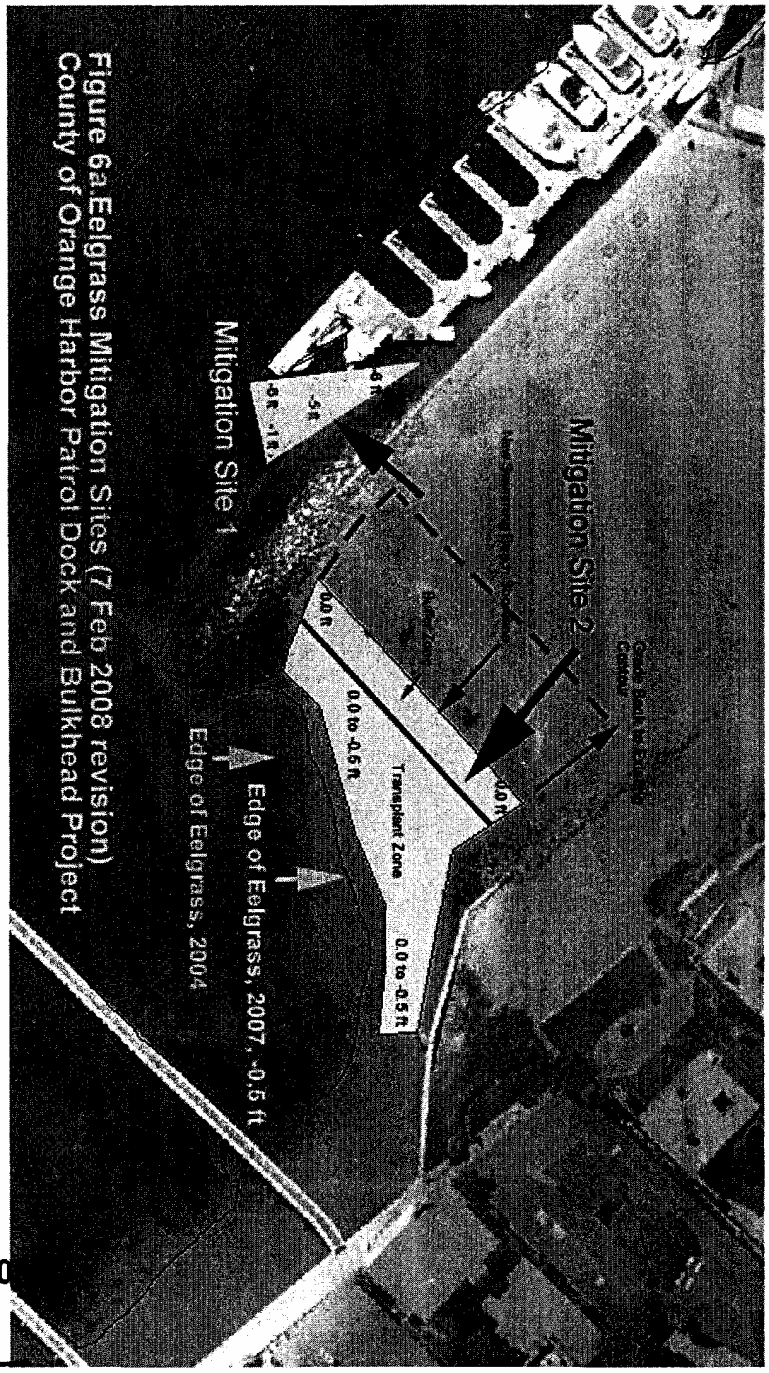

Figure 6a Eelgrass Mitigation Sites (7 Feb 2008 revision)
County of Orange Harbor Patrol Dock and Bulkhead Project

COASTAL COMMISSIO

EXHIBIT # 8
PAGE 1 OF 1

GENERAL SITE PLAN

COASTAL COMMISSION

EXHIBIT # 9
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