

CALIFORNIA COASTAL COMMISSION

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Staff: Jim Baskin
Staff Report: July 29, 2005
Hearing Date: August 12, 2005
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 1-04-062

APPLICANT: City of Eureka

AGENT: Pacific Affiliates

PROJECT LOCATION: Within Humboldt Bay and along the ocean side of the Samoa Peninsula, Humboldt County.

PROJECT DESCRIPTION: Disposal of approximately 80,390 cubic yards of material and dispose of the dredged material via slurry pipeline at a beach disposal site in the tidal zone along the ocean shoreline of the Samoa Peninsula.

LOCAL APPROVALS RECEIVED: 1) Humboldt County Coastal Development Permit No. CDP-04-37, approved January 20, 2005 and Conditional Use Permit No. CUP-04-13 approved January 20, 2005; and 2) Humboldt Bay Harbor, Recreation, and Conservation District Permit for City of Eureka dredging approved October 14, 2004 and CEQA Negative Declaration approved October 14, 2004.

OTHER APPROVALS OBTAINED
OR REQUIRED:

1) State Lands Commission Approval; (2) Regional Water Quality Control Board FCWA Section 401 Water Quality Certification or Waiver; (3) U.S. Army Corps of Engineers FCWA Section 404 Individual Permit No. 22216N, issued December 10, 1997, expires March 15, 2008.

SUBSTANTIVE FILE DOCUMENTS:

1) County of Humboldt Local Coastal Program; 2) Coastal Development Permit Application No. 1-87-172, issued March 2, 1988; and 3) Coastal Development Permit Application No. 1-96-061, issued November 25, 1997.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission approve with conditions the coastal development permit application submitted by the City of Eureka for disposal of dredged material at a surf zone disposal site on the ocean side of the Samoa Peninsula. The proposed project is similar to a previous maintenance dredging projects approved by the Commission in 1988 and 1998 entailing surf zone spoils disposal. Based on: (1) the results of a monitoring study conducted of the surf zone disposal site used in 1988 and 1998; (2) data within the environmental review documentation prepared for the project; and (3) information generated by the applicants' consultants in response to letters commenting on the project by interested state and federal agencies, the staff has concluded that the proposed project will not have a significant impact on the environment and is consistent with the Coastal Act.

The surf zone disposal site does not have sensitive habitat areas, although intertidal organisms would be temporarily affected by the disposal. The 1998 monitoring report indicated that species abundance and composition recovered to near pre-project levels within four months of deposition of material at the site. The proposed project is consistent with the use limitations of Sections 30233 and 30231 of the Coastal Act for dredging and fill projects. Use of the principal alternative disposal site for the dredged material, the offshore Humboldt Open Ocean Disposal Site (HOODS) disposal site, would not result in an environmentally less damaging alternative as use of the HOODS site would require the transfer of dredged sediment to vessels, which in turn would increase turbidity at the transfer site within Humboldt Bay near habitat areas more sensitive than at the proposed surf zone disposal site.

To ensure that the project is fully consistent with the Coastal Act and that Commission has sufficient information to evaluate future maintenance dredging projects along the Eureka waterfront, staff recommends that the Commission attach six special conditions to the approval of the permit. Special Condition No. 1 requires the applicant, prior to issuance of the permit, to prepare, submit for the review and approval by the Executive Director, and implement a five-year monitoring program at the surf zone disposal site. Special Condition No. 2 requires the applicant, prior to issuance of the permit, to similarly prepare, submit for the review and approval by the Executive Director, and implement a dredge spoils and hazardous materials spill contingency plan for responding to any accidental releases of dredge spoils and related pumping fuels and lubricants. Special Condition No. 3 requires the applicant, prior to commencement of the dredging activities, to provide a copy of any Letter of Modification to Federal Clean Water Act Section 404 Individual Permit No. 22216N as may be issued by the U.S. Army Corps of Engineers, for the Executive Director's review and determination as to whether a coastal development permit amendment would be required. The condition further requires that the dredging not be commenced until any required permit amendment is obtained from the Commission. Special Condition No. 4 requires the applicant, prior to issuance of the permit, to obtain a permit amendment from the Humboldt Bay Harbor, Recreation, and Conservation District (HBHRCD) to authorize dredge spoils disposal from all eleven proposed maintenance dredging sites. Similarly, Special Condition No. 5 requires the applicant to obtain an amendment to the dredging lease issued by the state Lands Commission covering dredge spoils disposal into sovereign state waters originating from all eleven dredging sites. Special Condition No. 6 requires the applicant, prior to issuance of the permit, to submit a copy of the final biological opinion issued for the National Marine Fisheries Service (NOAA Fisheries) for this proposed round of maintenance dredging, and to not initiate the dredging if the opinion results in changes to the Corps' permit until a coastal development permit amendment has been obtained from the Commission or the Executive Director determines that no amendment is necessary.

As conditioned, staff believes that the project is fully consistent with the Coastal Act.

The Motion to adopt the Staff Recommendation of Approval with Conditions is found on page 5.

STAFF NOTES:

1. Permit Exemptions for Dredging.

The submitted application includes a request for authorization of 80,390 cubic yards of maintenance dredging at eleven vessel berthing/launching sites along the City of Eureka waterfront of Humboldt Bay. Pursuant to Coastal Act Section 30610(d), as detailed in Section 13252(a)(2)(A) of the Commission's administrative regulations, any method of routine maintenance dredging that involves the dredging of less than 100,000 cubic yards

within a twelve month period similarly does not require a coastal development permit. As the proposed maintenance dredging of the eleven non-navigational channel areas within the harbor would involve less than 100,000 cubic yards in a twelve-month period, no coastal development permit is required for the dredging portions of the project. Therefore, the proposed dredging itself is not before the Commission for Commission action.

Pursuant to Coastal Act Section 30106 and Section 13252(a)(2)(B) of the Commission's administrative regulations, however, a coastal permit is required for disposal of dredge material onto areas within the coastal zone. The applicant has requested to dispose of suitable dredged materials into the nearshore area along the Samoa Peninsula. This area is located within the coastal zone. Therefore, the applicant has applied for a permit to authorize disposal at the disposal site via a slurry pipeline that would extend from the dredging locations to the disposal site. The Commission must review the placement and operation of the pipeline as well as the disposal for consistency with the Coastal Act.

2. Standard of Review

The portions of the proposed project being considered in Application No. 1-04-062 are located in tidelands, submerged areas, and lands subject to the public trust within the Commission's retained jurisdictional area. Therefore, the standard of review that the Commission must apply to the project is the Coastal Act.

3. Other Required Permits and Authorizations.

As stated above, the actual dredging activity is primarily regulated by the U.S. Army Corps of Engineers. In addition, the California Regional Water Quality Control Board regulates the discharges of materials into waters subject to the federal and state Clean Water Acts. The North Coast Regional Water Quality Control Board has issued an Order No. R-1-2000-59 setting waste discharge requirements for both the dredging and dredge spoils disposal portions of the project.

The Corps is currently consulting with the National Marine Fisheries Service (NOAA Fisheries) for an interim review of the potential effects that the current round of maintenance dredging might have on salmonid fish species pursuant to Section 7 of the Federal Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act. Release of a final biological opinion from NOAA Fisheries is pending. Depending upon the conclusions and recommendations contained in the final opinion, changes to the Corps permit may result and would be implemented through a "Letter of Modification" issued by the Corps.

The project is also subject to the permit jurisdiction of two local agencies: (1) the Humboldt Bay Harbor, Recreation, and Conservation District (HBHRCD) for the portions of the project situated at and below the Mean Higher High Water (MHHW) level

(+6.52 feet NAVD₁₉₈₈) within the waters of Humboldt Bay and the Mean High Water (MHW) elevation (+5.81 feet NAVD₁₉₈₈) on Woodley Island; and (2) the County of Humboldt for the portions of the dredge spoils pipeline located outside of the incorporated boundaries of the City of Eureka.

On October 14, 2004, the HBHRCDC adopted a mitigated negative declaration environmental review document and approved Permit No. 04-02 for the City of Eureka to conduct maintenance dredging and nearshore disposal of materials from ten sites of the eleven proposed sites along the City's waterfront over a ten-year period. As the Harbor Commission's actions pre-dated the applicant's permit application amendment to include the dredging and spoils disposal from the Coast Seafood Company Dock site, authorization of maintenance dredging at that site through a permit amendment will be required.

On December 12, 2004, the State Lands Commission (SLC) issued a lease dredge spoils disposal into sovereign state waters from ten of eleven of the dredging sites. Securing a lease amendment from the SLC that grants permission to dispose dredge spoils from all eleven sites will be required to fully perfect the applicant's property rights to conduct the proposed development.

Finally, on January 20, 2005, the County of Humboldt Planning Commission conditionally approved Coastal Development Permit No. CDP-04-37 and Conditional Use Permit No. CUP-04-13 for the City's dredging and spoils disposal project. As the project description for these permits stated the development as, "the temporary placement of a dredge disposal pipeline to carry about 210,000 cubic yards of sediment from the Eureka Waterfront and the Woodley Island Marina to a surf zone disposal site in the Pacific Ocean on the Samoa Peninsula," and was inclusive of the location and quantity of dredge spoils that would originate at the eleventh dredging site, no further amendments to these permits are required.

4. Relation to Application No. 1-04-61

Application No. 1-04-061 (Humboldt Bay Harbor, Recreation, and Conservation District) and Application No. 1-04-062 (City of Eureka) are both scheduled for consideration at the August 12, 2005 Commission meeting. The two applications are related in that the applications: (1) are for development that will be performed as one project by the same contractor; and (2) will share the same disposal site and disposal pipeline. Two separate applications were submitted because the areas to be dredged are administered by the two different public entities pursuant to two separate legislative grants of tidelands.

5. Commission Action Necessary

The Commission must act on the application at the August 12, 2005 meeting to meet the requirements of the Permit Streamlining 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. 1-04-062 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 either: 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS: See Attachment A.

III. SPECIAL CONDITIONS:

1. Monitoring Report

A. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-04-062, the applicant shall submit for the review and approval of the Executive Director a surf zone disposal monitoring plan that provides for monitoring over a five year period of: (1) the pattern and rate of dispersal of material deposited at the site; (2) sediment characteristics at the disposal site and at the control site; (3) the species composition and abundance of intertidal invertebrates in areas directly

affected by the disposal of dredge spoils and at a control site near the disposal area over a three year period; and (4) the effects of the surf zone disposal on fisheries. The plan shall provide for submittal of reports providing the required monitoring information before, during, and within four months after conclusion of the disposal operation, and yearly reports thereafter to be submitted by July 1 of each year.

- B. The permittee shall undertake the dredging spoils transmission and nearshore disposal activities in accordance with the approved final plan. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. **Dredge Spoils Slurry /Hazardous Materials Spill Contingency Plan**

- A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-04-062**, the applicant shall submit for Executive Director approval a project-specific dredge spoils slurry monitoring and spill contingency plan that includes: (a) an estimate of a reasonable worst case release of dredge spoils, and pumping-related fuels and lubricants into coastal waters or wetlands that could result from project operations; (b) a clear protocol for monitoring and minimizing the risks of the transmission of dredge spoils through environmentally sensitive areas during maintenance dredging operations, including criteria for identifying an unanticipated slurry release and proposed transmission pipeline sealants or other repair materials; (c) a response and clean-up plan in the event of a spill or accidental discharge of dredge spoils and/or pump fuels and lubricants; (d) a list of all clean-up equipment that will be maintained on-site; (e) the designation of the onsite person who will have responsibility for implementing the plan; (f) a telephone contact list of all regulatory and public trustee agencies having authority over the development and/or the project site and its resources to be notified in the event of a spill or material release; and (g) a list of all conduit and pumping materials, fluids, additives, and sealants that will be used or might be used in the transmission and pumping of the dredge spoils, together with Material Safety Data Sheets for each of these materials.
- B. The permittee shall undertake the dredge spoils disposal activities in accordance with the approved final plan. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.
- C. In the event that a spill or accidental discharge of dredge spoils or other fuel or lubricant fluids occurs during spoils disposal operations, all maintenance dredging

and disposal activities shall cease and shall not recommence except as provided in subsection (D) hereof:

- D. Following discovery of the spill or accidental discharge of dredge spoils or other fuel or lubricant fluids, the permittee shall submit to the Executive Director a revised project and restoration plan prepared by qualified professional(s) that provides for: (1) necessary revisions to the proposed project to avoid further spill or accidental discharge of spoils and/or fluids; and (2) restoration of the area(s) affected by the spill or accidental discharge to pre-project conditions. The revised project and restoration plan shall be consistent with any applicable requirements of the State and/or Regional Water Resources Control Board(s). The revised project and restoration plan shall be processed as an amendment to the coastal development permit. Maintenance dredging and disposal may not recommence until after an amendment to this permit is approved by the Commission.

3. Conformance with USACOE Requirements

PRIOR TO COMMENCEMENT OF OPERATIONS AUTHORIZED UNDER THIS PERMIT, the permittee shall submit to the Executive Director for review, a copy of the Letter of Modification to U.S. Army Corps of Engineers Permit No. 22215N, or evidence that no other USACOE permit or authorization is necessary for aquatic nearshore disposal of dredge spoils from the specified eleven sites along the City of Eureka's Humboldt Bay waterfront. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers or the U.S. Environmental Protection Agency. 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 required.

4. State Lands Commission Dredging Lease Amendment

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-04-062, the applicant shall provide to the Executive Director a copy of the dredging lease amendment issued by the State Lands Commission (SLC) or evidence that no lease, lease amendment, or other authorizations are required for the disposal of dredge spoils originating from Dredging Site No. 3 - Coast Seafood Company Dock. The applicant shall inform the Executive Director of any changes to the project required by the SLC. 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.

5. Humboldt Bay Harbor, Recreation, and Conservation District Approval

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-04-062, applicant shall provide to the Executive Director a copy of a permit or permit amendment

issued by the Humboldt Bay Harbor, Recreation, and Conservation District (HBHCRD) or letter of permission, or evidence that no permit or permission is required for the disposal of dredge spoils originating from Dredging Site No. 3 – Coast Seafood Company Dock. The applicant shall inform the Executive Director of any changes to the project required by the HBHCRD. 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.

6. Final Biological Opinion

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-04-062, the applicant shall submit, for the review and approval of the Executive Director, a copy of the Final Biological Opinion in support of the maintenance dredging spoils disposal authorized by this permit as issued by the National Marine Fisheries Service. The permittees 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. Such changes shall not be incorporated into the project until the permittees obtain a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project and Site Description.

The applicant proposes to dispose of a total of approximately 80,390 cubic yards of maintenance dredging material from vessel berthing areas along the Eureka waterfront (see Exhibits No. 3). The submitted application includes a request for authorization of 80,390 cubic yards of maintenance dredging at eleven vessel berthing/launching sites along the City of Eureka waterfront of Humboldt Bay. Pursuant to Coastal Act Section 30610(d), as detailed in Section 13252(a)(2)(A) of the Commission's administrative regulations, any method of routine maintenance dredging that involves the dredging of less than 100,000 cubic yards within a twelve month period similarly does not require a coastal development permit. As the proposed maintenance dredging of the eleven non-navigational channel areas within the harbor would involve less than 100,000 cubic yards in a twelve-month period, no coastal development permit is required for the dredging portions of the project. Therefore, the proposed dredging itself is not before the Commission for Commission action.

Pursuant to Coastal Act Section 30106 and Section 13252(a)(2)(B) of the Commission's administrative regulations, however, a coastal permit is required for disposal of dredge material onto areas within the coastal zone. The applicant has requested to dispose of

suitable dredged materials into the nearshore area along the Samoa Peninsula. This area is located within the coastal zone. Therefore, the applicant has applied for a permit to authorize disposal at the disposal site via a slurry pipeline that would extend from the dredging locations to the disposal site. The Commission must review the placement and operation of the pipeline as well as the disposal for consistency with the Coastal Act.

The berthing maintenance would be performed by dredging by a suction line equipped with a cutting head. The resulting sediment/baywater slurry would be transmitted via a pipeline to a beach disposal site on the ocean side of the Samoa Peninsula, the landmass that forms the western boundary of Humboldt Bay. The dredging would be performed at the same time as a maintenance dredging project at the Woodley Island Marina boat basin by the Humboldt Bay Harbor District (being considered by the Commission as Coastal Development Permit Application No. 1-04-061). The two projects would be performed by the same contractor and would share the same disposal pipeline and disposal site.

The dredge is a pontoon-mounted crane that lowers a dredge boom, containing a cutter head coupled with a suction pipe, to the bottom. As the cutter head rotates and loosens the bottom material, the material is drawn directly up the suction pipe to the surface and the slurry of sediment and water is then pumped through a floating semi-flexible disposal pipeline, assisted by land based booster pumps for pipeline transfer to the designated disposal area in the surf zone of the Samoa Peninsula. The pipeline is floated across minimal access open water areas and weighted and submerged where crossing navigable waters. Placement of the pipeline in the water would be from a slow moving barge, and the pipeline would be routed through an existing carrier pipes and overland to the approximately 20 acre beach disposal site. The total length of the pipeline is 21,400 feet (4.5 miles), with approximately 6,000 feet overland, and the remaining the remaining 15,400 feet in Humboldt Bay.

The 12-inch diameter suction pipe, with a pumping rate of 15-20 feet-per-second, would remove approximately 200 cubic yards of solid material per hour depending on site conditions and dredging operators, and dispose of the material at a similar rate. Unless maintenance or repair is necessary, the dredge is expected to operate 24-hours a day, six to seven days per week. The pipeline is inspected regularly and maintained to insure integrity and prevent leaks or breaks. The dredge and the shore-based booster pumps rely on diesel engines and generate the noise and exhaust roughly equivalent to that of a semi-tractor truck when operational. In order to purge the pipeline of any accumulated sediment, the cutter head would be lifted off the bottom twice a day, and water from the water column would be drawn into the cutter head for approximately 20 minutes.

Once the dredge and crew arrive in Humboldt Bay, mobilization of the spoils line, booster pumps and dredge is expected to take 10 to 15 days. Dredging is scheduled to commence on November 1, 2005 and is expected to be completed by March 31, 2006.

1. Proposed Maintenance Dredging Sites

The eleven dredging sites extend eastward from Dock "B," situated along the City's western industrial waterfront to the Samoa Bridge Launch Ramp, located beneath the southern span of the Samoa Bridge (SR 255). The berthing areas are all primarily used by commercial fishermen or recreational boaters, although a couple of the sites are currently vacant, one site is used for moorage of a Coast Guard Cutter, and another for the City's fire boat.

The exempt maintenance dredging project is being undertaken by the City as part of an overall project to renovate and restore the Old Town Waterfront and several water dependent facilities of the once prosperous fishing industry of Humboldt Bay. The dredging sites and the amounts to be dredged at each location are summarized in Table No. 1 below.

Table One: Proposed Maintenance Dredging Sites – City of Eureka Waterfront Area

1. Dock "B"	700	43.8	0.704	14,000	7
2. Eureka Small Boat Basin	1,200	308.5	8.49	39,000	21
3. Commercial Street Dock	650	20	0.298	1,370	2
4. Coast Seafood Company Dock	212	32	0.156	3,800	5
5. Fisherman's Terminal	395	60	0.543	12,000	7
6. "F" Street Floating Dock	560	38	0.491	1,700	3
7. "I" Street Dock	200	50	0.230	5,000	4
8. "J" Street Dock	112.5	40	0.103	1,400	3
9. Adorni Center Dock	35	30	1,050	1,320	2
10. Bonnie Gool Guest Dock	200	20	0.092	600	2
11. Samoa Bridge Launch Ramp	75	50	0.100	200	2
Totals:	4,339.5	692.3	12.257	80,390	58

Site No. 1: Dock "B"

Dock "B" is located on the Outer Reach of the Eureka Channel approximately 1,000 feet southwest of the Eureka Public Berthing Facility (formerly known as

the Small Boat Basin). The wooden structure adjacent to the maintained 35-foot deep channel was used in the past for loading lumber and logs (as late as the 1950s) for export from Humboldt Bay. The decline of the timber industry relegated the facility to duty as a location to off-load commercial fishing boats.

The proposed dredging of the Dock "B" moorage would entail the removal of an estimated 14,000 cubic yards of sediment from 700 lineal feet of dock frontage to a project depth -24 feet Mean Lower Low Water (MLLW). Dredging would daylight near the east channel line at the project depth and extend 50 feet beyond the north and south ends of the original structural footprint. A forty-five degree flare from the northwest and southwest dock corners would be excavated to ease future vessel berthing. Slopes from final depths shall be cut at 2:1 or left at the natural angle of repose of the sediment. A two-foot over-depth allowance is permitted within the dredge area, realizing a maximum pay line of -26 feet MLLW.

Site No. 2: City of Eureka Small Boat Basin.

The City of Eureka Small Boat Basin is located off of Waterfront Drive, about 1/8 mile south of its intersection with Commercial Street. The basin provides moorage for many recreational and commercial vessels. A total of approximately 39,000 cubic yards of dredging is proposed to restore the marina to its original design depth of -8.0 feet MLLW.

Site No. 3: Commercial Street Dock

The Commercial Street Dock consists of the eastern 250 feet of the Commercial Street Dock and formerly provided moorage for the Coast Guard Cutter "Acushnet" prior to its re-deployment to Alaska. A total of approximately 1,370 cubic yards of dredging is proposed to restore the berth to its original design depth of -18.0 feet MLLW.

Site No. 4: Coast Seafood Company Dock

The Coast Seafood Company is the owner of the sole private enterprise berthing facility proposed for maintenance dredging. Coast Seafood is engaged in the commercial rearing and processing of cultured Pacific oyster production on Humboldt Bay. The site is located at the foot of "A" Street along the eastern shoreline of the North Bay Channel. The tidelands are leased by Coast Seafood Company from the City of Eureka. Dredging and spoils disposal of 3,800 cubic yards of material from the moorage area and the unloading slip is proposed. The dredging process would involve cutter suction dredging the moorage and the unloading area to their original design depth of -12 feet MLLW. The current depth around the dock is -10 feet MLLW.

Site No. 5: Fisherman's Terminal / Landing Dock

Located at the foot of "C" Street, the Fisherman's Building / Landing Dock had been used in the past for off-loading fish and was associated with Lazio's Restaurant and fish processing plant. Currently, the site is currently undergoing the construction of the Fisherman's Building, a commercial fishing receiving and processing facility that will include a retail fish market. A total of approximately 12,000 cubic yards of dredging is proposed to restore the berth to its original design depth of -14.0 feet MLLW.

Site No. 6: "F" Street Floating Docks

Located between the foot of "D" and "F" Streets, the "F" Street Floating Docks are the Eureka Boardwalk's a recreational boating access facility. The docks are currently used as a public access dock from which kayak tours of Humboldt Bay are launched. A total of approximately 1,700 cubic yards of dredging is proposed to restore the berth to the -10.0 feet MLLW depth.

Site No. 7: "I" Street Dock

The "I" Street Dock site is situated at the foot of "I" Street. Caito Fisheries currently off-loads and processes catch at this leased facility. Caito Fisheries is the easternmost waterfront-dependant commercial enterprise on the Eureka Inner Reach Channel. As proposed, dredging of the "I" Street Dock would require the removal of an estimated 5,000 cubic yards of sediment from dock frontage to a project depth of -14.0 feet MLLW.

Site No. 8: "J" Street Dock

The "J" Street Dock has historically been used for moorage by the California Department of Fish and Game for its off-shore fisheries operations and marine patrol vessel. The moorage is also home to the Eureka City Fire Department's fire boat. A total of approximately 1,400 cubic yards of dredging is proposed to restore the berth to the -12.5 feet MLLW depth to which it was last dredged.

Site No. 9: Adorni Recreation Center Dock

The Adorni Recreation Center was constructed at the foot of K Street in 1992 to provide waterfront access and recreational opportunities to local and visiting citizens. The Center includes a small 320-square-foot dock used for launching rowing vessels and other small craft. A total of approximately 1,320 cubic yards of dredging is proposed to restore the berthing area to a depth of -6.0 feet MLLW.

Site No. 10: Bonnie Gool Memorial Guest Dock

The Bonnie Gool Memorial Guest Dock is located just east of the Adorni Recreation Center. The facility was constructed to provide public access to vessels and visiting historic ships of interest. A total of approximately 600 cubic

yards of dredging is proposed to restore the outer and inner berthing areas to depths of -14.0 feet MLLW and -8.0 feet MLLW, respectively.

Site No. 11: Samoa Bridge Launch Ramp

The Samoa Bridge boat launching ramp is located underneath the southern end of the Samoa Bridge. The facility was built in 1985 and since being dredging in 1998, has again silted in. A total of approximately 200 cubic yards of material is proposed to restore the ramp to its original condition.

2. Proposed Method of Dredging and Spoils Disposal

The proposed cutter suction pipeline dredging method involves use of a hollow suction pipe which extends to the bay floor. The pipe contains a rotating cutter head, which can be swept back and forth across the work area, and can be extended into confined areas such as boat slips and under dock faces, etc. As material is loosened by the cutter, it is drawn up the suction pipe to the surface where the suction pipe is joined to a closed flexible pipeline for pumping to the disposal site. The material drawn up by the suction dredge consists of approximately 20% sediment and 80% bay water.

The slurry pipeline would consist of a 12-inch-diameter fused flexible plastic line. The dredge is a pontoon-mounted crane that lowers a dredge boom, containing a cutter head coupled with a suction pipe, to the bottom. As the cutter head rotates and loosens the bottom material, the material is drawn directly up the suction pipe to the surface and the slurry of sediment and water is then pumped through a floating semi-flexible disposal pipeline, assisted by land based booster pumps for pipeline transfer to the designated disposal area in the surf zone of the Samoa Peninsula.

The line would extend on floats from the dredging location to the State Route 255 (SR 255) right-of-way; SR 255 is the highway that crosses Humboldt Bay between Eureka and the Samoa Peninsula in a series of bridges. The pipeline would be placed along the shoulder of the right-of-way where the highway crosses Woodley and Indian Island at ground level, and placed in the water in the shadows of the bridges where the highway crosses water. In tidal locations, the pipeline would be floated into position at high tide to avoid unnecessary disturbance to the mudflats. Where the line would cross navigable waters, weight would be attached to submerge the line and permit the normal passage of vessels. Buoys and lights would be installed to prevent navigational hazards. A Notice to Mariners is also filed with the U.S. Coast Guard for the duration of the project, advising marine travelers of the location of the pipeline and dredging activities. Once the pipeline reaches the Samoa Peninsula, the line would cross under the Northwestern Pacific Railroad and New Navy Base Road through existing carrier pipes and then continues across the dunes of the North Spit via off-road vehicle

trails to the surf zone disposal site. The slurry material is pumped through the pipeline to the disposal site under pressure from several in-line booster pumps.

Once the dredge and crew arrive in Humboldt Bay, mobilization of the spoils line, booster pumps and dredge is expected to take 10 to 15 days. Dredging is scheduled to commence on November 1, 2005 and is expected to be completed by March 31, 2006.

3. Proposed Disposal Site

The location of the surf zone disposal site is shown on Exhibit No. 4. The pipeline would discharge the dredged material directly into the surf zone. The disposal site would be posted at several locations and barricades and lighting would be provided and maintained through the project to further inform users of the Peninsula of the temporary project activities occurring there. The sediment to be dredged consists of typically fine-grained material composed of approximately 15% sand, 45% silt, and 40% clays. It is anticipated that most of the sub-sand material will disperse as suspended sediment along the large Eel River basin shelf area offshore. According to the applicant, this shelf area also absorbs an estimated average annual sediment load of approximately 24,698,370 cubic yards discharged by the Eel and Mad River systems. The Eel River represents one of the largest suspended sediment sources in the world. The proposed dredging and dispersal would occur during the winter months, between November and mid-March, when ocean turbidity from the river discharges is at a natural seasonal maximum, to minimize the sedimentation impact on the ocean. The applicant expects that most of the material discharged to the surf zone disposal site will be dispersed offshore as part of cyclical process of erosion of the winter beach. Some of the material that erodes away will likely be deposited again at the site as part of the natural spring beach build up, but the applicant indicates that all of the material should leave the site within two years.

The Samoa Peninsula surf disposal site has been used thrice previously for dredge material disposal. In 1977, the Corps of Engineers disposed of approximately 1.8 million cubic yards of material from the North Bay Channel Deepening project at this location. In 1988, the site was also used for the disposal of 131,000 cubic yards of material from a maintenance dredging project at the Woodley Island Marina. The Coastal Commission approved the maintenance dredging and surf zone disposal under Coastal Development Permit No. 1-87-172. Subsequently in 1998, pursuant to Coastal Development Permit Nos. 1-96-060 and 1-96-061, 226,238 cubic yards of dredged spoils from the City waterfront and the Woodley Island Marina were disposed at the Samoa Peninsula surf disposal site.

The proposed maintenance dredging project is only one of several dredging projects performed or proposed for Humboldt Bay. The proposed maintenance

dredging project is separate from the annual Humboldt Bay maintenance dredging project performed by the U.S. Army Corps of Engineers. The proposed maintenance dredging project is also separate from the annual Humboldt Bay Channel maintenance dredging projects also performed by the Corps. Between 1982 and 2004, the Bay Channel maintenance project removed approximately 802,000 cubic yards per year. The material from the Corps dredging projects has been and will continue to be disposed of at the "Humboldt Open Ocean Disposal Site (HOODS).

The entire disposal project except for a portion of the pipeline would be located within the Commission's retained jurisdictional area. The segment of pipeline that extends over the Samoa Peninsula from the bay to the mean high tide line of the surf zone disposal site is located within the coast permit jurisdiction of Humboldt County. The County approved a coastal development permit (CDP-04-37) and a coastal use permit (CUP-04-13) on January 20, 2005. The County permits required avoidance and mitigation of potential disturbance to sensitive rare plants, including the Menzies wallflower (Erysimum menziesii) and beach layia (Layia carnosa). The coastal development permit was not appealed to the Commission.

B. Need for Dredged Material Disposal.

The proposed nearshore disposal of dredged materials will support the continued use of berthing areas along the Eureka waterfront for recreational boaters and commercial fishermen. The Coastal Act contains strong policy language supporting marina uses, including those which require dredging. Section 30220 provides that:

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

Section 30224 provides that:

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.

Section 30234 provides, in part that:

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

Section 30255 provides that:

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

The proposed nearshore dredged material disposal project will support the continued use of the Eureka waterfront for these priority uses. Without the dredging and the disposal of the dredged materials, the berthing areas and slips of the marina will continue to fill with sediment and will no longer be usable for mooring vessels. Adequate mooring facilities that do not similarly need maintenance dredging and the disposal of the dredged materials are not available elsewhere within Humboldt Bay. Therefore, the Commission finds that the proposed dredged material disposal project will support recreational boating and commercial fishing, consistent with Sections 30220, 30224, 30234, and 30255 of the Coastal Act.

C. Protection of Marine and Estuarine Resources.

As discussed in Project and Site Description Findings Section IV.A above, because the proposed maintenance dredging involves less than 100,000 cubic yards in a twelve-month period, the suction dredging portion of the permit application is exempt from the Coastal Act's permitting requirements. Thus, only the portion of the proposed project involving the installation of the disposal pipeline, and the conveyance to and discharge of the dredged material slurry at the surf zone disposal area, is subject to the Act's permitting requirements. A number of Coastal Act policies address the protection of marine resources from the impacts of dredge spoils fill projects. These policies include, among others, Section 30231 and 30233.

Section 30231 of the Coastal Act provides as follows, in applicable part:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes...shall be maintained and, where feasible, restored...

Section 30233(a) provides as follows, 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 wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
 - (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
 - (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
 - (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
 - (7) Restoration purposes.*
 - (8) Nature study, aquaculture, or similar resource dependent activities.*
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.*

(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. [Emphases added.]

The above policies set forth a number of different limitations on what development may be allowed in wetlands and other water bodies within the coastal zone. For analysis purposes, the limitations can be grouped into five general categories or tests. These tests are:

- That the purpose of the fill is for one of eight uses allowed under Section 30233;
- That feasible mitigation measures have been provided to minimize adverse environmental effects;
- That the project has no feasible less environmentally damaging alternative;
- That the biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible; and
- That dredge spoils suitable for beach replenishment be transported to appropriate beaches or into suitable long shore current systems.

1. Permissible Use for Dredge Spoils Disposal in Coastal Waters.

The first test set forth by the Coastal Act policies that address the protection of marine and estuarine resources is that any proposed dredging or fill project must be for an allowable purpose under Section 30233 of the Coastal Act. The proposed project involves maintenance dredging.

Section 30233(a)(2) allows dredging for maintaining existing, or restoring previously dredged depths in existing vessel berthing and mooring areas, and launching ramps. The proposed dredging is limited to areas that have been previously dredged to the same elevation for vessel berthing and mooring. Therefore, the Commission finds that the proposed dredging, and its associated pipeline installation and beach disposal, are consistent with the use limitations of Section 30233, as the dredging is for the maintenance of existing vessel berthing and mooring areas.

2. Feasible Mitigation Measures

The second test set forth by Section 30231 and 30233 of the Coastal Act is that feasible mitigation measures have been provided to minimize adverse environmental effects. The Commission must examine the potential impacts of the project on marine and estuarine resources for the non-exempt portions of the project within its jurisdictional area (i.e., excluding the actual suction dredging intake of the materials from the eleven berthing

sites and the project portions within the County of Humboldt's permitting jurisdiction.) The project could have three potential adverse effects on such resources, including: (1) increasing turbidity levels during installation and removal of the dredge spoils pipeline; (2) the covering of estuarine intertidal habitat along the route of the dredge spoils pipeline within Humboldt Bay; (3) accidental releases of the dredge spoils slurry and/or pumping-related fuels or lubricants; and (4) disturbing marine intertidal habitat at the dredged material disposal site. None of these impacts, however, have been determined to be significant.

(1) Temporary Increase of Turbidity During Installation and Removal of the Dredge Spoils Pipeline.

The proposed installation and removal of the dredge spoils transmission pipeline could disturb sediments within the mudflat areas along the pipeline's route. Increased turbidity can have deleterious effects on the estuarine habitat, burying eelgrass and other vegetation and disturbing the spawning, feeding, and other activities of fish and other fauna within the water column and along the bay bottom. However, based upon discussions with National Marine Fisheries Service (NOAA Fisheries) staff, the proposed project could minimize turbidity impacts and reduce them to a level of insignificance through: (a) avoiding mudflats to the greatest extent practicable during installation of the dredge disposal line; (b) installing and removing the pipeline during high tide when these sensitive areas are inundated to assure that no vessel propellers, anchors or dredging equipment are dragged over the mudflats.

(2) Covering of Habitat Along the Dredge Spoils Pipeline within Humboldt Bay.

The routes of the proposed dredge spoils pipeline through Humboldt Bay provide soft bottom habitat that may be habitat for a variety of benthic organisms. In addition, sparse clumps of eelgrass have materialized sporadically in various berthing areas since the previous dredging was performed. The proposed dredging would remove much of this soft bottom habitat area. However, the impact is not judged to be significant. The loss of the sparse patches currently existing along the pipeline routes will not result in a significant loss of biological productivity. In addition, the pipeline routes can be expected to be re-colonized by the flora and fauna that would be temporarily displaced by the project. These organisms grow in sufficient abundance in areas adjacent to the pipeline routes that a ready source of colonizers exists to replace the organisms that are lost.

(3) Accidental Release of Dredge Spoils Slurry or Hazardous Materials.

The project entails the transmission of a dredge spoils slurry through a 12-inch diameter flexible pipeline over a distance of 21,400 feet (4.5 miles), with approximately 6,000 feet of the pipeline crossing overland, and the remaining 15,400 feet traversing the waters of Humboldt Bay. If a rupture should occur in the slurry transmission pipeline, an uncontrolled release of highly turbid water and sediment into environmentally sensitive

habitat area within the bay, estuarine or marine wetlands, or upland areas could result with potentially deleterious effects to the plant and animals that utilize these areas as habitat.

Additionally, given the five-month scope of the project, re-fueling or lubricating motorized equipment (i.e., the in-line booster pumps) during the course of maintenance dredging activities is anticipated. An accidental spill of pump fuel or lubricants could adversely affect the environmentally sensitive resources within the project area and the water quality of the adjoining estuarine and marine environments. Special Condition No. 2 requires the applicant to undertake the proposed development consistent with an approved Dredge Spoils Slurry / Hazardous Materials Spill Contingency Plan. This plan is to include pipeline monitoring and leak response provisions and water quality best management practices for the prevention of hazardous material spills and provisions for prompt containment and clean-up of any spills which may inadvertently occur. As conditioned, potential adverse impacts from accidental dredge spoils slurry or fuel or oil spills to land and marine resources will be reduced to less-than-significant levels.

(4) Disturbance of Habitat at the Nearshore Disposal Site.

The surf zone disposal site is inhabited primarily by intertidal invertebrate fauna, including motile, burrowing crustaceans and polychaete worms. As noted previously, the site was used for the similar disposal of approximately 226,238 cubic yards of dredged material in 1998. A monitoring study was conducted prior to, during, and just after this last episode of dredged material disposal. The monitoring report stated that prior to the last use of the area for dredged material disposal, in overall species richness, Samoa Beach was intermediate between local semi-protected sandy beaches and sandy beaches exposed to extreme wave conditions. In both pre- and post-discharge periods, the beach fauna was dominated in species composition and numerically by the burrowing isopod Excirrolana linguifrons and the burrowing marine worm Euzonus williamsi. The abundance of E. linguifrons and E. williamsi appears to have been much less in 1988 than was collected in 1998. The abundance of other sand beach animals was comparable in 1988 and 1998. By the August sampling period in 1998, the level of faunal similarity approximated that found in the pre-discharge sampling. The reappearance of mole crabs (Emerita analoga) in August samples at all three transects and its abundance at the discharge transect indicates that little residual biological effect of dredge spoils could be detected at the discharge point. The material to be discharged from the proposed project will temporarily bury this habitat, until wave and tidal action disperses the material to the offshore shelf. Impacts to the habitat are expected to be similar to the impacts that occurred in 1998. According to the 1998 monitoring study, the habitat area recovered rapidly:

Based on the present study, negative effects of temporary discharge of dredge spoils on intertidal fauna of Samoa Beach were localized and transitory, primarily affecting the abundance of characteristic beach

species in the immediate vicinity of the disposal outfall. Within 1 month following the end of disposal operations, most species characteristic of this beach were present at the outfall site, although at reduced densities. Approximately 4 months following termination of beach disposal, populations at the Disposal Site had recovered to levels comparable to those at the Control Site.

Thus, based on the result of the 1998 monitoring report, the impacts of the proposed discharge of dredged material on the surf zone habitat can be expected to be temporary and insignificant.

The Commission notes that the land based portion of the project, the placement, use, and removal of the portion of the pipeline that will cross the Samoa Peninsula, could have potential impacts on certain rare or endangered species. However, except for the area below the mean high tide line, the segment of the pipeline crossing the Samoa Peninsula is entirely within the coastal permit jurisdiction of the County of Humboldt. The County has approved a separate coastal development permit for this portion of the overall project. Therefore, the "project" before the Commission does not include the portion of the overall project that crosses the Samoa Peninsula.

Nonetheless, the County and the lead agency determined that the environmental effects of the pipeline on the terrestrial habitat of the Samoa Peninsula would not be significant. The pipeline will cross through areas where beach layia (Layia carnosa) is growing. Beach layia is a federally listed endangered species. In addition, the Western snowy plover (Charadrius alexandrinus nivosus) has been known to nest in the spring along portions of the upper beach areas of the Samoa Peninsula. However, the project as proposed will minimize impacts to these species and reduce them to a level of insignificance. The pipeline will be routed along old trails to avoid the beach layia and will be placed by hand in sensitive areas to minimize disturbance from construction. In addition, a qualified biologist will be present before and during laying of the pipeline to identify and evaluate the status of the beach layia populations in order to avoid the plants and minimize impacts to beach layia seedlings. A field survey and biological assessment of snowy plovers conducted by Mad River Biologists concluded that the proposed outfall area was not suitable habitat for the Western Snowy Plover given the narrow band of possible nesting area along the top of the wave slope and presence of debris and predators and "For these reasons, placement and removal of the pipeline should have no significant effect on the Western Snowy Plover." The County approved the coastal development permit with conditions requiring that the proposed mitigation measures to protect beach layia be implemented by the applicants.

Therefore, the Commission finds that the development as proposed and conditioned includes mitigation measures, where feasible, to minimize significant adverse environmental effects of the project consistent with Section 30233.

3. Project Alternatives.

The third test set forth by the Commission's dredging and fill policies is that the proposed dredging or fill project must have no feasible less environmentally damaging alternative. Although the Commission determines that the proposed project will have no significant impacts, the Commission has also considered the various identified alternatives, and determines that none of them provides a feasible less environmentally damaging alternative. A total of four possible alternatives have been identified, including: (a) disposing of the dredged material at the offshore HOODS disposal site; (b) disposing of the dredged material at the upland "Superbowl" disposal site; and (c) the "no project" alternative.

a. Disposal at Offshore HOODS Disposal Site.

As noted previously, the federal government has designated an offshore disposal site for dredged material known as the "HOODS" disposal site. The site is between three and four miles offshore of Humboldt Bay, beyond sovereign state lands in federal waters. The Commission concurred with a Coastal Zone Management Act consistency determination made by the U.S. Environmental Protection Agency for designation of the site in 1995 (CD-72-95). Over 800,000 cubic yards of dredged material is disposed of annually at the site, mostly from maintenance dredging of Humboldt Bay navigational channels performed by the U.S. Army Corps of Engineers. A possible alternative to the proposed project that would avoid even the temporary impacts on habitat at the surf zone disposal site would be to dispose of the dredged material at the HOODS site. During the 1998 maintenance dredging project three state and federal agencies commented to the Corps of Engineers in response to the Corps' public notice of its consideration of federal permits for the project that this alternative should be used to avoid impacts to habitat at the surf disposal zone. The Commission acknowledged the concerns raised by the commenting agencies, but found that, overall, the impacts of the project as proposed would be less than the alternative of using the offshore HOODS disposal site.

The primary reason the Harbor District and the City of Eureka chose not to propose disposal of the dredged material from the maintenance dredging proposed under coastal permit applications 1-96-60 and 1-96-61 at the HOODS site is the comparative costs of these options. Based on cost estimates provided to the HBHRCDC by dredging companies, the proposed project with surf zone disposal would cost approximately \$2 million. The cost of disposing of the material at the HOODS site would nearly double the total cost to \$3.8 million.

Whether or not the extra cost makes use of the HOODS site infeasible, for a variety of reasons the alternative is not environmentally less damaging. As explained by the applicants' consultants in response to the 1998 reviewing agency

comments, use of the HOODS disposal site would actually increase turbidity impacts in and around the dredging areas.

Turbidity would be increased near the dredging area because a different method of transferring the dredged material to the disposal site would have to be used. Given the three to four mile distance to the HOODS site across open ocean waters, a pipeline obviously cannot be used to discharge dredged material at the HOODS site and the use of vessels must be relied upon.

Use of a suction dredge is required given the close quarters within the mooring areas where the dredge must operate. The water content of the material dredged with the suction dredge approaches 80%. While the high proportion of water in the slurry material does not present a problem for transferring the dredged material to the disposal site through a contained pipelined, the high water volume does present a problem for transferring the dredged material by barge or hopper dredger to an offshore disposal site. When using hoppers or barged to transport the dredged material, a large proportion of the 80% water volume of the dredged material must be decanted and the resulting water discharged during vessel loading to accommodate the solids (20%). This decanting would take place in or near the dredge area to allow for efficient filling of the vessels. Significant turbidity can be expected to result from the discharge of the supernatant water, which contains significant amounts of sediment. In fine-grained material (only approximately 15% is coarse sandy material), the degree of turbidity will be greater than if the material had a more sandy composition.

The dredging areas are located along the shallower margins of the bay which include sensitive shallow water habitats, including extensive eelgrass beds. The eelgrass beds provide important spawning, rearing, feeding, and resting habitat for numerous fish and other estuarine species. In addition, the shallow waters of Humboldt and Arcata Bays support extensive commercial shellfish operations that can be adversely affected by high turbidity. Given the more sensitive nature of the estuarine habitat within Humboldt Bay as compared to the ocean surf zone, the overall impact of use of the HOODS site is much greater than the impacts of the project as proposed.

The Commission notes that the HOODS site is well suited to the separate channel dredging projects performed by the CORPS, as the turbidity impacts are proportionately less. The content of the material dredged from the channels in those projects is quite sandy and the channel work areas are generally well flushed. Both of these factors reduce the turbidity impact of the CORPS channel dredging projects.

- b. Disposal at "Superbowl" Disposal Site.

Dredged materials have previously been deposited at an upland disposal site on the Samoa Peninsula known as the "Superbowl" site (see Exhibit No. 3), adjacent to the Old Eureka Airport/Samoa Dragstrip. The 60-acre site was used for disposal of sediments in the North Bay Channel Improvement Project of 1978-79 and for other projects in the late 1970s. The site reportedly has capacity available, and the dredged material could be piped to the disposal site, thus avoiding turbidity impacts at the dredge site as the proposed project would.

However, since the Superbowl site was last used, portions of the site have transformed into freshwater marsh habitat and sensitive plant species have colonized portions of the site. These areas are considered to be environmentally sensitive habitat areas, and are protected by the Coastal Act. Use of the site for the proposed project would likely result in some permanent disturbance of the habitat. As the habitat values at the surf zone disposal site are less significant, and the impacts of the use of the surf zone disposal site would be temporary, the Commission finds that the alternative of using the Superbowl for dredge disposal is not an environmentally less damaging alternative.

c. The No Project Alternative.

The no project alternative would be to not perform the proposed maintenance dredging along the Eureka waterfront. With no dredging, there would be no impacts from dredging and no impacts from disposal. However, without maintenance dredging, the berthing areas would eventually silt in to the point that they could no longer be used for commercial fishing vessels or recreational boating, except by the shallowest draft vessels. The berthing areas would likely be forced to close, and the boaters who currently use the site would be displaced. As there are limited mooring facilities in Humboldt Bay, many of these users would be forced to leave this region of the coast. Such a result would be contrary to policies of the Coastal Act. 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.

4. Maintenance and Enhancement of Estuarine and Marine Habitat Values

The fourth general limitation set by Sections 30231 and 30233 on dredging and fill projects is that any proposed dredging or fill project must maintain and enhance the biological capacity of the habitat, where feasible.

As discussed above, although the project as proposed will have adverse impacts on habitat at both the dredging and disposal sites, the impacts will not be significant. By avoiding significant impacts to coastal resources, the project will maintain the biological

productivity and functional capacity of the habitat. However, there will be a continuing need for maintenance dredging of the bay in the future. Based on past dredging patterns, maintenance dredging will likely be required at roughly ten year intervals. Therefore, the Commission finds that it is necessary for the impacts of the proposed surf disposal to be monitored to ensure that if unexpected impacts were to occur, the results could be used during the evaluation of future dredging projects by the Commission and other agencies. Consideration of the information provided by a monitoring report would help ensure that such future projects are conducted in a manner that will maintain and enhance the biological capacity of the habitat.

The Commission notes that it has relied, in part, on information provided by the 1998 monitoring report prepared after the last episode of surf zone dredge material disposal in its evaluation of the current permit application. Accordingly, the Commission attaches Special Condition No. 1 which requires that prior to issuance of the permit, the applicant submit a surf zone disposal monitoring plan for the review and approval of the Executive Director. The plan must provide for monitoring over a five year period of: (1) the pattern and rate of dispersal of material deposited at the site (2) sediment characteristics at the disposal site and at the control site; (3) the species composition and abundance of intertidal invertebrates in areas directly affected by the disposal of dredge spoils and at a control site near the disposal area over a three year period; and (4) the effects of the surf zone disposal on fisheries.

As conditioned, the Commission finds that the proposed project is consistent with the requirements of Sections 30231 and 30233 of the Coastal Act that any proposed dredging or fill project must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

5. Use of Dredged Material for Beach Replenishment

The fifth test set forth above is that dredge spoils suitable for beach replenishment be transported to appropriate beaches or into suitable long shore current systems. One of the concerns of any dredging project is the loss of sand to the particular longshore current cell and the possible resulting downcoast erosion. When possible, sandy dredge spoils should be disposed in a location that will ensure downcoast disposal.

The sediment to be dredged consists of typically fine-grained material composed of approximately 15% sand, 45% silt, and 40% clays. Only the sand portion of the material is suitable for beach nourishment, and given the small component of sand in the dredged material, the applicants do not claim that the project can be characterized as a beach nourishment project. Nevertheless, given the proposed location and timing the project to be conducted during the winter months when a high background level of turbidity exists along the open ocean shoreline, the proposed disposal site is an appropriate beach for beach replenishment. As the site is within the surf zone, the material will be discharged

where the sand component may enter the long shore current system, although the beach in question is not in a sand-starved condition.

Furthermore, the site is sufficiently far from the mouth of Humboldt Bay that discharges at the site would not contribute to a mounding or shoaling problem within a navigational area. Therefore, the Commission finds that the small component of the material to be dredged that is suitable for beach nourishment will be transported to an appropriate beach consistent with the sand supply requirements of Section 30233 of the Coastal Act.

D. Public Access.

Coastal Act Section 30210 requires that maximum public access opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Coastal Act Section 30211 requires that development not interfere with the public's right of access to the sea where acquired through use. Coastal Act Section 30212 requires that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, as when adequate access exists nearby. In applying Sections 30210, 30211, and 30212, the Commission is limited by the need to show that any denial of a permit application based on those sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential public access.

The objectives of the project to ensure that vessels can continue to use berthing areas along the Eureka waterfront for mooring will help maintain recreational boating as a form of public access to Humboldt Bay and the ocean. In addition, as the project will have a duration of only a few months, as all portions of the disposal pipeline and the dredging area itself will be sufficiently marked to warn boaters of its presence, and all portions of the line crossing navigational channels will be submerged to the bottom where they will not block vessel passage, the project will have no significant effect on vessel access during project construction. Similarly, as the portion of the pipeline that crosses the Samoa Peninsula and the disposal site will also be marked and lighted during the several months of the winter that the project will be undertaken and will not preclude passage up and down the peninsula by public access users, the project will have no significant impact on public access use of the Samoa Peninsula. Furthermore, as the dredging will only maintain the existing mooring and maneuvering areas, the proposed project will not create new vessel mooring opportunities that could draw more people to the waterfront and create more demand for public access.

Therefore, for the reasons indicated above, the proposed project will not have any significant adverse effect on public access. The Commission finds that the proposed project, which does not include any new provision for shoreline public access, is consistent with the public access policies of the Coastal Act.

E. Visual Resources.

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.

Dredge spoils disposal operations present a temporary intrusion into visual resource areas and occur generally along the disposal line within Humboldt Bay, or in proximity to the spoils disposal outfall on the North Spit of the Samoa Peninsula. The bay is generally visible from numerous public viewing areas. These include the Eureka waterfront itself, the A.M. Bistrin Memorial Bridge crossing of State Route 255 over Humboldt Bay, and along the bay shorelines of Indian Island and the Samoa Peninsula. In addition the dredge spoils disposal outfall would be visible from the open ocean and sandy beach areas in the immediate vicinity of the discharge line. In terms of scenic areas of importance, the City of Eureka and the County of Humboldt LCPs both designate views of Humboldt Bay and the Pacific Ocean from specified viewing points as visual resource areas.

The project elements that would occur within the public viewshed include: (1) the dredge platform itself, along with any floating sections of pipe; (2) sections of flexible pipe placed across land segments to transport sediment for nearshore disposal, and (3) the ocean beach portions of the pipeline. However, views of these facilities would not result in a significant impairment of scenic resources, for the following reasons: (1) the presence of the dredge would simply blend in with other vessels already visible and should not be counted as an adverse impact, and (2) the surface-lain flexible piping for transporting dredge spoils slurry would be similarly temporary and vary in locale, depending on the particular disposal destination of the dredged materials.

Therefore, given its temporary and transient nature, and the fact that the proposed dredging and disposal activity would not significantly alter scenic public views within and along the shorelines of Humboldt Bay along the route of the dredge spoils transmission pipeline or along the open ocean shoreline in proximity to the dredge spoils pipeline outfall, the Commission finds that this project is consistent with Sections 30251 and 30240(b) of the Coastal Act.

F. State Lands Commission Review.

The tide and submerged lands along the Eureka waterfront are administered by the City pursuant to a legislative grant. Thus the development within the dredging areas does not require State Lands Commission (SLC) authorization. However, the dredged material disposal site is located in the surf zone below the mean high tide line in state tidelands that have not been legislatively granted to the City or any other entity. Use of the disposal site requires authorization by the SLC.

On December 9, 2004, the SLC, by a unanimous 3-0 vote, approved a ten-year dredging lease with the City of Eureka and the Humboldt Bay Harbor, Recreation, and Conservation District for maintenance dredging and nearshore disposal of a maximum of 433,180 cubic yards of materials from ten sites along the City's waterfront and from the District's Woodley Island Marina. On March 8, 2005, the City amended its coastal development permit application to include the dredging and spoils disposal of an addition 3,800 cubic yards from an eleventh waterfront site, the Coast Seafood Company Dock.

To assure that the applicant obtains all necessary property rights and authorizations to carry out the project and to comply with the terms and condition of this permit, the Commission attaches Special Condition No. 4 which requires that the applicant submit evidence that a lease amendment has been obtained from the SLC containing all necessary authorizations for dredge spoils disposal from all dredging areas, including the Coast Seafood Company docking facility, prior to issuance of the permit.

G. Other Local Agency Permits Required.

The Humboldt Bay Harbor, Recreation, and Conservation District (HBHRCD) was created in 1970 by the California Legislature to serve the natural resource, recreational, shipping, and economic development management needs of Humboldt Bay and the smaller fishing ports to the north and south (i.e., Trinidad, Shelter Cove). The District functions as the Port Authority for the Port of Humboldt Bay and operates Humboldt County's largest marina, Woodley Island Marina. The HBHRCD regulatory jurisdiction includes all of the waters of Humboldt Bay up to the Mean Higher High Water (MHHW) level (+6.52 feet NAVD₁₉₈₈) except for Indian, Woodley and Daby Islands where the District's jurisdiction extends up to the Mean High Water (MHW) elevation (+5.81 feet NAVD₁₉₈₈).

On October 14, 2004, the HBHRCD adopted a mitigated negative declaration environmental review document and approved Permit No. 04-02 for the City of Eureka to conduct maintenance dredging and nearshore disposal of materials from ten sites along the City's waterfront over a ten-year period. As the Harbor Commission's actions predated the applicant's permit application amendment to include the dredging and spoils disposal from the Coast Seafood Company Dock site, authorization of maintenance dredging at that site has yet to be secured.

To assure that the applicant obtains all necessary authorizations to carry out the project and to comply with the terms and condition of this permit, the Commission attaches Special Condition No. 5 which requires that the applicant submit evidence that a permit amendment has been obtained from the HBHRCD containing all the necessary authorizations for spoils disposal from all dredging sites, including at the Coast Seafood Company docking facility, prior to issuance of the permit.

H. U.S. Army Corps of Engineers Review.

The project is within and adjacent to a navigable waterway and is subject to review by the U.S. Army Corps of Engineers (Corps). 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.

On December 10, 1997, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, the U.S. Army Corps of Engineers (Corps) issued Permit No. 22215N to the City of Eureka. The permit, which expires on March 15, 2008, is for maintenance dredging of accumulated sediment in the Outer and Inner Reaches of the Eureka Channel in Humboldt Bay, and for surf disposal of dredged material in the Pacific Ocean off the Samoa Peninsula, Humboldt County, California. The first dredging episode took place in 1998, and permitted the City to excavate and dispose of 67,155 cubic yards (cy) of dredged materials. Although coho salmon (Oncorhynchus kisutch) of the Southern Oregon/Northern California Coast (SONCC) Evolutionarily Significant Unit (ESU) was listed as threatened at the time the permit was issued, the Corps did not consult NOAA Fisheries. However, a special condition of each permit required completion of Section 7 Endangered Species Act (ESA) consultation, prior to authorization of any additional dredging episode. Accordingly, based upon the recommendations received from NOAA Fisheries as contained in a biological opinion pending release in late July – late August, the terms and conditions of Permit No. 22215N may be changed through a Letter of Modification Issued by the Corps.

To ensure that the second round of dredging activities ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches Special Condition No. 3 which requires to applicant to demonstrate that it has all necessary approvals from the U.S. Army Corps of Engineers for the proposed project.

I. Consultations by National Marine Fisheries Service.

Pursuant to Section 7 of the Federal Endangered Species Act (16 USC 1531) and the Magnuson-Stevens Fishery Conservation and Management Act (50 CFR 600), the U.S. Army Corps of Engineers Federal Clean Water Act Section 404 individual permit is subject to prerequisite and interim consultations with the National Marine Fisheries

Service (NOAA Fisheries) regarding the project's potential environmental effects on fisheries. As discussed in other sections of this report, draft comments and recommendations developed to date by NOAA Fisheries with respect to protecting the environmentally sensitive resources that might be adversely affected by the dredging project have been incorporated either in the project description by the applicant or attached as special conditions to the subject permit.

To ensure that the final biological opinion ultimately issued by NOAA Fisheries addresses the same project operational procedures and restrictions authorized herein, the Commission attaches Special Condition No. 6. Special Condition No. 6 requires the applicant to submit, for the review of the Executive Director, a copy of the final biological opinion issued for the dredging project, and notification of any project changes required by the Corps in response to the recommendations within the final opinion. The Executive Director would determine whether an amendment to the coastal development permit would be required before the dredging work could commence.

J. California Environmental Quality Act.

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

The Commission incorporates its findings on conformity with the Chapter 3 policies of the Coastal Act 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 specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

V. EXHIBITS

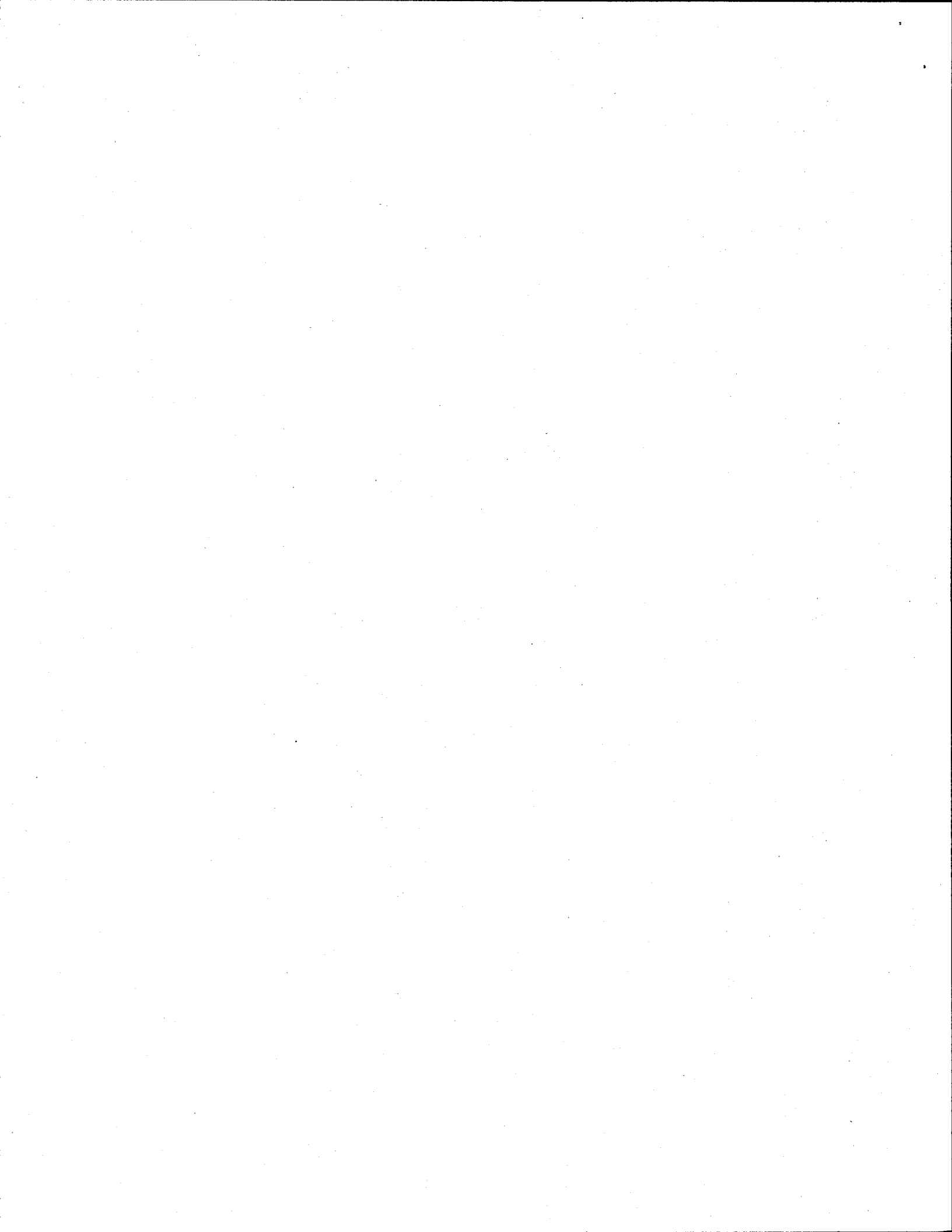
1. Regional Location Map
2. Vicinity Map

3. Project Narrative and Site Map
4. Mid-Humboldt Bay Maintenance Dredging Overview Map
5. Dredge Spoils Pipeline Route Map
6. Spoils Nearshore Disposal Outfall Map
7. Executive Summary – 1998 Dredge Spoils Disposal Site Monitoring Report

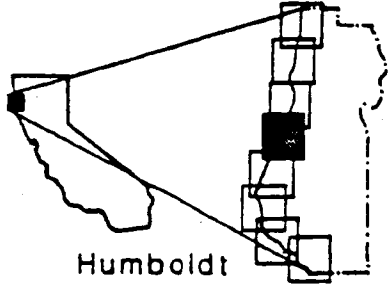
ATTACHMENT NO. 1

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.



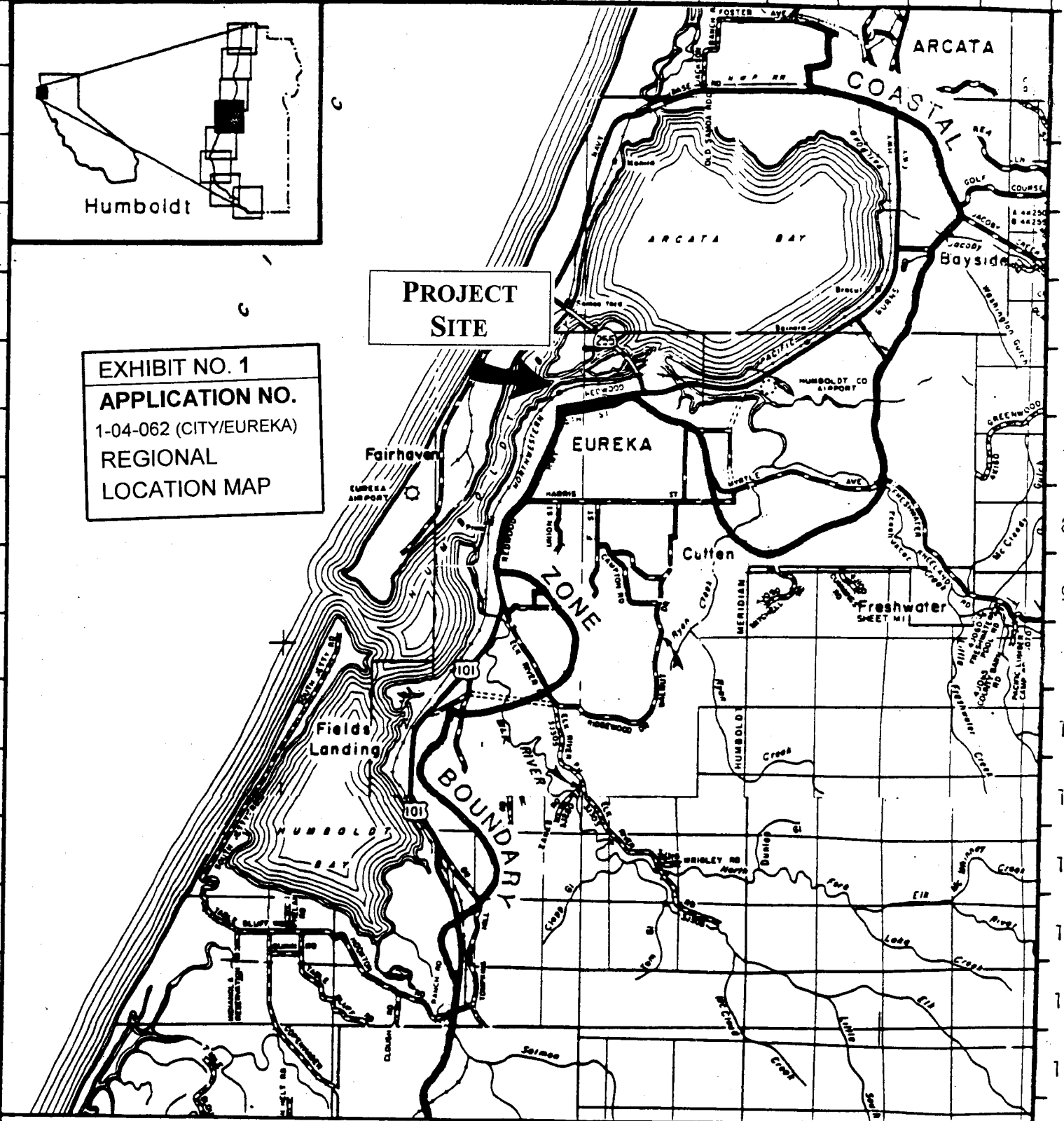
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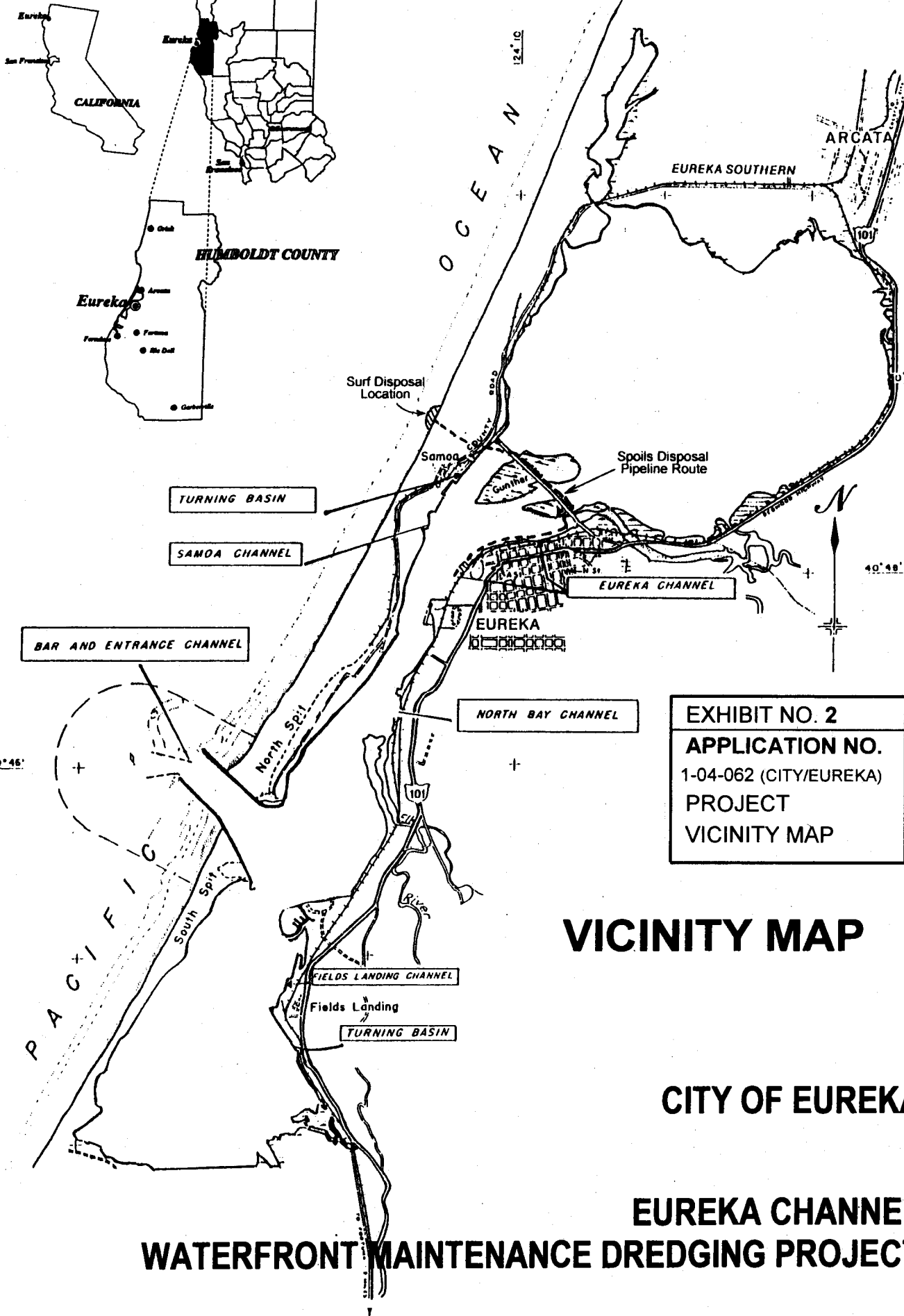
EXHIBIT NO. 1
APPLICATION NO.
1-04-062 (CITY/EUREKA)
REGIONAL
LOCATION MAP

PROJECT
SITE



LOCATION MAP





VICINITY MAP

CITY OF EUREKA

EUREKA CHANNEL

WATERFRONT MAINTENANCE DREDGING PROJECT

EXHIBIT NO. 2
APPLICATION NO.
 1-04-062 (CITY/EUREKA)
PROJECT
VICINITY MAP

**CITY OF EUREKA
WATERFRONT MAINTENANCE DREDGING**

Project Description

EXHIBIT NO. 3

APPLICATION NO.

1-04-062 (CITY/EUREKA)

PROJECT NARRATIVE

AND SITE MAP

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History

The City of Eureka is currently undertaking the renovation and restoration of the Old Town Waterfront and several water dependant facilities of the once prosperous fishing industry of Humboldt Bay. Maintenance dredging of the moorages fronting the existing recreational and commercial facilities is needed to realize their current or planned potential. There are eleven (11) separate City owned facilities slated for the proposed maintenance dredging. All eleven facilities are located along the Eureka Waterfront of the Eureka Outer and Inner Reach Channels. The various projects extend eastward from Dock B, located approximately 1000 feet southwest of the City of Eureka Small Boat Basin, to the Samoa Bridge Launch Ramp, located beneath the southern span of the Samoa Bridge (Route 255). The eleven City sites are as follows: Dock 'B', Eureka Small Boat Basin, Commercial Street Dock, Coast Seafoods Dock, Fisherman's Terminal/Landing Dock, F Street Floating Docks, I Street Dock, J Street Dock, Adorni Dock, Bonnie Gool Guest Dock and the Samoa Bridge Launch Ramp.

The sites were last dredged in 1998. The dredge sites, maintenance dredging scenario and the dredge disposal pipeline route proposed are the same as that utilized under the 1998 permits. In 1998 an estimated 64,294 cubic yards of accumulated sediment was removed from the moorage areas of the existing City waterfront facilities.

The Eureka Inner Reach Channel receives upland run-off from Ryan Slough and Freshwater Slough (Freshwater Creek) and tidal run-off from the Arcata Bay. The winter upland run-off from Ryan and Freshwater Sloughs accounts for the bulk of the sedimentation, with the Inner Reach Channel becoming very turbid during storm events.

Purpose of Project

The project is required in order to maintain adequate berthing depth for the 160± vessels which moor within moorage areas of the ten existing waterfront facilities, as well as insure the continued safe and convenient operation of the various mooring facilities. The facilities scheduled for maintenance dredging are of commercial and recreational utility providing a majority of services for the local fishing and recreational boating industries. The project will be conducted in combination with the maintenance dredging of the Woodley Island Marina. The project is scheduled to commence in September of 2005, pending approval of all permits.

Project Description

The proposed project involves the maintenance dredging and disposal of an estimated 80,390 cubic yards of accumulated sediment from the moorage areas of eleven existing waterfront coastal dependent properties along the Eureka Waterfront. All project

facilities are located on the Eureka Outer and Inner Reach Channels of the Humboldt Bay Channel System.

The maintenance dredging is proposed to be conducted by a cutter-suction pipeline dredge, the same method utilized during the 1998 maintenance dredging project. The use of a cutter-suction pipeline dredge is the best technology for reducing suspended sediment within waters of the dredge sites.

Approximately 70% of the material to be dredged by this project is fine, silt, and clay. The remainder is about 30% sand. The small cutter-suction dredge used in 1998 had the ability to maneuver itself between the main docks and finger slips of the marina and remove dredge material from beneath the areas covered by the floats. The utilization of cutter-suction dredge method of dredging is also the best technology for reducing the turbulence at the dredge location, as the cutter head loosens the sediment and a constant suction is maintained by the pump, drawing the loosened sediments and much of the turbid water into the pipeline. Turbid water will be present at the dredge site and down current, (depending upon the tide) but in significantly lower quantities than if a hopper dredge or clamshell dredge were used. The timing of the project, during the winter months, will effectively reduce the turbidity caused by dredging due to the significant turbidity within the Inner Reach Channel from upland run-off caused by storm events.

The schedule of dredging will be circulated to all tenants of each of the eleven dredge sites so that boats can be moved as necessary to facilitate the complete maintenance dredging activity.

From the cutter-suction dredge at the marina the spoils slurry will be pumped through a semi-flexible disposal line to the designated disposal area. The spoils line is floated across minimal access open water areas and weighted and submerged where crossing navigable waters. The route of the spoils line is the same as that used in the 1998 maintenance dredging project. It is proposed that the spoils line route for the Small Boat Basin run north across the Eureka Inner Reach Channel and along the west side of Indian Island. This route might also be used for several of the western Eureka City Waterfront sites. For the Woodley Island Marina maintenance dredging, it is proposed that the spoils line run east from the marina to the Samoa Bridge (Highway 255) right-of-way. Through an Encroachment Permit from Cal-Trans, the pipe would be positioned off the westbound shoulder, out of the normally traveled section. Where the line enters the mid-span channel and the Samoa Channel, it will be submerged to allow the passage of vessels to and from Arcata Bay. This alignment may be utilized for several of the eastern City of Eureka Waterfront facilities. At no point in the pipeline route will the line cross the federally authorized shipping channels of Humboldt Bay. Floating sections of the line will be marked with buoys and lights to warn vessels of its presence for the duration of the project. Booster pumps stationed in the pipeline to assist in pumping the spoils slurry, will be positioned on Woodley Island to the east side of the center span of the Samoa Bridge at the western approach and on the shore of the west side of the Samoa Channel approximately 700 feet south of the Samoa Bridge. From the Samoa booster, the spoils disposal line will be routed through an existing carrier pipe beneath Old Samoa Road, then above ground across the eastern end of the Simpson Samoa Company (formerly Louisiana-Pacific) upland disposal site to the edge of New Navy Base Road. From this point the line will pass through another existing carrier pipe beneath New Navy Base Road, then run above ground along existing off road vehicle roads to the surf zone of the Samoa Peninsula (Pacific Ocean). Through

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the dune area to the surf, the pipeline will be covered where utilized roads or trails intersect the route, and marked to warn the public of its presence. At the beach discharge area, signs and barricades will be posted to warn the public of the temporary conditions.

The dredging scenario and pipeline route described are the same as that utilized under the 1998 permits. Pipeline route areas disturbed by placement, maintenance and removal of the spoils line will be reclaimed to as near pre-project conditions as possible, and as per conditions of all individual permits.

Surf disposal of spoils has been utilized for several dredging projects and most recently during the 1998 maintenance dredging project as again proposed herein.

Surf disposal during the Winter (2005) will reduce the effects of turbidity within the surf zone of the Samoa Peninsula. During this period of the year, the Eel and Mad Rivers are typically discharging significant amounts of turbid water into the ocean proximal to the surf zone discharge point. The higher sediment-laden levels of the ocean waters, experienced during winter months, aids in reducing the effects of suspended concentrations of sediments at the spoils discharge point relative to the seasonal background levels. Higher wave action during the winter also helps to distribute the discharged sediments through the surf zone.

The winter dredge/disposal period effectively reduces turbidity at the dredge sites, especially within the Eureka Inner Reach Channel of Humboldt Bay where the predominance of turbid run-off from uplands of the North Bay drain. The minor quantity of suspended sediment generated within the Eureka Inner Reach Channel by the cutter-suction pipeline dredge would not be detectible over the diminished background water quality for a good portion of the winter rainy season. Dredging within the Eureka Inner Reach Channel during the summer and fall (May - October) would result in noticeable effects to water quality.

The spoils discharge area will be posted at several locations as to the activities and duration of the project. Barricades and lighting will be provided and maintained throughout the project to further inform users of the Peninsula of the temporary activities. The discharge area will be inspected and maintained daily to ensure the proper public notification of the project activities and safe access to the North Spit Recreational area.

Through the shallows and unnavigable waters of the Bay, the spoils line will be floated. Where the line will cross navigable waters of Humboldt Bay, weights will be attached to submerge the line and permit the normal passage of vessels. Buoys and lights mark the line throughout the bay crossings to prevent navigational hazards to mariners. A Notice to Mariners is also filed with the U.S Coast Guard for the duration of the project, advising marine travelers of the project activities within navigable waters.

Sections of plastic disposal line will be floated into position within the Bay, or placed in position using a small rubber tired tractor within the upland right-of-ways, then heat fused to prevent leakage of spoils. Cleanup of any leakage will be the responsibility of the dredging contractor. Regular inspection and maintenance of the entire length of the line is carried out during the project to ensure integrity and prevent leaks or breaks.

The dredge and booster pumps rely on diesel engines for the pumping of sediment. They generate the equivalent noise and exhaust of a semi-tractor rig when in operation.

Booster pumps are located away from residences for the prevention of noise related impacts. All fuel burning engines will be fitted with appropriate muffler systems and maintained throughout the project. Dredging operations along the Eureka Waterfront are within areas of regular industrial and commercial activities. The diesel engine of the dredge should not cause significant noise increases above the typical daily operational levels of the project area. Other than live-aboards at the Eureka Public Berthing Facility (Small Boat Basin) and the Woodley Island Marina, there are no other residences on the immediate Eureka Outer and Inner Reach Waterfront that would be affected by the proposed project.

As proposed, the project will not generate increased traffic on public roads or create any additional demands upon public facilities or services. The dredging contractor will be responsible for removal of all debris and project related materials at the completion of operations. This includes reclaiming all areas specified in project permits as well as any additional areas identified within the project plans and specifications.

Mobilization of the spoils line, booster pumps and dredge is expected to take ten to fifteen days and involve eight to ten full time employees. Following contractor mobilization, the dredging contractor's crew will consist of five to six full time employees. Three or four persons will split the twenty-four hour shift work operating the dredge and the remaining employees will conduct the maintenance activities of the operation. Dredging operations, especially those encumbered by a specific seasonal operating period, run six to seven days a week, twenty-four hours a day. An operational schedule such as this is expected for this project, based upon historic requirements and present informal consultation with the California Regional Water Quality Control Board.

Upon completion of the project, the general public will enjoy efficient access to Humboldt Bay and the important recreational and commercial facilities thereon.

Dredge Site Descriptions

The facilities slated for maintenance during the City of Eureka Waterfront maintenance dredging projects are located along the Eureka Waterfront of the Eureka Channel and the Eureka Outer and Inner Reach Channels. The various projects extend eastward from Dock B, located approximately 1000 feet southwest of the City of Eureka Small Boat Basin, to the Samoa Bridge Launch Ramp, located beneath the southern span of the Samoa Bridge (Route 255).

Descriptions of the eleven (11) separate City owned facilities scheduled for maintenance dredging within the proposed project are provided below.

Site #1- Dock "B"

Dock B is located on the Outer Reach of the Eureka Channel approximately 1000 feet southwest of the Eureka Public Berthing Facility (formerly known as the Small Boat Basin). The wooden structure adjacent to the maintained 35 foot deep channel, was used in the past for loading lumber and logs (as late as the 1950's) for export from Humboldt Bay. The decline of the timber industry relegated the facility to duty as a location to off-load fishing boats. In the 1980's, the southern two-thirds of the dock was consumed by fire, leaving the wharf virtually unusable as a future industrial facility, unless rebuilt. Since monies for rebuilding were not available, the structure has remained as a fishing boat off-loading site. The moorage area along the face of the

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dock has silted in substantially and maintenance is needed to provide moorage for the shallow draft fishing vessels that off-load.

As proposed, dredging of the Dock B moorage will require the removal of an estimated 14,000 cubic yards of sediment from 600 lineal feet of dock frontage to a project depth - 24 feet Mean Lower Low Water (MLLW). Dredging will daylight near the east channel line at the project depth and extend 50 feet beyond the north and south ends of the original structural footprint. A forty-five degree flare from the northwest and southwest dock corners will be excavated to ease future vessel berthing. Slopes from final depths shall be cut at 2:1 or left at the natural angle of repose of the sediment. A two foot overdepth allowance is permitted within the dredge area, realizing a maximum pay line of -26 feet MLLW. The southern two-thirds of the structure was burned in the early 1980's and miscellaneous debris may be encountered during dredging operations. The Tidal Bench Mark (TBM) used for the surveys is located on a section of 12x12 blocking near the northwest corner of the dock. The zoning of the vacant upland parcels surrounding the facility to the south and east is Water Dependant Industrial (MC). The vacant upland parcel to the north is zoned Waterfront Commercial (CW). The upland parcels are devoid of vegetation with the exception of ruderal species.

Site #2 - City of Eureka Small Boat Basin

The City of Eureka Public Berthing Facility (formerly known as the Small Boat Basin), located 1/8 mile south of Commercial Street on Waterfront Drive, provides moorage for many recreational and commercial vessels. The Boat Basin was renovated in 1999. Morages of the boat basin were last maintained in 1998 when approximately 57,745 cubic yards of sediments were removed by cutter suction dredge and pumped to the upland disposal site located on the North Spit of the Samoa Peninsula.

As proposed, maintenance dredging of the berths and fairways of the Small Boat Basin will involve the removal of approximately 39,000 cubic yards of sediment to the -8.0 foot depth. Dredging will not be permitted within the delineated eelgrass beds near the southwest entrance of the basin or within 20 feet of the seawall fronting the Waterfront Drive parking lot. The basin shall be excavated to a mean depth of -8.0 feet MLLW. Dredging shall also include freeing all utilities from within sediment, dredging areas beneath floating docks and providing access to the existing launch ramp. The facility was last maintained in 1998. TBM used for surveys is located on the headwall of the Washington Slough tide gate.

Currently vessel traffic to and from the inner slips is limited to moderate to high tides. The quantity proposed for removal is based upon dredging to the original design depths. The upland parcel is zoned Water Dependant Industrial (MC). The Commercial Street Dock and upland fish processing plant bordering the Boat Basin to the east and the vacant parcel to the west along Humboldt Bay shoreline are both zoned Waterfront Commercial (CW).

Site #3 - Commercial Street Dock

In 1998 approximately 100 cubic yards of material fronting the western 400 feet of the Commercial Street Dock was removed to a design depth of -14.0' MLLW. This 400 foot portion of the dock serves as a fishing vessel off-loading and fueling dock. The upland improvements also include the Pacific Choice fish processing plant and the Englund Marine Supply store. Dredging is proposed for the western 400 feet of the Commercial

Street Dock. This area shall be dredged to a depth of -14.0 feet MLLW. An estimated 100 cubic yards of sediment is present within the delineated dredge area.

The eastern 250 feet of the Commercial Street Dock is primarily used to provide moorage for various United States Coast Guard vessels and large fishing vessels. While permitted, the eastern 250 feet of the dock was not dredged in 1998 due to contract time constraints. Generally, vessels visiting the eastern 250 feet of the Commercial Street Dock require a moorage with approximately 18 feet of depth to accommodate them at extreme low tides. To achieve the design depth of -18.0' MLLW for the eastern 250 feet of the Commercial Street Dock, the removal of approximately 1270 cubic yards of sediment will be required.

It is estimated that 1270 cubic yards of sediment has accumulated above the -18.0 foot depth since the last maintenance dredging operation of 1998. From the east limit of the -14 foot Commercial Street Dock dredging, the -18.0 foot depth shall be maintained to the eastern extent of the Commercial Street Dock. North and south project depth limits shall extend from the face of the dock to daylight near the Channel line. Side slopes shall be cut at 2:1 or the natural angle of repose. TBM for this site is located approximately 20 feet west of the dock angle point and 3 feet north of Towill monument No. 401, elevation 12.76 MLLW.

The upland parcels surrounding the facility are zoned Waterfront Commercial (CW) and include the U.S. Coast Guard office and Coast Seafoods processing plant.

Site #4 – Coast Seafoods Dock

Coast Seafood Company is engaged in the commercial business of cultured Oyster production and processing on Humboldt Bay. The dredging is required to remove the sediment that has accumulated in Coast Seafoods' unloading slip and moorage area. The proposed project site is at the foot of 'A' Street along the eastern shoreline of the North Bay Channel at 25 Waterfront Drive in Eureka, CA. is owned by Coast Seafoods Company. The tidelands are leased by Coast Seafoods Company from the City of Eureka. The site was last dredged in 1995 by Clamshell shell bucket dredge. Approximately, 1,000 cubic yards of sediment that accumulated in the unloading slip were removed. In addition, the damaged bulkhead from the earthquake was repaired by driving concrete piles and tying them to the bulkhead.

The proposed project is for the maintenance dredging and spoil disposal of 3,800 cubic yards of material from the moorage area and the unloading slip. The area subject to dredging is approximately 0.15 acres. The dredging area extends 32 feet north - west of the dock and parallels the dock for approximately 212 feet. On the east side of the dock dredging will extend 31 feet south east of the dock and parallels the east side of the dock for approximately 130 feet. The dredging process will involve cutter suction dredging the moorage and the unloading area to their original design depths, 12 feet MLLW. The current depth around the dock is 10 feet MLLW. The proposed spoil disposal method is the same as that utilized for the rest of the project (beach disposal by pumping spoils through pipeline).

Site #5 - Fisherman's Terminal/Landing Dock

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The currently vacant Landing Dock, formerly associated with Lazio's Restaurant and fish processing plant was last dredged in 1982 to a depth of -8.0' MLLW. While permits were secured in 1997 for dredging of the Landing Dock, it was not dredged due to the previous project's short work window and lack of time left to dredge all sites. Adjacent to the Landing Dock moorage is a floating dock that provides moorage for the Humboldt Bay Cruise Ship Madaket, Humboldt Bay's oldest working ferry boat (used presently for informational cruises of the Bay). The facility, located at the foot of C Street, is scheduled for renovation in August 2004 and will again provide moorage for vessels commensurate with those berthed at the Boat Basin and Woodley Island Marina. The project site is located within the waterfront commercial district of Eureka. The new Boardwalk is sited just north of this Facility. Other surrounding parcels are vacant.

To dredge the moorage area to its proposed renovation design depth of -14.0' MLLW will result in removal of 12,000 cubic yards of material. The -14' dredge depth reflects the depth of the adjacent channel and up-channel areas. North and south project dredge depths shall begin on a line 20 feet off the face of the existing structure (future structure face) and daylight at or near the south line of the Eureka Inner Reach Channel. Eastern dredge limits shall be the east end of the existing fixed dock and the western limit shall follow a flare of forty-five degrees extending from the northwest corner of the existing dock structure. Slopes shall be cut at 3:1. The remains of a wooden fishing boat are buried in the sediment near the west end of the Landing Dock. The dredge depth for the floating dock that provides moorage for the Humboldt Bay Cruise Ship Madaket is also -14.0 feet MLLW, following the east/west line of the Landing Dock dredging. The eastern limit of project depth dredging shall extend 80 feet up channel from the floating dock. Transition slope from the Landing moorage to the Madaket Moorage shall be cut at 3:1. All other slopes shall maintain 2:1 gradients. The -14.0 foot depth will daylight near the south channel line. Dredging of the two moorages will require the removal of about 12,000 cubic yards of sediment. The Madaket Dock frontage was last maintained in 1998. TBM for the dredging of this site is located at the edge of the concrete slab on the east side of the Madaket gangway attachment.

Site #6 - F Street Floating Docks

In 1999/2000 the 560 lineal feet of moorage area fronting the aged fish processing buildings, as well as the buildings, located between the foot of D and F Streets were removed and in 2003 two new public access floating docks were constructed at the foot of F Street. In 1997 permits were secured for the removal of 4,348 cubic yards of sediment from the site to a depth of -10.0' MLLW. However, due to contract time constraints, only 40% of the site was dredged. As such, the built up of sediment and lack of complete maintenance dredging has caused the floating docks to sit on the mud at low tide. Since their installation an estimated 1,700 cubic yards of sediment has built up underneath the docks and above the proposed -10.0 foot project depth fronting the F Street Floating Docks.

Project depth shall be maintained from the face of the existing structures to daylight near the south channel line of the Eureka Inner Reach Channel. The western project dredge depth limit shall be the west end of the existing dock, flaring forty-five degrees westerly to daylight near the channel line. The eastern dredge limit is approximately 35 feet east of the existing float. TBM is the same as utilized for the Landing Dock. The upland parcels surrounding the F Street Floating Docks are zoned Waterfront Commercial (CW). Several of the old waterfront buildings in the area have been raised.

Site #7 - I Street Dock

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Caito Fisheries currently off-loads and processes catch at this leased facility. Caito Fisheries is the eastern most waterfront dependant commercial business on the Eureka Inner Reach Channel. As proposed, dredging of the I Street Dock will require the removal of an estimated 5,000 cubic yards of sediment from dock frontage to a project depth of -14.0 feet MLLW. The dredge limits extend 20 feet east and west of the ends of the floating dock and from the face to daylight near the south line of the Eureka Inner Reach Channel. Slopes from the project depths and limits shall be cut at 2:1.

California Department of Fish and Game leases the J Street Dock immediately east of the I Street Dock to moor their vessels. The vacant parcel to the immediate west is owned by the Northwestern Pacific Railroad. The upland parcels surrounding the I Street Dock are zoned Waterfront Commercial (CW).

Site #8 - J Street Dock

The J Street Dock is currently being used for moorage of the California Department of Fish and Game vessel "Albacore" and two other vessels that moor intermittently. These vessels are used for the Department's off-shore operations out of Humboldt Bay. Since the last maintenance dredging operation of 1998, maintaining this moorage to a depth of -12.5 feet MLLW (reflecting adjacent channel depth) would call for the removal of approximately 1,400 cubic yards of accumulated sediments. The dredge limits extend 100 feet east and west of the ends of the floating dock and from the face to daylight near the south line of the Eureka Inner Reach Channel. Slopes from the project depths and limits shall be cut at 2:1.

Caito Fisheries off-loads and processes catch at a leased facility immediately west of the J Street Dock. To the southeast of the Dock is a small community waterfront park. The upland parcels surrounding the J Street Dock are zoned Waterfront Commercial (CW).

Site #9 - Adorni Recreation Center Dock

In 1992, the Adorni Recreation Center was constructed to provide waterfront access and recreational opportunities to local and visiting citizens. Since the last maintenance dredging operation of 1998, sediment has built-up underneath the south side and causes the floating dock to tilt rather severely at low tide. The proposed removal of 1,320 cubic yards of material would provide a depth of -6.0' MLLW along the face and -5.0' MLLW along the south edge, allowing for a smooth shallow transition to the surrounding natural contours. Shallow transition slopes east and west will help prevent excessive sedimentation of the area. Project depth shall extend a minimum of five feet from the east and west sides of the float. Slopes surrounding the dock shall be cut at 4:1 to daylight. The upland parcels surrounding the Adorni Recreation facility are zoned Waterfront Commercial (CW). The Adorni Public Recreation Center provides the shoreline access for the small recreational rowing dock scheduled for maintenance dredging.

Site #10 - Bonnie Gool Guest Dock

The Bonnie Gool Guest Dock is a recently constructed public access facility located 400 feet east of the Adorni Recreation Center. The dock was built to provide public access

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to vessels and historic ships of interest. The existing depths at the facility, -10.0' MLLW along the face and -8.0' MLLW at the back of the dock are proposed to be dredged to depths of -14.0' MLLW and -8.0' MLLW respectively. Since the last maintenance dredging operation of 1998, approximately 600 cubic yards of sediment has accumulated and requires removal. The north and south dredge limits for the outer berthing area shall extend from the face of the dock to daylight near the south channel line at the -14.0 foot depth. The western limit shall begin at the point of daylight (-14.0 foot depth) on a line extending west from the face of the floating dock, approximately 30 feet west of the end of the dock. The eastern limit of the outer berth will extend 10 feet up-channel of the east end of the dock and flare 45 degrees up-channel to daylight. Inner berth project depth limits will follow the south side of the floating dock and extend south 25 feet parallel to the south line of the dock. West project depth limit will extend approximately 80 feet west of the west end of the facility, on a line twenty-five feet south and parallel with the floats. Eastern project depth limits will extend 80 feet east of the dock and on a line parallel to and 25 feet south of the south side of the floats. All slopes shall be cut at 3:1 to daylight. TBM is located on the face of the 16 inch square pile west of the T-section on the main float.

The public moorage facility is bordered on the west by the Adorni Recreation Center and to the south by the Sacco Waterfront Amphitheater. Southeast of the dock is the vacant Halvorsen Mill site which extends east 1800 feet to S Street, 400 feet east of the Samoa Bridge Launch Ramp site. The upland parcels surrounding the Bonnie Gool Guest Dock facility are zoned Waterfront Commercial (CW).

Site #11 - Samoa Bridge Launch Ramp

Since the last maintenance dredging operation of 1998, sediment from the upstream Eureka and Freshwater sloughs has lead to deposit of a mound of material along the east border of the ramp. The mound is slowly migrating onto the tidal portion of the ramp and will soon limit the ramp's utility if not removed. The ramp is used as a public vessel launch location for enjoyment of recreational opportunities on Humboldt Bay and beyond. It is proposed to remove approximately 200 cubic yards of material from the ramp and adjoining area immediately east of the ramp. Removal of the mound to the east side of the facility will include cutting the sediment to the grade of the ramp for a distance of ten feet east of the floating dock and sloping the cut to daylight at a point approximately 40 feet east of the float. Minor sediment removal will also be needed from the ramp and along the west edge. Again cutting the accumulated sediment to the ramp gradient and tapering to daylight at a shallow slope in the down-channel direction. TBM is located on the northern-most pile.



0 0.3 0.6 0.9 1.2 1.5 km
 0 0.2 0.4 0.6 0.8 1 mi

Map center is UTM 10 401109E 4517447N (WGS84/NAD83)
EUREKA quadrangle
 Projection is UTM Zone 10 NAD83 Datum

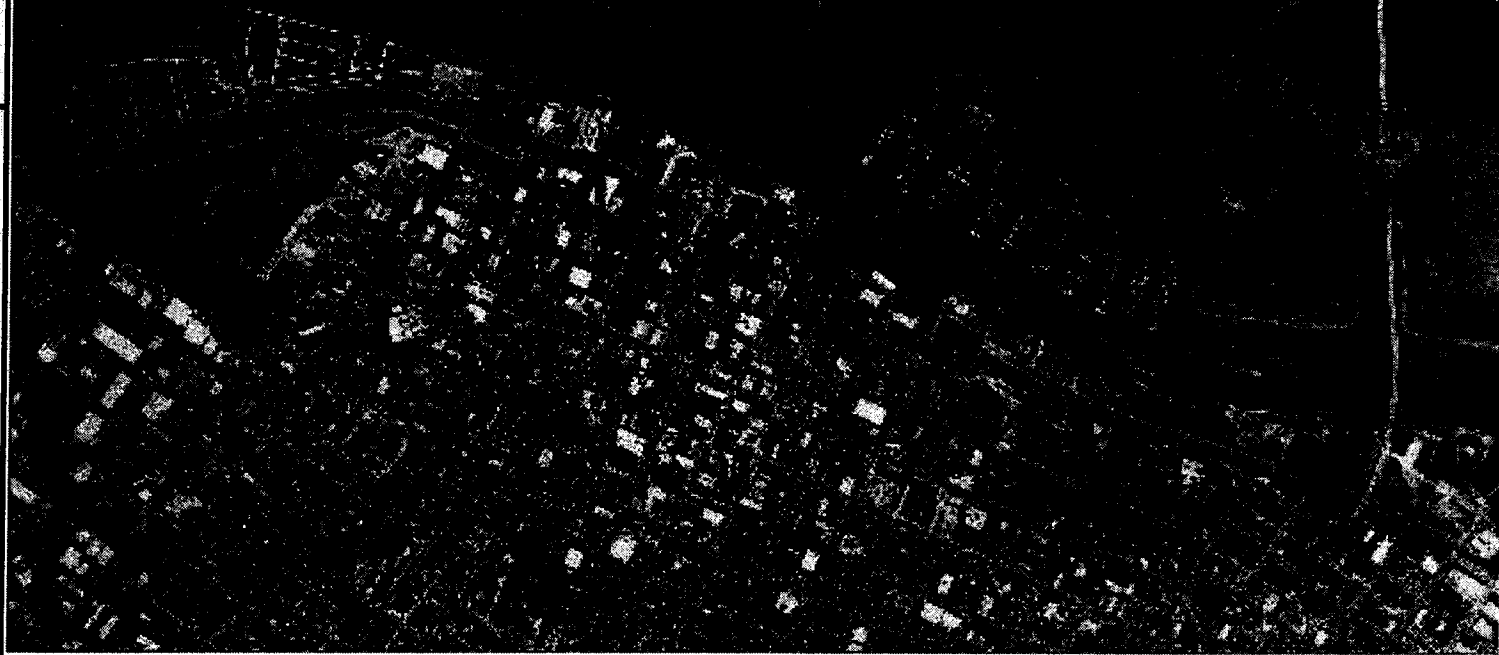
M
 G
 M=16.241
 G=-0.766

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EXHIBIT NO. 4

APPLICATION NO.

1-04-062 (CITY/EUREKA)
Mid-Humboldt Bay
Maintenance
Dredging Overview Map



HE-1

NOV 16 2004
1:00 PM
1:00 PM

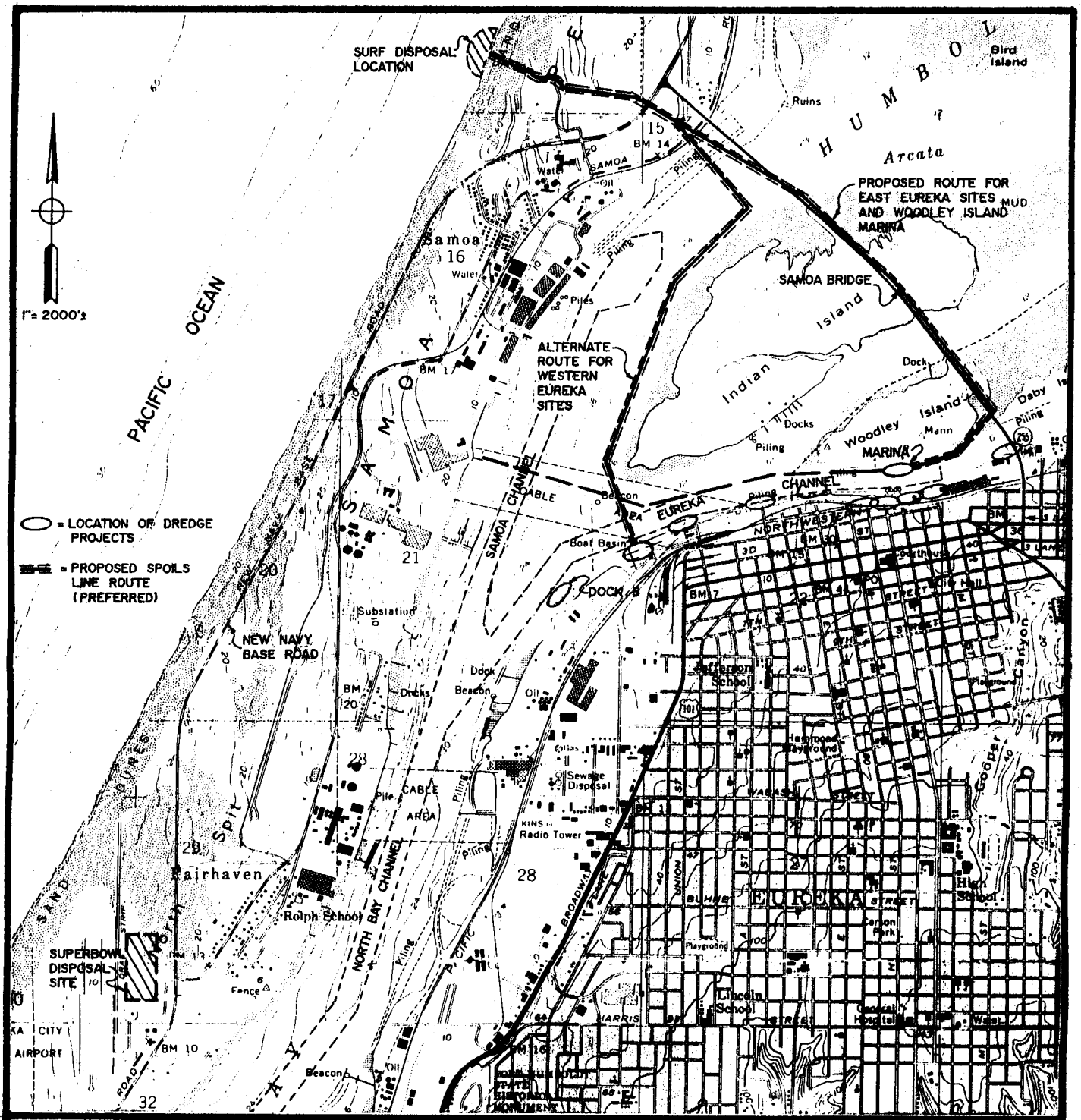
HBHRCO & CITY OF EUREKA
MAINTENANCE DREDGING
EUREKA INNER REACH
EUREKA, CA

OVERHEAD VIEW
IN COMPLIANCE WITH
CALIFORNIA WATERWAYS ACT

DESIGN
DAVID L. SCHNEIDER
200 WEST WASHINGTON ST
EUREKA, CA 95501
(707) 444-3661



PACIFIC APPLICANTS
[Redacted]
[Redacted]



DISPOSAL ROUTE OPTIONS

**WATERFRONT FACILITIES MAINTENANCE DREDGING
HUMBOLDT BAY, EUREKA INNER REACH CHANNEL**

**COUNTY OF: HUMBOLDT
STATE OF: CALIFORNIA**

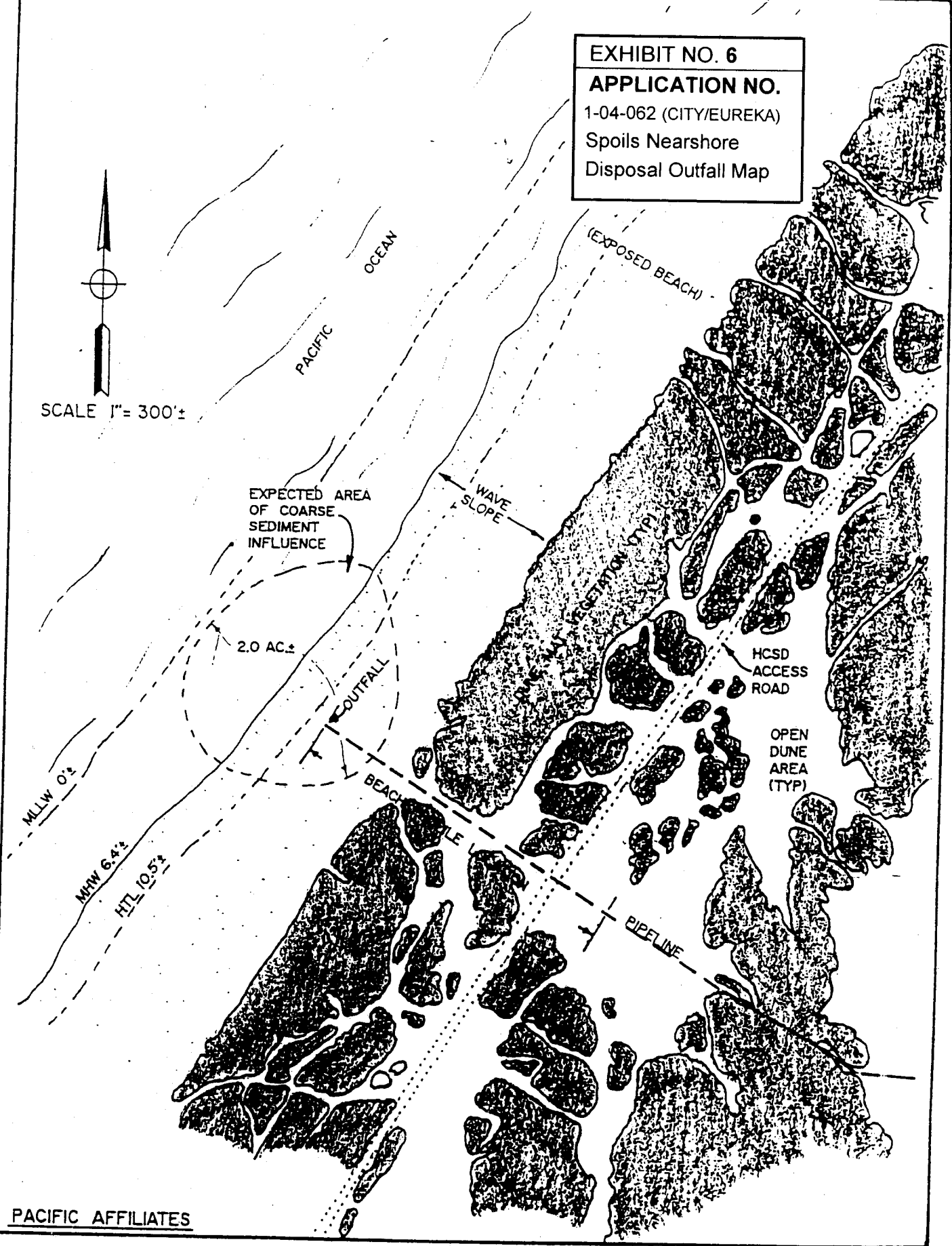
**EXHIBIT NO. 5
APPLICATION NO.
1-04-062 (CITY/EUREKA)
Dredge Spoils Pipeline
Route Map**

PREPARED BY PACIFIC AFFILIATES

EXHIBIT NO. 6
APPLICATION NO.
1-04-062 (CITY/EUREKA)
Spoils Nearshore
Disposal Outfall Map



SCALE 1" = 300'



PACIFIC AFFILIATES

SAMOA BEACH SPOILS LINE OUTFALL SITE
CITY OF EUREKA & HUMBOLDT BAY HARBOR DISTRICT
COOPERATIVE MAINTENANCE DREDGING PROJECT

ANNUAL BIOLOGICAL MONITORING REPORT
HARBOR DISTRICT AND CITY OF EUREKA
MAINTENANCE DREDGING PROJECT
SAMOA BEACH, HUMBOLDT COUNTY, CA

1.0 EXECUTIVE SUMMARY

- Approximately 226, 238 cubic yards of dredged materials were pumped via floating pipeline across the bay to the Samoa Peninsula and discharged across the exposed sand beach between January and May, 1998. The discharge pipe was located on the beach just above the high tide line, at approximate latitude of 40° 49' 20" N, longitude 124° 11' 20' W (Figure 1).
- Three transects were established to determine the species composition and abundance of sand beach animals in the immediate area of the dredged materials discharged, at a location nearby, and at a control site some distance south of the discharge point.
- In both pre- and post-discharge periods, the beach fauna was dominated in species composition and numerically by the burrowing crustacean *Excirolana linguifrons* and the burrowing marine worm *Euzonus williamsi*.
- The abundance of burrowing isopods (*Excirolana linguifrons*) and the marine worm *Euzonus williamsi* appears to have been much less in 1988 than we collected in 1998. The abundance of other sand beach animals was comparable in 1988 and 1998.
- Dredged materials were still being discharged across the disposal site during the April sampling interval. All three sites had been affected by winter storm beach erosion. Additionally, the presence of hydrogen sulfide at the discharge transect influenced both occurrence and abundance of animals.
- In the May sampling period we noted a gradual increase in species occurrence and abundance. The severe winter storms that had caused significant erosion on the Samoa Peninsula beaches were no longer a dominant environmental factor.
- In June and July sampling, we encountered about the same number of species at the three sites, but the control site had the highest number of species (11) of the three. Many small *Euzonus williamsi* were collected and it was noted that several of the mole crabs (*Emerita analoga*) were bearing egg masses.
- By the August sampling period the three sites were approaching a level of faunal similarity approximating that found in the January pre-discharge sampling. The reappearance of mole crabs (*Emerita analoga*) in August samples at all three transects and its abundance at the discharge transect indicated that little residual biological effect of dredge spoil disposal could be detected at the discharge point.

EXHIBIT NO. 7

APPLICATION NO.

1-04-062 (CITY/EUREKA)

Exec. Summary - 1998 Dredge
Spoils Disposal Site Monitoring
Report