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Filed: September 24, 2009
49th Day: November 12, 2009
180th Day: March 23, 2010
Staff: James R. Baskin AICP
Staff Report: May 27, 2010
Hearing Date: June 9, 2010
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **1-08-050**

APPLICANT: **Crescent City Harbor District**

AGENT OF PROCESS: Stover Engineering

PROJECT DESCRIPTION: *Crescent City Harbor Citizen's Dock Approach, Whalers Island, and Anchor Way Eroded Rock Slope Protection and Roadway Repair and Improvement Project* entailing repairs and upgrades to damaged riprap slope protection, asphalt paving, and/or parking lot improvements at: (1) the end of Citizen's Dock Road and under the base of the Citizen's Dock, including placement of one-ton and light class riprap, "stepped" concrete slope protection, and aggregate base; (2) along Citizen's Dock Road including placement of one-ton and light class riprap, concrete slope protection, and aggregate base; and (3) near Whaler's Island including placement of two and one-ton rock slope protection, Type B geo-fabric, concrete key, and new asphalt pavement.

PROJECT LOCATION: At various locations within Crescent City Harbor, 101 Citizens Dock

Road, Crescent City (Del Norte County). APN 117-020-16.

LOCAL APPROVALS RECEIVED: None required.

OTHER APPROVALS REQUIRED: (1) U.S. Army Corps of Engineers Federal Clean Water Act (FCWA) *Section 404 Individual or Nationwide Permit*; (2) National Marine Fisheries Service Federal Endangered Species Act and Essential Fish Habitat *Technical Assistance or Biological Opinion Consultation*; and (3) Regional Water Quality Control Board FCWA §401 *Water Quality Certification*.

SUBSTANTIVE FILE
DOCUMENTS:

(1) Coastal Development Permit Application File No. 1-08-050 and (3) County of Del Norte LCP.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval with special conditions of the proposed *Crescent City Harbor Citizen's Dock Approach, Whalers Island, and Anchor Way Eroded Rock Slope Protection and Roadway Repair and Improvement Project*. The primary components of the proposed project include: (1) repairing damaged riprap and roadway asphalt paving near the end of Citizens Dock Road and beneath the base of Citizen's Dock through the placement of geo-fabric liner, one-ton and lighter class rock slope revetment materials, "stepped" concrete slope protection, and aggregate base; (2) repairing damaged riprap and parking area asphalt paving near the end of Citizens Dock Road through the placement of geo-fabric liner, one-ton and lighter class rock slope revetment materials and aggregate base; and (3) repairing damaged rock slope protection near Whaler's Island through the placement of geo-fabric liner, one- and two-ton revetment materials and asphalt pavement. The proposed rock slope upgrades and repairs would be conducted within the footprint of the existing revetment materials, with the new upgraded materials being placed at approximately the same slope as that of the existing materials, and within a newly excavated area extending back away from the harbor such that no encroachment into coastal waters would result.

The existing inner harbor rock slope protection consists primarily of "riprap" concrete construction debris. During the winter storm period of December 31, 2005 through January 3, 2006, high tides, two- to three-foot storm surges and 90 mile-per-hour winds caused overtopping and damage to the inner harbor revetment. Portions of the rock slope protection were damaged to the extent that the revetment integrity has been compromised, putting adjoining harbor improvements, including access roadways,

parking lots, docks, and launching ramps, in risk of damage should another severe storm occur.

The proposed repair and upgrade project would rehabilitate in-place the existing rock slope protection to restore its effectiveness and to strengthen its resiliency to wave attack. The project would repair the rock slope protection in its current horizontal configuration, extending the depth of the revetment into adjoining reclamation materials without expanding its historic fill prism further into harbor waters, upgrading the class of armoring materials to prevent future dislodging of the materials by storm surge. To avoid impacts to various sensitive fish and wildlife species, the breakwater repairs and upgrade construction would be undertaken during low tides for accessibility purposes and to minimize impacts to water quality. Equipment needed for the project includes a loader, excavator, and possibly a crane. Detailed project plans are included as Exhibit No. 5.

As the portion of the rock slope protection repair and upgrade project within the intertidal reach beneath Citizen's Dock will increase the depth and cross-sectional area of the revetment and replace the existing rock slope protection with stepped concrete slope protection, the Commission must evaluate the project as a "new" development rather than as purely a repair and maintenance project. Therefore, to approve this component of the project, the Commission must find that the proposed filing for an allowable purpose and consistent with the other limitations imposed by Coastal Act Sections 30230, 30231, and 30233. Staff believes that the proposed filling is permissible under Section 30233, subsections (a)(1) and (a)(3) of the Coastal Act for "*New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities,*" and "*In open coastal waters, other than wetlands, ... new or expanded boating facilities ... that provide public access and recreational opportunities.*" Furthermore, staff believes that there is no less environmentally damaging feasible alternative to the development as conditioned, as required by Section 30233(a). Moreover, staff believes that with the requirements of recommended Special Condition Nos. 1 through 5 to avoid significant adverse impacts on sensitive fish and wildlife species, water quality, and intertidal biological communities associated with work within the intertidal reach and general human activity in proximity to open waters the development will provide feasible mitigation to minimize adverse environmental effects as is also required by Section 30233(a). Special Condition Nos. 1 through 5 would require: (a) submittal and approval of final construction plans; (b) temporal limitations on performing the construction activities during low tide periods to avoid impacts to sensitive species; (c) adherence to various construction responsibilities to protect coastal resources; (d) submittal of a final sedimentation and runoff control plan; and (e) submittal of a hazardous materials management plan. Staff believes that with the inclusion of these special conditions, the proposed rehabilitation work is consistent with Coastal Act Sections 30230, 30231, 30232, and 30233. In addition, staff believes that the proposed rock slope protection repairs and upgrades, as conditioned, are consistent with Section 30233(c) of the Coastal Act, which directs that filling in existing estuaries and wetlands maintain or enhance the functional capacity of the wetland or estuary. With respect to the two other project

elements involving the replacement of damaged unengineered riprap revetment with engineered rock slope protection, the staff believe these portions of the project constitute repair and maintenance activities for which the method of repair may be found consistent with the Coastal Act provided their authorization is conditioned to include specified measures for minimizing and avoiding potential adverse impacts to sensitive marine biological resources and water quality. The requirements of Special Condition Nos. 1 through 5 as described above will ensure that such measures to minimize impacts will be incorporated into the development.

In conclusion, staff believes that the proposed project, as conditioned, is consistent with all applicable Chapter 3 policies of the Coastal Act. **The Motion to adopt the Staff Recommendation of Approval with Conditions is found below on page 4-5.**

STAFF NOTES:

1. Jurisdiction and Standard of Review

The site of the proposed boat mooring area revetment repair and upgrade project is within and adjacent to the semi-confined waters of the Crescent City Harbor, an embayment of the Pacific Ocean. The project is located in areas subject to the public trust within the Coastal Commission's area of original or retained jurisdiction. Therefore, the standard of review that the Commission must apply to the development is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

MOTION:

I move that the Commission approve Coastal Development Permit No. 1-08-050 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. Approval of the permit complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

II. STANDARD CONDITIONS: See Appendix A.

III. SPECIAL CONDITIONS:

1. Revised Design and Construction Plans

A. **PRIOR TO THE ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-050**, the applicant shall submit to the Executive Director for review and written approval final design and construction plans for the project which are consistent with the approved project narrative and preliminary site plans titled: (1) "Crescent City Harbor Citizens Dock Approach Erosion – Rock Slope Improvement Plan PW #438," dated April 10, 2008; (2) "Crescent City Harbor Citizens Dock Approach Erosion – Rock Slope Improvement Plan PW #965," dated August 25, 2009; and (3) "Crescent City Harbor Whaler Island Erosion – Rock Slope Improvement Plan PW #894," dated May 6, 2009, as prepared by Stover Engineering Civil Engineers and Consultants, attached as Exhibit No. 5, including site plans, foundation plans, structural plans, and material specifications, and consistent with the all special conditions of Coastal Development Permit No. 1-08-050, including Special Condition Nos. 3, 4, 5, 7, 8, 9 and 10.

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 site plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. Timing of Construction

Construction activities authorized by this permit, shall be conducted during periods of low-tides only and from above the water surface to the maximum extent feasible to minimize the generation of suspended sediment and potential water quality impacts.

3. Construction Responsibilities

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

- a. The repairs and upgrades to the rock slope protection shall be performed from land and shall be built out incrementally, with construction equipment working from the crest of the newly restored rock slope protection. No access path, whether temporary or permanent, shall be created in the tidelands, along the rock slope protection for construction purposes;
- b. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion. Construction materials shall be stored only in approved designated staging and stockpiling areas;
- c. Public roadway surfaces adjacent to the construction site entrances shall be swept at the end of each day to remove sediment and/or other construction materials deposited due to construction activities and prevent such sediment and/or materials from contaminating coastal waters or other environmentally sensitive habitat areas;
- d. Any and all debris resulting from construction activities shall be removed from the rock slope protection repair areas and adjacent beach areas on a daily basis and disposed of at an appropriate location(s);
- e. Any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas. Mobile fueling of construction equipment and vehicles on and around the construction site shall be prohibited. Mechanized heavy equipment and other vehicles used during the construction process shall not be stored or re-fueled within 50 feet of drainage courses and other coastal waters;
- f. Temporary staging and storage of construction machinery, equipment, debris, and other materials during the construction period shall occur at property owned by the Crescent City Harbor District adjacent to the Citizen's Dock and Whaler Island boat launch, and may not occur on the dock or adjacent beaches;
- g. Machinery and construction materials not essential for project improvements are prohibited at all times in the subtidal or intertidal zones;
- h. Construction vehicles shall be maintained and washed in confined areas specifically designed to control runoff and located more than 100 feet away from the mean high tide line;

- i. 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 the each day;
- j. During construction, all trash shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during rock slope protection rehabilitation activities. Following construction, all trash and construction debris shall be removed from work areas and disposed of properly;
- k. Fuels, lubricants, and solvents shall not be allowed to enter the coastal waters. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call; and
- l. At the end of the construction period, the permittee shall inspect the project area and ensure that no debris, trash, or construction materials remain on the beach, on the rock slope protection, or in the water, and that the project has not created any hazard to navigation.

4. Final Sedimentation & Stormwater Runoff Control Plan

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-050**, the applicant shall submit, for the review and written approval of the Executive Director, a final detailed Sedimentation & Stormwater Runoff Control Plan that addresses all phases of development and construction activities authorized under this coastal development permit.

- (1) The Sedimentation and Run-off Control Plan shall be consistent with the requirements of Special Condition No. 3 and the other conditions of this permit, and demonstrate that:
 - (a) Run-off from the project site shall not increase sedimentation in coastal waters;
 - (b) Run-off from the project site shall not result in pollutants entering coastal waters;
 - (c) Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters during the construction of the authorized structures, including, but not limited to, the use of relevant best management practices (BMPs) as detailed in the “California Storm Water Best Management Practice

Handbooks (Construction and Industrial/ Commercial), developed by Camp, Dresser, & McKee *et al.* for the Storm Water Quality Task Force (e.g., BMP Nos. EC-1–*Scheduling*, SE-1–*Silt Fence &/or SE-9–Straw Bale Barrier*, NS-9–*Vehicle & Equipment Fueling*, NS-10–*Vehicle & Equipment Maintenance & Repair*; NS-14–*Material Over Water*, NS-15–*Demolition Adjacent to Water*, WM-1–*Material Delivery & Storage*, WM-3–*Stockpile Management*, WM–*Spill Prevention & Control*, WM-6–*Hazardous Waste Management*, WM-9–*Concrete Waste Management*, SC-11–*Spill Prevention, Control, & Cleanup*, and others, as appropriate; see www.cabmphandbooks.com).

- (2) The Sedimentation and Run-off Control Plan shall include, at a minimum, the following components:
 - (a) A schedule for the installation and maintenance of appropriate construction source control best management practices (BMPs) to prevent entry of stormwater run-off into the construction site and the entrainment of excavated materials into run-off leaving the construction site; and
 - (b) A schedule for installation, use and maintenance of appropriate BMPs to prevent the entry of polluted stormwater run-off from the completed development into coastal waters.

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. Hazardous Materials Management Plan

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-050**, the applicant shall submit, for the review and written approval of the Executive Director, a plan to reduce impacts to water quality from the use and management of hazardous materials on the site. The plan shall address all phases of development and construction activities authorized under this coastal development permit and shall be consistent with the requirements of Special Condition No. 3 and the other conditions of this permit. The plan, at a minimum, shall provide for the following:

- (1) Equipment fueling shall occur only during daylight hours in designated fueling areas;

- (2) Oil absorbent booms and/or pads shall be on site at all times during project construction. All equipment used during construction shall be free of oil and fuel leaks at all times;
 - (3) Provisions for the handling, cleanup, and disposal of any hazardous or non-hazardous materials used during the construction project including, but not limited to, paint, asphalt, cement, equipment fuel and oil, and contaminated sediments;
 - (4) A schedule for maintenance of containment measures on a regular basis throughout the duration of the project;
 - (5) Provisions for the containment of rinsate from the cleaning of equipment and methods and locations for disposal off-site. Containment and handling shall be in upland areas and otherwise outside of any environmentally sensitive habitat areas;
 - (6) A site map detailing the location(s) for hazardous materials storage, equipment fueling and maintenance, and any concrete wash-out facilities; and
 - (7) Reporting protocols to the appropriate public and emergency services agencies in the event of a spill.
- (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.

6. Assumption of Risk

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

7. State Lands Commission Review

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT NO. 1-08-050, the applicant shall submit to the Executive Director a written determination from the State Lands Commission that:

- a. No State or public trust lands are involved in the development; or
- b. State or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or
- c. State or public trust lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the approved project as conditioned by the Commission to proceed without prejudice to that determination.

8. U.S. Army Corps of Engineers Approval

PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-08-050, the permittee shall provide to the Executive Director a copy of the permit, letter of modification, or other approval issued by the Army Corps of Engineers, or evidence that no permit or other approval is required. The applicant shall inform the Executive Director of any changes to the project required by the Corps. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

9. Final Biological Opinion

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-050, the applicant shall submit, for the review and approval of the Executive Director, a copy of the Final Biological Opinion, Letter of Concurrence, or Technical Assistance correspondence in support of the rock slope protection repairs and upgrades authorized by this permit as issued by the National Marine Fisheries Service. The permittee shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers as set forth in the biological opinion, concurrence letter or technical assistance consultation. Such changes shall not be incorporated into the project until the permittee obtain a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

10. Regional Water Quality Control Board Approval

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-050, the applicant shall provide to the Executive Director a copy of a Water Quality

Certification or other approval issued by the North Coast Regional Water Quality Control Board, or evidence that no approval is required. The applicant shall inform the Executive Director of any changes to the project required by the Regional Board. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS & DECLARATIONS

The Commission hereby finds and declares as follows:

A. Background.

On July 13, 1963, by Senate Bill No. 1383, the State of California transferred all rights, title, and interest to portions of the submerged and tidelands within Crescent City Harbor and surrounding ocean waters to the Crescent City Harbor District. In granting these ownership rights, the State Lands Commission (SLC) has retained authority over these former sovereign lands through both exempted and reserved rights to all deposits of minerals, and its public trust responsibilities under the state Constitution (see Exhibit No. 6).

The applicant harbor district has been involved in the management of the Crescent City Harbor facilities since the early 1960s when the district was first established. The Commission has issued numerous permits or permit waivers *de minimis* since the mid-1970s, to the applicant harbor district, primarily for repair and maintenance of the boat mooring facilities, construction or renovations to upland support facilities, harbor related visitor-serving facilities, and maintenance dredging and related sediment disposal/beach replenishment activities.

The subject rock slope protection structures comprise approximately 1,150-lineal-feet of the riprap revetment armor along the harbor's the Citizen's Dock Road and Anchor Way accessways, its small boat launching ramp and cove, and beneath the base of Citizen's Dock. The purpose of the existing rock slope protection is to protect the adjoining boat launching facilities, roadways, and pier launch from coastal erosion. The rock slope protection is oriented to protect the harbor from both northwest and south swells. The existing rock slope protection consists of local quarry stone and concrete construction debris. Over the roughly forty-five-year period, most of the larger class revetment materials have remained in place, although some minor settling has occurred. Smaller class materials used in the original rock slope protection construction have incrementally become displaced as a result of wave action.

However, during the winter storm period of December 31, 2005 through January 3, 2006, two- to three-foot storm surges in excess of typical high tide heights, driven by 90 mile-

per-hour winds, overtopped and significantly damaged the inner harbor rock slope protection. Portions of the unengineered construction debris riprap armor rock became dislodged and tumbled from various locations along the revetment. As a result of this direct wave attack and related undermining of the overlying revetment materials, the top of the rock slope protection sloughed off into the harbor waters, losing approximately two to four feet of height in places.

B. Project Setting and Description.

1. Project Setting

Crescent City Harbor is located approximately 20 miles south of the California-Oregon border in west-central Del Norte County (see Exhibit Nos. 1-4). The harbor lies on the seaward edge of the broad coastal plain that extends from South Beach to the south to the lower Smith River floodplain to the north. The harbor lies within a crescent-shaped bay, with Battery Point as the upcoast (western) limit and the rocky causeway connecting the former offshore Whaler Island, approximately one mile to the southeast as the downcoast (eastern) limit. A significant anadromous fish-bearing watercourse, Elk Creek, enters the harbor on its northeastern shoreline.

The relative location of this south-facing cove, situated between the Ports of Humboldt Bay and Brookings (Oregon), makes it an important “harbor of refuge” from the predominantly northwesterly winds and seas in the area. In addition, the constructed outer rock slope protections provide supplemental protection against westerly and southerly storms. Facilities within the bounds of the harbor include a boat basin, launch areas, a repair and fabrication boatyard, associated marina fueling, lift hoist, drayage, stevedore, waste disposal services, a recreational vehicle park, and other ancillary visitor accommodations and harbor-related services.

The rock slope protection materials are comprised of concrete construction debris “riprap.” These irregular polygonal structures sit at an elevation of mean sea level (msl) with a base-to-top width of about thirty feet, and tapering at a 1.4 (vertical) to 1 (horizontal) slope to a top height of +12 feet msl.

The surfaces of the rock slope protection materials support habitat for a diversity of marine algal, invertebrate, and fish species. Species diversity tends to be higher along the outer harbor portions of the rock slope protection compared to the more inner harbor locales. This decrease in biodiversity is believed to be decreased due to sand accumulation and the area’s relatively muted water circulation. Organisms on the inward side of the rock slope protection were characteristic of protected high intertidal areas. No species of concern were located during the inventory of project site portions of the harbor area conducted for the Harbor Master Plan (citation). Nonetheless, the harbor, in general, provides habitat to a variety of sensitive fish and wildlife species, including coho salmon and Steller sea lion.

B. Project Description

As a result of the 2005-06 storm damage, the inner harbor boat launching facilities, roadways and docks are now exposed to further risks of further damage and injury should another severe storm occur. The proposed project is to rehabilitate, in-place, the existing rock slope protection to restore its effectiveness as a harborage revetment. The project entails repairs and upgrades to harbor revetments at three locations:

Citizens Dock Approach: Rehabilitate a 229-lineal-foot segment of damaged unengineered riprap along the roadside of Citizen's Dock Road across from the harbor district's offices by installing a series of two-, one-, and ¼-ton rock over Class 2 aggregate base rock lined with a backing of geo-textile fabric, against a new concrete key, and repaving the roadside to match the new revetment.

Citizen's Dock Road Terminus: Rehabilitate a 115-lineal-foot segment of damaged unengineered riprap "bulb" at the foot of Citizen's Dock Road across from the harbor district's offices by installing a series of two-, one-, and ¼-ton rock over Class 2 aggregate base rock lined with a backing of geo-textile fabric. Place concrete grouting beneath the under-mined concrete foundation of an electrical utility vault building. Replace the existing mounded riprap beneath the base of Citizen's Dock with a series of steel bar-reinforced concrete step rock slope revetments over an epoxy affixed and dowel-set key rocks set a minimum of 18 inches below the scour line.

Whaler Island Boat Launch: Rehabilitate an approximately 940-lineal-foot perimeter of the boat launching cove and adjoining reaches of damaged unengineered riprap near the terminus of Anchor Way by installing a series of two-, one-, and ¼-ton rock over Class 2 aggregate base rock lined with a backing of geo-textile fabric, over a new embedded rock key, and repaving the adjacent roadside edge with asphaltic concrete to match the new revetment.

The project would repair the rock slope protection in essentially its current structural footprint, to provide a similar level of protection, and protected area as it did originally, prior to its current condition. The pre-eroded vertically projected building envelope of the rock slope protection is approximately 34,500 square-feet. The rehabilitated rock slope protection would occupy both the 30-foot-wide footprint of originally constructed structure as well as extend an additional roughly 30 feet into the adjoining reclaimed roadway and jetty materials to provide additional room for the installation of the larger class ½-, one-, and two-ton rock slope materials, geo-fabric liners, and four-inch-diameter backing class 2 rock. Only the depth of the toe key and the relative width of the revetment the rock slope protection would be increased with no corresponding increase in the area or extent of harbor bottom being covered by revetment materials. Similarly, the base of the Citizen's Dock would be upgraded with stepped cemented rock slope protection replace the existing mounded rubble riprap within its existing fill footprint. Detailed project plans are included as Exhibit No. 5.

C. Permit Authority, Extraordinary Methods of Repair & Maintenance.

Coastal Act Section 30610(d) generally exempts from Coastal Act permitting requirements the repair or maintenance of structures that does not result in an addition to, or enlargement or expansion of, the structure being repaired or maintained. However, the Commission retains authority to review certain extraordinary methods of repair and maintenance of existing structures that involve a risk of substantial adverse environmental impact as enumerated in Section 13252 of the Commission regulations. Section 30610 of the Coastal Act provides, in relevant part, the following:

Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas: . . .

(d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter. [Emphasis added.]

Section 13252 of the Commission administrative regulations (14 CCR 13000 *et seq.*) provides, in relevant part, the following:

(a) For purposes of Public Resources Code section 30610(d), the following extraordinary methods of repair and maintenance shall require a coastal development permit because they involve a risk of substantial adverse environmental impact:...

(3) Any repair or maintenance to facilities or structures or work located in an environmentally sensitive habitat area, any sand area, within 50 feet of the edge of a coastal bluff or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams that include:

(A) The placement or removal, whether temporary or permanent, of rip-rap, rocks, sand or other beach materials or any other forms of solid materials;

(B) The presence, whether temporary or permanent, of mechanized equipment or construction materials.

All repair and maintenance activities governed by the above provisions shall be subject to the permit regulations promulgated pursuant to the Coastal Act, including but not limited to the regulations governing administrative and emergency permits. The provisions of this section shall not be applicable to methods of repair and maintenance undertaken by the ports listed in Public

Resources Code section 30700 unless so provided elsewhere in these regulations. The provisions of this section shall not be applicable to those activities specifically described in the document entitled Repair, Maintenance and Utility Hookups, adopted by the Commission on September 5, 1978 unless a proposed activity will have a risk of substantial adverse impact on public access, environmentally sensitive habitat area, wetlands, or public views to the ocean.... . [Emphases added.]

The proposed project involves two primary components: (1) the rehabilitation of the existing rock slope protection in its existing building envelope with armor materials of the larger size and class at two separate locations within the harbor along and at the terminus of Citizen's Dock Road, and lining the Whaler Island boat launch and surrounding areas near the terminus of Anchor Way; and (2) improvements to the rock slope protection beneath the base of the Citizen's Dock structure, involving the replacement of existing mounded rubble riprap with stepped concrete rock slope protection. The portions of the overall proposed development involving rehabilitation of the existing rock slope protection along Citizen's Dock Road and at the Whaler Island boat launch cove constitute a repair and maintenance project, because they entail rehabilitating the existing rock slope protection to its original, previously configuration, without any resulting further encroachment into harbor waters or potential or actual expansion to the primary structures the revetments are protecting (i.e., boat launches, ramps, stillwater cove, and roadways).

The riprap revetment materials beneath the base of Citizen's Dock would be replaced with stepped concrete sea wall materials that will increase the depth and cross-sectional area of the revetment. As this latter component comprises an addition and enlargement of the revetment, the development is not merely a repair or maintenance project but constitutes "new development" which must be found consistent with all relevant policies of Chapter 3 of the Coastal Act.

Although certain types of repair projects are exempt from coastal development permitting requirements, Section 13252 of the Commission's administrative regulations requires that a coastal development permit be secured for extraordinary methods of repair and maintenance enumerated in the regulation. The proposed development repair and maintenance along Citizen's Dock Road and within and adjoining the boat launch cove at the end of Anchor Way involves the placement of construction materials and removal and placement of solid materials within the intertidal reach of coastal waters and directly within and adjacent to environmentally sensitive habitat. Therefore, the proposed project requires a coastal development permit under Section 13252(a)(3) of the Commission's regulations.

With regard to the former project component, in considering a permit application for a repair or maintenance project pursuant to the above-cited authority, the Commission

reviews whether the proposed *method* of repair or maintenance is consistent with the Chapter 3 policies of the Coastal Act. The Commission's evaluation of such repair and maintenance projects does not extend to an evaluation of the conformity with the Coastal Act of the underlying existing development.

The repair and maintenance component of the rock slope protection could have adverse impacts on coastal resources if not properly undertaken with appropriate mitigation. The applicant proposes to minimize impacts to coastal resources in part through: (1) setting tidal period limitations on the construction season to avoid periods of when sensitive fish and wild species are present in the proximity of the project site; (2) including various construction performance standards and best management practices to avoid sedimentation and other impacts to quality of coastal waters; and (3) conducting the project work consistent with a hazardous materials management plan addressing the transport, handling, and storage of fuels and other equipment fluids, emphasizing the prevention of releases to the ocean or beach, areas, and identifying accidental spill cleanup and disposal measures.

Although various measures proposed by the applicant to minimize adverse impacts to coastal resources are appropriate, additional measures are also needed to further avoid, as necessary, or minimize impacts to water quality, coastal waters, public access, and visual resources. The conditions required to meet this standard are discussed in the following findings sections.

D. Protection of Coastal Waters & Water Quality.

1. Applicable Coastal Act Policies and Standards

Section 30230 of the Coastal Act states the following:

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. [Emphasis added.]

Section 30231 of the Coastal Act states the following (emphasis added):

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. .
[Emphasis added.]

Section 30232 of the Coastal Act states the following:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containments and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233 of the Coastal Act states, in applicable 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 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 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...*

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...[Emphasis added.]

2. Consistency Analysis

Coastal Act Sections 30230 and 30231 require, in part, that marine resources and coastal waters and wetlands be maintained and enhanced. These policies also call for restoration of marine resources, coastal waters, streams, wetlands, and estuaries where feasible. Additionally, Section 30230 calls for special protection to be given to areas and species of special biological significance. Coastal Act Section 30232 requires protection against the spillage of crude oil, gas, petroleum products and hazardous substances and requires that effective containments and cleanup procedures be provided for accidental spills that do occur.

As mentioned above in Findings Section IV.B.1 *Project Setting* above, the waters of Crescent City Harbor together with those of the interconnecting Elk Creek drainage are biologically significant as they provide spawning and feeding habitat to a variety of salmonid species, including coho salmon, steelhead, and coastal cutthroat trout. Moreover, the proposed rock slope protection repairs and upgrades will involve the use of mechanized equipment and sediment containing building materials in close proximity to open coastal waters. As discussed in the preceding findings section, the proposed project involves two primary components: (1) the rehabilitation of the existing rock slope protection at two locations, including along Citizen's Dock Road and within and adjoining the boat launching cove near the end of Anchor Way to replace dislodged and other wise lost revetment materials in their original configuration with materials of greater size and engineering competence; and (2) upgrading the riprap beneath the base of Citizen's Dock with revetment materials of a different type. The Commission evaluates the first project component under the "repair and maintenance" provisions described above in Findings Section IV.C, where the Commission reviews whether the proposed method of repair or maintenance is consistent with the Chapter 3 policies of the Coastal Act (see subsection a. below). The Commission evaluates the second project component as "new" development, where for analysis purposes, the Commission must find that the proposed filling within the intertidal zone for the third project element is allowable under the limitations imposed by Coastal Act Sections 30230, 30231, and 30233, as explained in more detail below in subsection (b).

a. Rehabilitation of the Existing Rock Slope Protection

The rock slope protection rehabilitation work involves placing rock within and adjacent to coastal waters with the use of heavy equipment. The use of construction equipment and materials within sensitive marine and beach habitats could lead to habitat contamination and impacts through the discharge of debris, trash, and contaminants such as leaky gas and other fluids and sediment- and other pollutant-laden runoff. Allowing such debris or pollutants to enter the ocean could adversely affect water quality and marine organisms inconsistent with Coastal Act Sections 30230, 30231, and 30232.

As summarized above, Coastal Act Section 30231 protects the quality of coastal waters, streams, and wetlands through, among other means, controlling runoff. Sediment-laden runoff from a project work site, upon entering coastal waters, increases turbidity and

adversely affects fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. Moreover, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles.

In addition, as discussed above, Coastal Act Section 30232 requires protection against the spillage of crude oil, gas, petroleum products and hazardous substances and requires that effective containments and cleanup procedures be provided for accidental spills that do occur. The applicant has indicated that they intend to prepare a hazardous materials management plan to address the transport, handling, and storage of fuels and other equipment fluids, with emphasis on preventing releases to the ocean or beach, and to address spill prevention, cleanup, and disposal. To date, however, no such plan has been prepared.

Given that the proposed construction methods and activities: (1) will be located within and adjacent to coastal waters and beaches and thus could cause an increase in sediment and other pollutants entering coastal waters and other sensitive habitats through either the release of polluted runoff from the project site and/or leaky equipment contaminating coastal waters and beaches; and (2) are located within a area of special biological significance, which warrants “special protection” under Coastal Act Section 30230, the Commission finds it necessary to attach Special Condition Nos. 2 through 5, as described below.

- **Special Condition No. 2** in part requires that all construction activities within coastal waters authorized under the permit shall be conducted during periods of low-tides only to minimize suspended sediment and potential water quality impacts.
- **Special Condition No. 3** requires adherence to various construction responsibilities including, but not limited to, the following: (a) construction methods shall conform to those described in Findings Section IV.B.2 “Project Description,” specifically, the rock slope protection rehabilitation shall be conducted from land and shall be built out incrementally, with construction equipment working from the crest of the newly restored rock slope protection (which will allow marine organisms inhabiting the existing rock slope protection to continue to have habitat available in areas of the rock slope protection not being worked on); (b) no construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion; (c) public roadway surfaces adjacent to the construction entrances shall be swept at the end of each day to remove sediment and/or other construction materials deposited due to construction activities, to prevent such sediment and/or materials from contaminating coastal waters or other

environmentally sensitive habitat areas; (d) any and all debris resulting from construction activities shall be removed from the rock slope protection and adjacent beach areas on a daily basis and disposed of at an appropriate location(s); (e) any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas, mobile fueling of construction equipment and vehicles on and around the rock slope protection construction site shall be prohibited, and mechanized heavy equipment and other vehicles used during the construction process shall not be stored or re-fueled within 50 feet of drainage courses and other coastal waters; (f) construction vehicles shall be maintained and washed in confined areas specifically designed to control runoff and located more than 100 feet away from the mean high tide line; (g) 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 the each day; (h) during construction, all trash shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during restoration activities; (i) hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call; and (j) at the end of the construction period, the permittee shall inspect the project area and ensure that no debris, trash, or construction material remain on the beach, rock slope protection, or in the water.

- **Special Condition No. 4** requires submittal of a final Sedimentation and Runoff Control Plan, which shall demonstrate that: (a) run-off from the project site shall not increase sedimentation in coastal waters; (b) run-off from the project site shall not result in pollutants entering coastal waters; and (c) Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters during the construction of the authorized structures.
- **Special Condition No. 5** requires submittal of a final Hazardous Materials Management Plan, which, at a minimum, shall provide for the following (a) equipment fueling shall occur only during daylight hours in designated fueling areas; (b) oil absorbent booms and/or pads shall be on site at all times during project construction, and all equipment used during construction shall be free of oil and fuel leaks at all times; (c) provisions for the handling, cleanup, and disposal of any hazardous or non-hazardous materials used during the construction project including, but not limited to, paint, asphalt, cement, equipment fuel and oil, and contaminated sediments; (d) a schedule for maintenance of containment measures on a regular basis throughout the duration of the project; (e) provisions for the containment of rinsate from the cleaning of equipment and methods and locations for disposal off-site; (f) a site map detailing the location(s) for hazardous materials storage, equipment fueling and

maintenance, and any concrete wash-out facilities; and (g) reporting protocols to the appropriate public and emergency services agencies in the event of a spill.

A possible alternative to fortifying the rock slope protection in these areas would involve replacing the riprap with a solid seawall, either through installing pre-fabricated caisson panels over the riprap surface, paving the structure with “shotcrete,” Gunitite®, or other similar affixing aggregate materials, or driving inter-locking sheetpile along the breakwater’s interior. However, the installation of materials to convert the rock slope protection into a seawall would require far more intensive over-water construction activities, including the use of caustic concreting materials in even closer proximity to open ocean waters. Installation of sheet pile, and any associated demolition of all or part of the breakwater, especially the impact driving or “jetting” of the piles, would have greater potential impacts to sensitive biological resources such as coho salmon, from underwater noise and sedimentation. Therefore, the Commission finds that the alternative of converting the existing rubble-mounded rock slope protection into a unified seawall to strengthen it against wave assault is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

In conclusion, the Commission finds that as conditioned to require: (1) adherence to various construction responsibilities to protect coastal resources; and (2) submittal of a final sedimentation and runoff control plan, hazardous materials management plan, the proposed rock slope protection rehabilitation along Citizen’s Dock Road and within and adjoining the boat launch cove near the terminus of Anchor Way as conditioned involves the least environmentally damaging feasible alternative, provides feasible mitigation to minimize all adverse environmental effects, and is consistent with Coastal Act Sections 30230, 30231, 30232, and 30233.

b. Upgrading Existing Rock Slope Protection Beneath Citizen’s Dock Abutment

The project also proposes to augment the resiliency and protective capabilities of the existing rock slope protection beneath the base of Citizen’s Dock by replacing the existing mounded riprap materials with a series of concrete steps that will increase the depth and cross-sectional area of the revetment. Therefore, the Commission finds that the proposed project comprises an addition and enlargement of the revetment and the development is not merely a repair or maintenance project but entails new development involving the filling within coastal waters.

When read together as a suite of policy directives, Sections 30230, 30231, and 30233 of the Coastal Act set forth a number of different limitations on what types of projects may be allowed in coastal wetlands and waters. For analysis purposes, the limitations applicable to the subject project can be grouped into four general categories or tests. These tests require that projects that entail the dredging, diking, or filling of wetlands and waters demonstrate that:

- The purpose of the filling, diking, or dredging is for one of the seven uses allowed under Section 30233;
- The project has no feasible less environmentally damaging alternative;
- Feasible mitigation measures have been provided to minimize adverse environmental effects; and
- The biological productivity and functional capacity of the habitat shall be maintained and enhanced, where feasible.

Each category is discussed separately below.

Permissible Use for Dredging and Filling in Coastal Waters

The first test set forth above is that any proposed filling, diking, or dredging in coastal waters and wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act. The relevant categories of uses listed under Section 30233(a) that relates to the proposed revetment improvements are subsection (1) involving new or expanded port facilities, including commercial fishing facilities, and subsection (3) in open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities that provide public access and recreational opportunities.

As discussed previously, boating facilities at Crescent City include, among other things, the rock slope protection, which was constructed to create a harbor for boaters to moor, launch, and retrieve both commercial and sports fishing vessels and recreational watercraft. Under the rock slope protection's current deteriorated condition, storm surges, especially those corresponding with high tides, can now overtop the rock slope protection to strike the dock abutment. Once the rock slope protection is augmented as proposed, exposure of persons and property to potentially injury and damage from wave attack will be lessened.

As the applicant proposes to undertake these improvements to the rock slope protection for the purpose of improving the safety and longevity of commercial fishing and recreational boat mooring, loading and launching operations, the Commission concludes that the proposed project is permissible under Section 30233(a) subsection (1) for development of new or expanded port facilities, including commercial fishing facilities, and subsection (3) for new or expanded boating facilities in open coastal waters, other than wetlands, including streams, estuaries, and lakes, that provide public access and recreational opportunities.

Least Environmentally Damaging Feasible Alternative

The second test set forth by the Commission's dredging and fill policies is that the proposed fill project must have no feasible less environmentally damaging alternative. Coastal Act Section 30108 defines "feasible" as follows:

“Feasible” means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.

Alternatives to the proposed project that were examined include (1) the “no-project” alternative; and (2) alternative designs to provide greater protection from storm surge impacts to, and strengthening the structural integrity of, the Citizen’s Dock abutment. As explained below, the alternatives analyzed are infeasible and/or do not result in a project that is less environmentally damaging than the proposed project:

“No-Project” Alternative

The “no project” alternative would entail that no upgrade to the height and competency of the rock slope protection be undertaken. Although the less than significant impacts to intertidal wetlands habitat from the proposed rock fill would be avoided, with no such improvements, the harbor’s primary pier and off-loading dock facility would remain vulnerable to damage from wave strike and eventually damaged to the point that it no longer could be used for commercial and sports fishing vessels or recreational boating. The dock would likely be forced to close, and the mariners who currently use the site would be significantly inconvenienced by being required to fully moor their vessels before loading or off-loading their catches and cargo. As discussed above, Crescent City Harbor has been used for commercial and recreational fishing for decades, and it provides the only harbor of refuge from the common northwesterly winds and seas between Brookings in southern Oregon and Trinidad Bay in Humboldt County. As discussed previously, commercial fishing and recreational boating are given high priority under the Coastal Act, and the Coastal Act policies call for the protection of these uses and the facilities needed to continue these uses. Therefore, the Commission finds that the no project alternative is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Alternative Rock Slope Protection Enhancement Designs

Another alternative to fortifying the rock slope protection beneath the base of Citizen’s Dock would involve replacing the riprap with a solid seawall, either through installing pre-fabricated caisson panels over the riprap surface, paving the structure with “shotcrete,” Gunitite®, or other similar affixing aggregate materials, or driving interlocking sheetpile along the breakwater’s interior. However, the installation of materials to convert the rock slope protection into a seawall would require far more intensive over-water construction activities, including the use of caustic concreting materials in even closer proximity to open ocean waters, for which the use of coffer damming and/or barge operations necessitating closing portions of Citizen’s Dock. Similarly, in addition to requiring closure of the dock facility, installation of sheet pile, and any associated demolition of all or part of the breakwater, especially the impact driving or “jetting” of the piles, would have greater potential impacts to sensitive biological resources such as coho salmon, from underwater noise and sedimentation. Therefore, the Commission

finds that the alternative of converting the existing rubble-mounded rock slope protection beneath the dock abutment into a unified seawall to strengthen it against wave assault is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Conclusion

For all of the reasons discussed above the Commission finds that there is no less environmentally damaging feasible alternative to the development as conditioned, as required by Section 30233(a).

Feasible Mitigation Measures

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. The proposed development would be located within and around coastal waters and wetlands. Depending on the manner in which the proposed filling is conducted, the significant adverse impacts of the project may include: (1) effects on sensitive fish and wildlife species; and (2) water quality impacts from the placement of sediment containing materials in and/or undertaking construction involving the use of hazardous materials in close proximity to coastal waters. The potential impacts and their mitigation are discussed below.

Effects on Sensitive Fish and Wildlife Species

The project could have potential effects on endangered and threatened marine species including coho salmon (*Oncorhynchus kisutch*) and Steller Sea lions (*Eumetopias jubatus*). Coho pass seasonally through the harbor as they make their migration to and from spawning grounds within the Elk Creek drainage. In addition, marine mammals often utilize harbor sites as haul-outs and for feeding.

To ensure that the proposed rock slope protection repairs and enhancements are similarly carried out in a manner that will not cause significant adverse impacts to sensitive fish and wildlife species or habitat, the Commission attaches **Special Condition Nos. 1, 2, and 3**. As described above, these conditions requires that final revised plans for the development incorporate all impact minimizing mitigation measures identified in any permit, biological opinion, letter of concurrence, or water quality certification as may be issued for the project by either the U.S. Army Corps of Engineers, the National Marine Fisheries Service, or the North Coast Regional Water Quality Control Board, that the construction activities be conducted only during low tide periods, and the development be constructed in conformance with various performance standards to protect sensitive fish species, aquatic habitat, and minimize the generation of suspended sediment and associated water quality impacts.

Water Quality Impacts

The proposed rock slope protection repairs and upgrades could adversely affect water quality through increases in turbidity both during and after project activities. These effects will be temporary and short term in nature and are expected to quickly dissipate in the area following construction activities. As previously discussed, the Commission attaches various conditions to minimize significant adverse effects on water quality. These include the following: **Special Condition Nos. 2 and 3** in part limits the construction window for the work on the rock slope protection to dry season periods of the year and during low tides only, above the water surface, which will help minimize water quality impacts. **Special Condition No. 3** also requires adherence to various construction protocols including, but not limited to, no construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion. **Special Condition No. 4** requires submittal of a final Sedimentation and Runoff Control Plan that addresses all phases of development and construction activities authorized under this coastal development permit. **Special Condition No. 5** requires submittal of a final Hazardous Materials Management Plan to reduce impacts to water quality from the use and management of hazardous materials on the site (including, but not limited to, equipment fuels and contaminated sediments that could result from the proposed construction activities.

Conclusion

The Commission finds that as conditioned, feasible mitigation measures have been provided to minimize adverse environmental effects consistent with Section 30233(a) of the Coastal Act. In addition, the Commission finds that as conditioned to require: (1) adherence to various construction responsibilities to protect coastal resources; and (2) submittal of a final sedimentation and runoff control plan, hazardous materials management plan, the proposed development is consistent with Coastal Act Sections 30230, 30231, and 30232.

Maintenance & Enhancement of Biological Productivity & Functional Capacity

The fourth general limitation set by Sections 30230, 30231, and 30233 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed above, the conditions of the permit will ensure that the project will not have significant adverse impacts on the water quality of any of the coastal waters in the project area and will ensure that the project construction will not adversely affect the biological productivity and functional capacity coastal waters or wetlands. Therefore, the Commission finds that the project, as conditioned, will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Sections 30230, 30231, and 30233 of the Coastal Act.

E. Protection of Commercial Fishing & Recreational Boating Facilities.

1. Applicable Coastal Act Policies and Standards

Section 30224 of the Coastal Act states:

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.
[Emphases added.]

Section 30234 of the Coastal Act states, in applicable part:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded... [Emphasis added.]

2. Consistency Analysis

Crescent City Harbor has long been used as a launch site for commercial and recreational fishermen, and provides the only harbor of refuge from the common northwesterly winds and seas between Brookings Oregon and Trinidad Bay in Humboldt County, as discussed above. As discussed above in Findings Section IV.A, the Crescent City Harbor Citizen's Dock and boat launching facilities, which has been managed by the applicant since the early 1960s, includes a marina access road, boat slips, parking and work areas, utilities, and the rock slope protection itself. Prior to the Harbor District's involvement, the boat mooring and launch area had been used by local commercial and sport fishermen and maintained on an ad hoc informal basis by a consortium of commercial fishing interests and other community members. In addition to Citizen's Dock, several other wooden piers were originally in place along the northern side of the harbor.

The roadside rock slope protection's effectiveness at protecting the facilities has been reduced over time due to the settling of rocks and loss of materials associated with significant storms. As a result, the rock slope protection in its eroded condition is currently subject to being overtopped by waves. To minimize conflicts with biological resources, the proposed in-water construction activities have been conditioned to occur only low tide periods. Commercial and sports fishing is most common during late spring through mid-fall, and again in late fall through winter during the crab season. Although the project work would overlap with the boating season, any interference with access to the boat launching area and docking facilities would occur during the construction season

would be limited to the rock slope protection itself and a portion of the adjoining parking areas slated for use as staging areas. Given the current reduced level of commercial and sports fishing activity within the harbor as compared to the past, there are numerous alternative launching, docking, parking and work areas in proximity to the boat launch and Citizen's Dock that can be used during the rock slope protection construction period without interfering with commercial and sports fishing activities. Thus, the Commission finds that this impact is short-term and temporary, and the rehabilitation of the rock slope protection will improve boating access and safety over the long-term. In addition, as previously discussed, the Commission attaches **Special Condition No. 3** requires that at the end of the construction period, the permittee shall inspect the project area and ensure, in part, that the project has not created any hazard to navigation.

Therefore, the Commission finds that the project as conditioned will protect and improve the existing boat launching facility that serves commercial fisheries and recreational boating, consistent with Coastal Act Sections 30224 and 30234.

F. Protection of Visual Resources.

1. Applicable Coastal Act Policies and Standards:

Section 30251 of the Coastal Act states, in applicable part, the following:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas...shall be subordinate to the character of its setting.

2. Consistency Analysis:

Section 30251 of the Coastal Act requires that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance, and requires in applicable part that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, and to be visually compatible with the character of surrounding areas. Furthermore, Section 30240(b) of the Coastal Act states that development in areas adjacent to parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those recreation areas.

The project area is not located within a designated highly scenic area. Additionally, the project will not result in the alteration of natural landforms and will require only a minimal amount of grading. Similarly, the proposed repairs and modifications to the rock slope protection would be compatible with the character of the surroundings in that they would approximate the size, bulk, and outward appearance of other revetment structures throughout the harbor. However, the proposed development does include increasing the depth of the rock slope protection formerly approved from approximately 15 feet to 30 feet and replacing rubble-mounded rip rap with stepped concrete revetment beneath the Citizen's Dock abutment. However, this increase to the cross-sectional area and type of revetment would occur at and below grade on previously filled, reclaimed harbor lands. Therefore, the Commission finds that the proposed project is consistent with the visual resource policies of Section 30251 of the Coastal Act, as the project is compatible with the visual character of the surrounding area, will not result in the alteration of natural landforms, and will not result in blockage of views to and along the coast.

G. Geologic Hazards & Shoreline Structures.

1. Applicable Coastal Act Policies and Standards:

Section 30253 of the Coastal Act states, in applicable part:

New development shall do all of the following:

- (a) *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (b) *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...*

2. Consistency Analysis

In developing the design for the revetment repairs and upgrades, the applicant's consulting engineer and the project funding agency utilized established contemporary (2006 edition) construction standards and material specifications for slope protection structures and concrete paving as set forth by the California Department of Transportation. These professional engineer and construction industry vetted standards and specifications are required to be utilized in all state-contracted work, including shoreline and roadway revetments such as those found within Crescent City Harbor.

Nonetheless, due to the uncertain nature and inherent risk associated with the construction of improvements in high energy coastal environments, the Commission attaches Special Condition No. 6. **Special Condition No. 6** requires the applicant to

assume the risks of extraordinary erosion and flood hazards of the breakwater area and waive any claim of liability on the part of the Commission. Given that the applicant has chosen to implement the project despite these risks, the applicant must assume the risks. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for the development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards.

Therefore, the Commission finds that as conditioned, the project will minimize risks to life and property from geologic and flood hazards, will assure stability and structural integrity, and will neither create nor contribute significantly to erosion, geologic instability, or erosion of the site or surrounding area consistent with the requirements of Section 30253 of the Coastal Act.

H. Public Trust Lands.

The project site is located in an area subject to the public trust. Therefore, to ensure that the applicant has the necessary authority to undertake all aspects of the project on these public lands, the Commission attaches Special Condition No. 7. **Special Condition No. 7** requires that the project be reviewed and where necessary approved by the State Lands Commission prior to the issuance of a permit.

I. Other Agency Approvals.

Portions of the project require review and approval by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Federal Clean Water Act (FCWA) (PL 95-217), specifically, the replacement of the rock slope protection within “waters of the United States” at and below the elevation of Mean High High Water (MHHW). Alternately, the proposed rock slope protection repairs and upgrades may qualify for issuance of one of the USACE’s established “nationwide permits” for minor classes of development determined to have minimal impacts to water quality and navigable waters. As part of the USACE’s permit process, the applicant may be required to undergo formal Federal Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). In addition, pursuant to FCWA Section 401, the North Coast Regional Water Quality Control Board must certify that the project is consistent with all water quality protections of applicable federal and state law. In addition, pursuant to the Federal Coastal Zone Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the U.S. Army Corps of Engineers, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit.

To ensure that the project ultimately approved by the Corps in consultation with the USFWS and the NMFS as may be applicable, is the same as the project authorized herein, the Commission attaches Special Condition Nos. 8, 9, and 10. **Special Condition Nos. 8, 9, and 10** require the applicant to submit to the Executive Director evidence of the USACE's approval of the project, the results of the biological consultations, and the certification of water quality prior to the commencement of construction and prior to the issuance of the permit, respectively. The condition require that any project changes resulting from these agency's approval not be incorporated into the project until the applicant obtains any necessary amendments to this coastal development permit.

J. Public Recreation and Access.

Coastal Act Section 30604(c) requires that every coastal development permit issued for new development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and recreation policies of [Coastal Act] Chapter 3." The proposed project is located seaward of the first through public road.

Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. In particular:

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. [PRC §30210]

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. [PRC §30211]

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects... [PRC §30212(a)]

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. [PRC §30213]

The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case... [PRC §30214 (a)]

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area. [PRC § 30221]

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, [...] providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land. [PRC §30224]

Likewise, Coastal Act Section 30240 (b) also requires that development not interfere with recreational areas and states:

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Crescent City Harbor provides public access and recreational opportunities of regional and statewide significance. These opportunities include boat launching, berthing for commercial vessels and recreational boats, boat repair areas, marine-related retail/commercial businesses, sailing programs, yacht club and boat sales. The District's rock slope protection repair, maintenance, and upgrade project would strongly benefit public access and recreation, in two ways: (1) by restoring and providing enhanced protection from coastal flooding and erosion storm surge to the harbor's docking, boat launching; and access roadway facilities; and (2) by including resurfacing improvements to the top of the renovated revetments that will increase the safety and utility of the area for public use.

Thus, the Commission concludes that the project as conditioned would protect public harbor access, and boating and beach recreational opportunities consistent with Coastal Act Sections 30210, 30213, 30220, 30224, 30234 and 30234.5. Therefore, the Commission finds that, as conditioned, the proposed project is consistent with the public access and recreational policies of the Coastal Act.

K. California Environmental Quality Act (CEQA).

The County of Del Norte served as the lead agency for the project for CEQA purposes. The County found the subject rock slope protection repairs and upgrades qualified for "Class 1" and "2" categorical exemptions to environmental review, pursuant to Sections 15301 and 15302 of the CEQA Guidelines (14 CCR §§15000) as repair, maintenance, replacement, and/or reconstruction of existing structures.

Section 13906 of the California Code of Regulation requires Coastal Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Public Resources Code 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 significantly lessen any significant effect that the activity may have on the environment.

The Commission incorporates its findings on conformity with Coastal Act policies at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein in the findings addressing the consistency of the proposed project with the Coastal Act, the proposed project has been conditioned in order to be found consistent with the policies of the Coastal Act. As specifically discussed in these above findings which are hereby incorporated by reference, mitigation measures which will minimize all adverse environmental impact have been required. These required mitigation measures include requirements that limit construction activities to avoid environmentally sensitive habitat areas and/or periods of time when the presence of migratory fish and waterfowl, and marine mammals could lead be significantly impacted. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

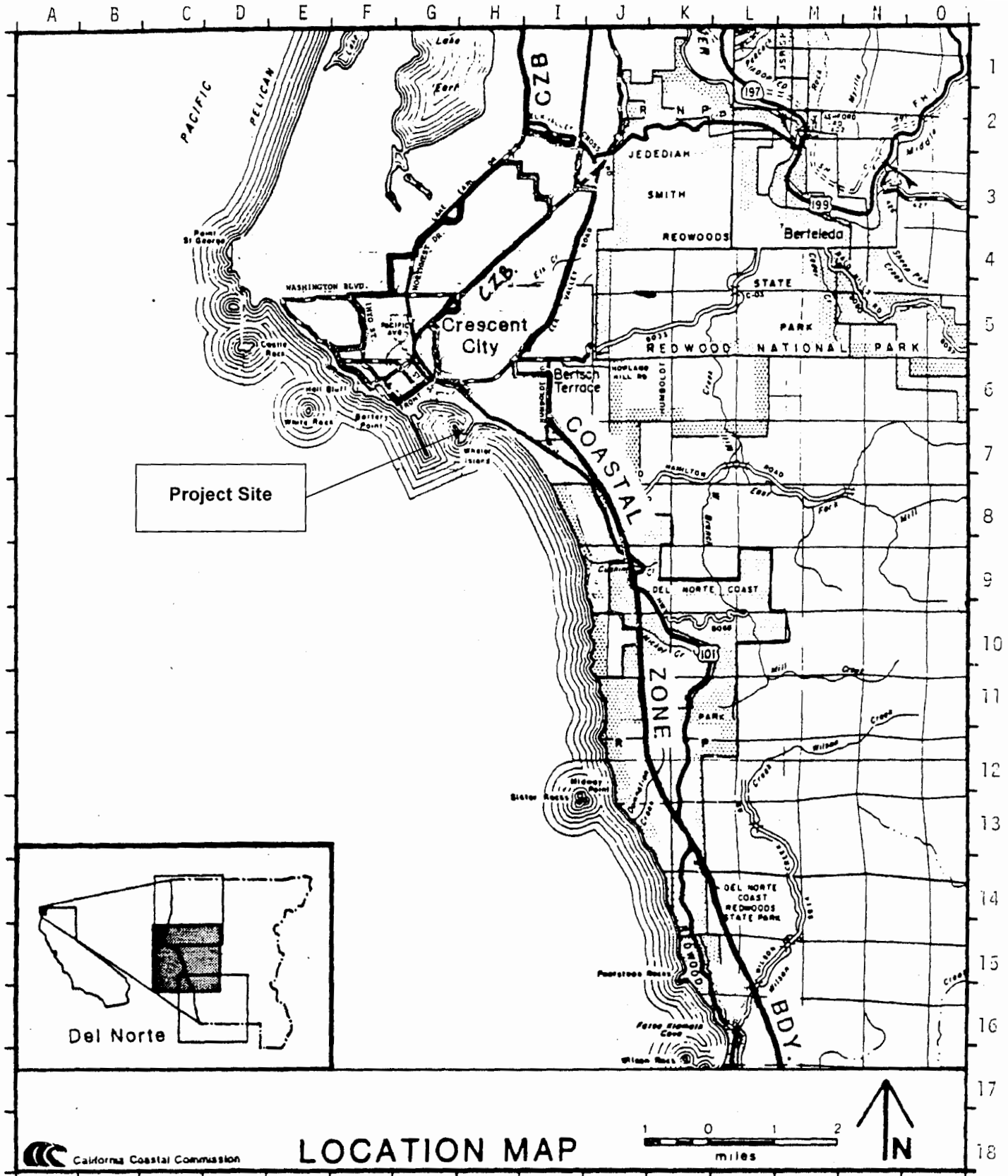
V. EXHIBITS

1. Regional Location Map
 2. Vicinity Topographic Map
 3. Site Plan Aerial Photo
 4. Oblique Aerial Photo
 5. Project Site Plan
-

APPENDIX A

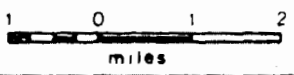
STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent of 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.



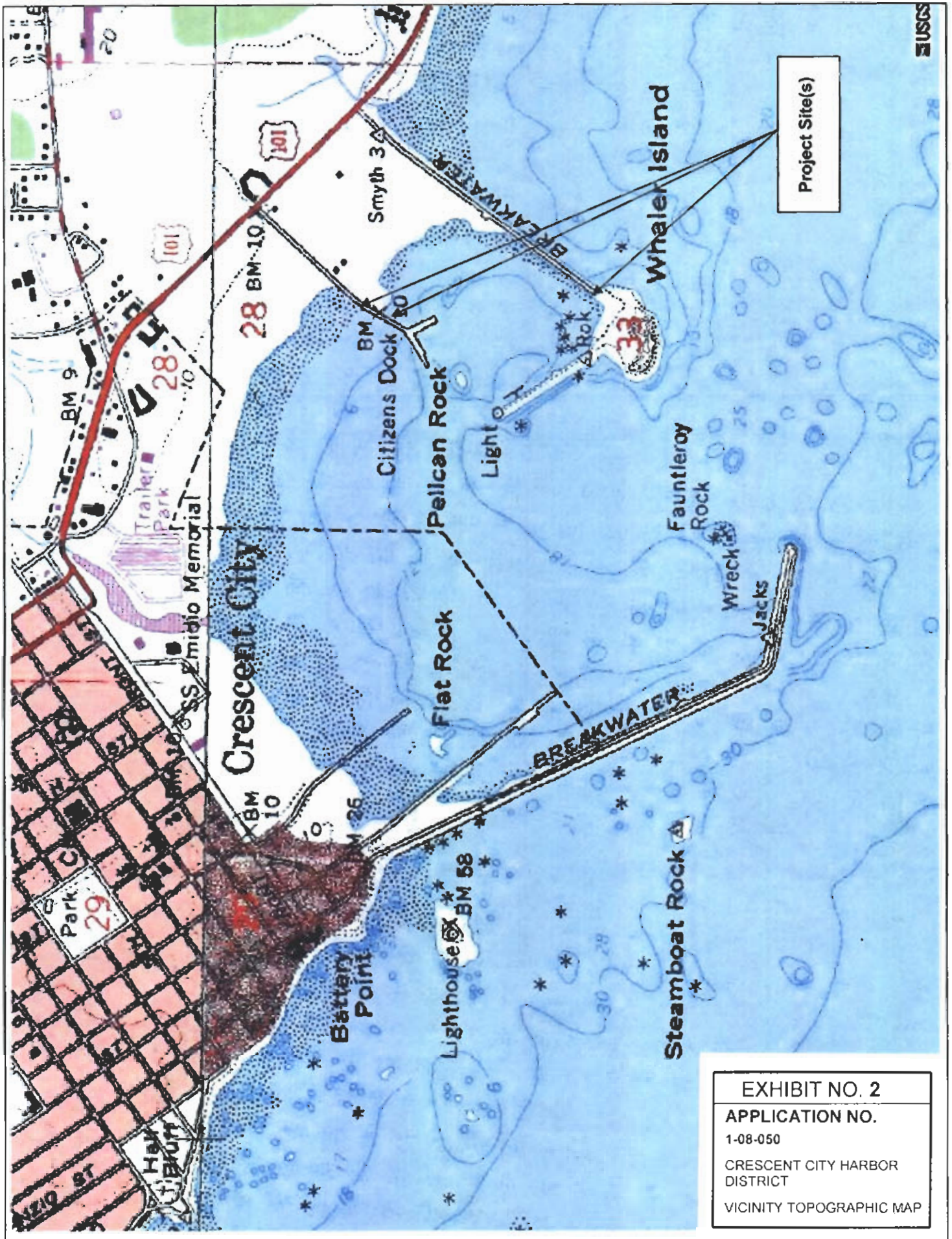
California Coastal Commission

LOCATION MAP



County of Del Norte

EXHIBIT NO. 1
APPLICATION NO.
 1-08-050
 CRESCENT CITY HARBOR
 DISTRICT
 REGIONAL LOCATION MAP





Project Sites

EXHIBIT NO. 3
APPLICATION NO.
1-08-050
CRESCENT CITY HARBOR
DISTRICT
SITE PLAN AERIAL PHOTO



Project Sites

EXHIBIT NO. 4
APPLICATION NO.
1-08-050
CRESCENT CITY HARBOR
DISTRICT
OBLIQUE AERIAL PHOTO

NO.	DATE	BY	DESCRIPTION
1	01/10/08	STOVER	DESIGNED BRIDGE DRAWING FOR SLOPE PROTECTION
2	01/10/08	STOVER	ADJUST SLOPE TO MEET DESIGN REQUIREMENTS



STOVER ENGINEERING
 Civil Engineers and Consultants
 PO BOX 783 711 H STREET
 CRESCENT CITY, CA 95531 - 707-465-6742

CRESCENT CITY HARBOR DISTRICT
 CITIZENS DOCK APPROACH EROSION
 ROCK SLOPE IMPROVEMENT PLAN

JOB NO. 3822
 SCALE: ON DWG
 DATE: 01/10/08
 SHEET: 1 OF 1



VICINITY MAP

1861-2001 TYPICAL EROSION
 BASIS OF ELEVATION
 IN FEET ABOVE SEA LEVEL

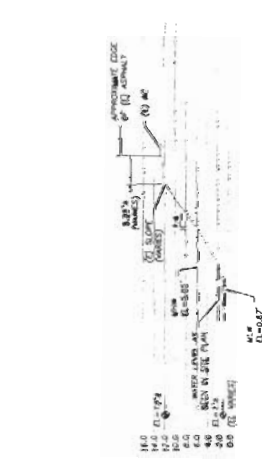
ELEV.	DESCRIPTION
18.0	1861-2001 TYPICAL EROSION
17.0	TOP OF ROAD
16.0	TOP OF BANK
15.0	TOP OF SLOPE
14.0	TOP OF ROCK PROTECTION
13.0	TOP OF CONCRETE
12.0	TOP OF SAND
11.0	TOP OF GRAVEL
10.0	TOP OF SAND
9.0	TOP OF GRAVEL
8.0	TOP OF SAND
7.0	TOP OF GRAVEL
6.0	TOP OF SAND
5.0	TOP OF GRAVEL
4.0	TOP OF SAND
3.0	TOP OF GRAVEL
2.0	TOP OF SAND
1.0	TOP OF GRAVEL
0.0	SEA LEVEL

GENERAL NOTES

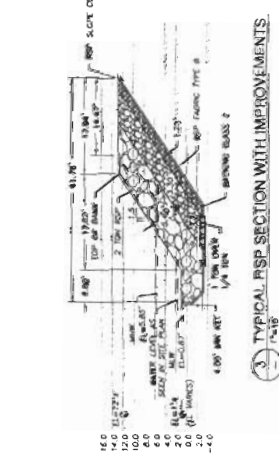
1. THE PROVISIONS SHALL BE SUBJECT TO THE REQUIREMENTS OF THE CALIFORNIA STATE ENGINEERING BOARD (CSEB) AND THE CALIFORNIA REGISTERED PROFESSIONAL ENGINEERS (RPE) ACT.
2. ROCK PROTECTION SHALL BE INSTALLED TO A MINIMUM OF 27" ABOVE AND EXTENDING 18" BELOW THE FINISH GRADE.
3. CONCRETE FOR ROCK SLOPE PROTECTION SHALL BE 3000 PSI STRENGTH CONCRETE WITH A MINIMUM OF 4% STEEL REINFORCEMENT.
4. UNDERSTANDING NOTE: DATA PERTAINING TO EXISTING UNDERMINING SHALL BE PROVIDED TO THE CONTRACTOR FOR REVIEW AND VERIFICATION. ALL UNDERMINING SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES DURING CONSTRUCTION.

DATA DISTRIBUTION LIABILITY STATEMENT:

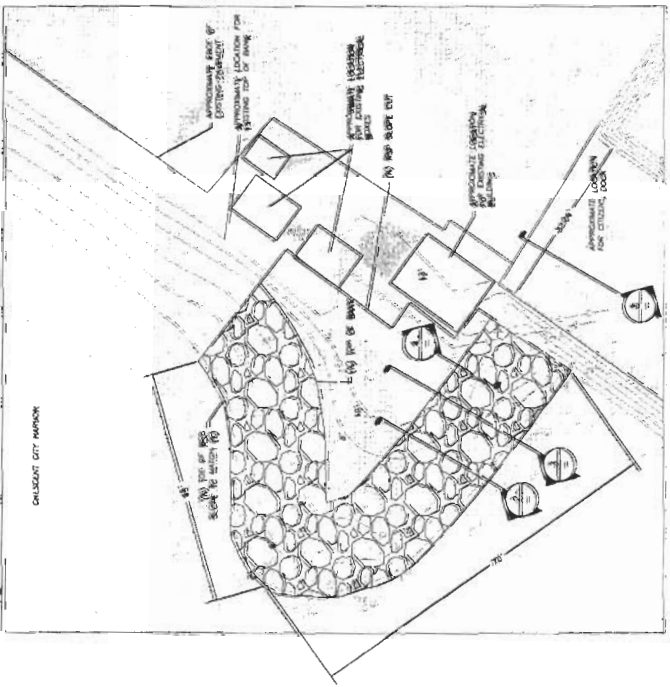
THE DATA PROVIDED HEREON WAS OBTAINED FROM THE CONTRACTOR'S RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA. THE ENGINEER HAS REVIEWED THE DATA AND HAS FOUND IT TO BE REASONABLY ACCURATE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THE DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES DURING CONSTRUCTION.



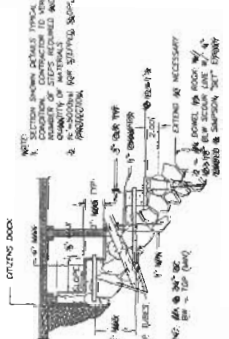
2 EXISTING RSP SECTION
 1" = 10'



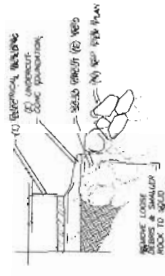
3 TYPICAL RSP SECTION WITH IMPROVEMENTS
 1" = 10'



4 SITE PLAN
 1" = 10'



5 CONCRETE SLOPE PROTECTION
 1" = 10'



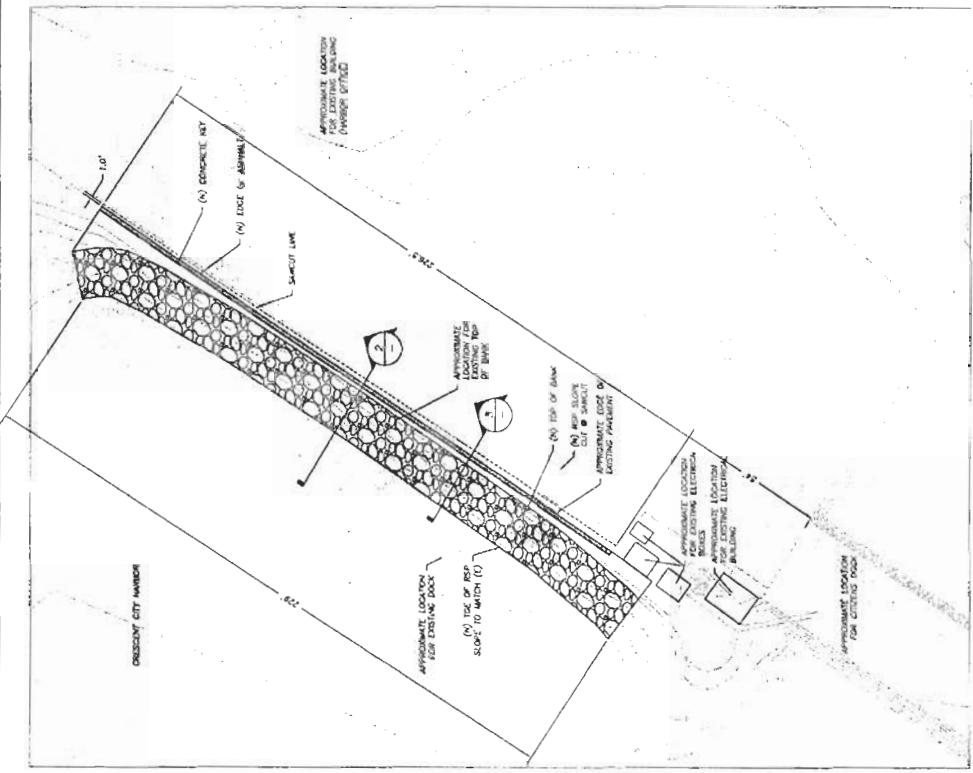
6 UNDERCUT STRUCTURE END IMPROVEMENTS
 1" = 10'

EXHIBIT NO. 5
APPLICATION NO.
 1-08-050
 CRESCENT CITY HARBOR DISTRICT
 PROJECT SITE PLANS (1 of 3)

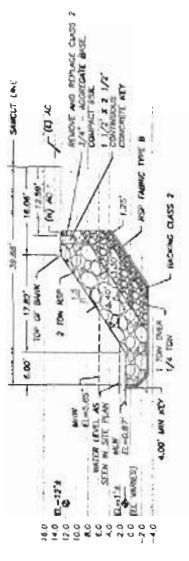
PW# 438

STOVER ENGINEERING SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE DATA PROVIDED HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES DURING CONSTRUCTION.

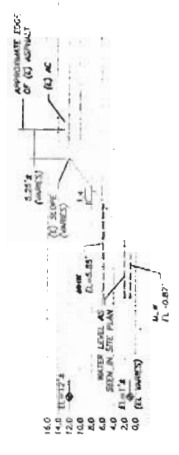
1 SITE PLAN
1"=20'



3 TYPICAL RSP SECTION WITH IMPROVEMENTS
1"=10'



2 EXISTING RSP SECTION
1"=10'



DATA DISTRIBUTION LIABILITY STATEMENT.
THE NEW/REVISION WAS DEVELOPED USING CITY OF CRESCENT CITY GEOGRAPHIC INFORMATION SYSTEM DATA, BUT THIS SECONDARY SOURCE OF DATA IS NOT A GUARANTEE OF ACCURACY. THE CITY OF CRESCENT CITY MAKES NO REPRESENTATIONS, WARRANTIES OR GUARANTEES OF ANY KIND, INCLUDING MERCHANTABILITY, FITNESS FOR PURPOSES OR TO MAINTAIN THE DATA RELATED GRAPHICS AND/OR MAPS IN ANY MANNER OR FORM. IT IS THE USER'S RESPONSIBILITY TO VERIFY THE ACCURACY OF ALL DATA AND CORRECTLY SHOW THE PARAMETERS OF GEOGRAPHIC DATA IN GENERAL AND THESE DATA IN PARTICULAR.

- GENERAL NOTES**
1. ALL CONSTRUCTION SHALL conform TO THE CURRENT REQUIREMENT OF INTERNATIONAL (CALIFORNIA) AND STANDARD SPECIFICATIONS.
 2. ROCK BACKFILL SHALL BE SET TO A FOS OF 27 OR ABOVE AND METHOD # 2 FOR ALL OTHERS.
 3. CONCRETE FOR ROCK SLOPE IMPROVEMENT SHALL BE PER CALIFORNIA STANDARD SPECIFICATIONS FOR CONCRETE AND SHALL BE 3,000 PSI COMPACT CONCRETE.
 4. UNDERSTAND THAT DATA PERTAINING TO EXISTING UNDERGROUND UTILITIES AS INDICATED HEREON IS FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL VERIFY ALL UTILITIES PRIOR TO EXCAVATION IN ORDER TO PREVENT DAMAGE TO ANY UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY UTILITIES NOT SHOWN HEREON.

MILLW DATUM

ELEV.	DESCRIPTION
15.84	HIGHEST OBSERVED WATER
15.77	LOWEST OBSERVED WATER
15.69	MEAN HIGH TIDE WATER
15.61	MEAN LOW TIDE WATER
15.53	MEAN TIDE LEVEL
15.45	MEAN TIDE LEVEL
15.37	MEAN TIDE LEVEL
15.29	MEAN TIDE LEVEL
15.21	MEAN TIDE LEVEL
15.13	MEAN TIDE LEVEL
15.05	MEAN TIDE LEVEL
14.97	MEAN TIDE LEVEL
14.89	MEAN TIDE LEVEL
14.81	MEAN TIDE LEVEL
14.73	MEAN TIDE LEVEL
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0.17	MEAN TIDE LEVEL
0.09	MEAN TIDE LEVEL
0.01	MEAN TIDE LEVEL

VICINITY MAP
BASIS OF ELEVATION
MEAN TIDE DATUM



CRESCENT CITY HARBOR DISTRICT
CITIZENS DOCK APPROACH EROSION
CRESCENT CITY, CA
ROCK SLOPE IMPROVEMENT PLAN

STOVER ENGINEERING and Consultants
PO BOX 793 - 211 H STREET
CRESCENT CITY, CA 95531 - 707-465-8742

JOB NO. 3624
SCALE ON DWG
DATE: 08/25/08
SHEET
1 OF 1

PW# 965



NO.	DATE	REVISION

DESIGNED AND DRAWN BY: M.T. STOVER
CHECKED BY: M.T. STOVER
SCALE: AS SHOWN
SHEET: 1 OF 1
DATE: 08/25/08

