

CALIFORNIA COASTAL COMMISSION

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Filed (CDP): November 7, 1997
49th Day (CDP): December 26, 1997
180th Day (CDP): May 6, 1998
Filed (CC): 9/29/97
3 Months (CC): 12/29/97
6 Months (CC): 3/29/98
Staff: Meg Vaughn/John Auyong/
Mark Delaplaine
Staff Report: November 13, 1997
Hearing Date: December 9-12, 1997
Commission Action:



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STAFF REPORT AND RECOMMENDATION
ON COMBINED COASTAL DEVELOPMENT PERMIT APPLICATION
AND CONSISTENCY CERTIFICATION

COASTAL DEVELOPMENT PERMIT NO.: 5-97-231

CONSISTENCY CERTIFICATION NO: CC-137-97

APPLICANT: County of Orange AGENT: Noble Consultants

PROJECT DESCRIPTION: Maintenance dredging of up to 106,400 cubic yards (overdepth dredge) with offshore disposal of the dredge spoils at LA-2 (except for spoils used in the eelgrass mitigation plan), removal of 0.181 acres of eelgrass, and implementation of an eelgrass mitigation plan (including transplantation of 0.217 acres of eelgrass).

PROJECT LOCATION: Dredging project: Sunset Harbor; from the outer Entrance Channel to the Bolsa Channel (including the entrance channel, main channel, access channel, Sunset Harbour, Bolsa Channel, and Portofino Marina), Cities of Seal Beach and Huntington Beach, County of Orange
Offshore disposal: Offshore disposal site LA-2, an EPA-designated ocean disposal site located 6 miles southwest of Point Fermin, Los Angeles County

LOCAL APPROVALS RECEIVED:
Orange County Approval-in-Concept

SUBSTANTIVE FILE DOCUMENTS:
(See Appendix A)

STAFF NOTE: This staff recommendation includes recommended resolutions and findings to support proposed Commission action on both a coastal development permit and a federal consistency certification. Two separate actions need to be taken; one for the permit and one for the consistency certification. A coastal development permit is required because the proposed dredging is located seaward of the mean high tide line in the Commission's retained permit jurisdiction area.

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Further, Section 13252 of Title 14 of the California Code of Regulations states that maintenance dredging involving more than one hundred thousand (100,000) cubic yards of dredging over a twelve month period requires a coastal development permit. Since the proposed project would include overdepth dredging up to 106,400 cubic yards within a 12 month period, the proposed project is not exempt from obtaining a coastal development permit.

A consistency certification is required for disposal of dredged materials at the LA-2 site, because; (1) it is a federally permitted activity including transportation of material through the coastal zone, and (2) of the potential effects of ocean disposal on natural resources of the coastal zone.

SUMMARY OF STAFF RECOMMENDATION:

1. Coastal development permit application. Staff is recommending approval of the proposed project with special conditions regarding; (1) compliance with the proposed eelgrass mitigation plan, (2) a pre-construction eelgrass survey, (3) a post-construction eelgrass survey, (4) compliance with the Southern California Eelgrass Mitigation Policy adopted by the National Marine Fisheries Service, (5) identification of eelgrass proposed not to be impacted, (6) submission of final written comments on the proposed project from the California Department of Fish and Game, (7) requiring a marine biologist monitor, (8) compliance with Regional Water Quality Control Board, Santa Ana Region, Order No. 97-81, (9) the use of a hydraulic dredge, when feasible, and use of structural turbidity controls such as silt curtains, (10) requiring a dredging monitor, (11) marking of construction equipment, (12) approval by the Coast Guard and Harbor Patrol for the temporary removal of navigation aids or markers, (13) removal of construction equipment which impedes navigation, and (14) prohibiting construction between March 1 and September 1; to bring the proposed dredging project in compliance with the wetland fill, water quality, and public access/recreation policies of Chapter 3 of the Coastal Act.

2. Consistency Certification. The project includes a consistency certification for the disposal of approximately 106,000 cubic yards of sediment at LA-2, an EPA-designated ocean disposal site located 6 miles southwest of Point Fermin, Los Angeles County. This consistency certification is needed to authorize the disposal of the dredged material beyond the three mile limit of state waters.

The Commission has authorized other dredge disposal projects at this location. The proposed project is the least environmentally damaging alternative and will have no significant impacts to marine resources. The dredge materials are not suitable for beach replenishment, due to the fine grain size of the material. The proposed project will result in temporary impacts to benthic organisms and a temporary increase in water turbidity. However, the site will recolonize quickly. Chemical analysis of the sediments and bioassay tests shows the dredge material is suitable for ocean disposal, and will not generate any impacts to the water quality or marine resources in

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or around LA-2 or in the coastal zone. The EPA has confirmed that the materials meet the applicable "Green Book" standards and are therefore are suitable for disposal at LA-2. Therefore, the project is consistent with the dredging, water quality, marine resources, and sand supply policies of the Coastal Act (Sections 30230, 30231, and 30233).

The proposed project will have no negative effects on commercial or recreational boating or fishing in the area. Therefore, the project is consistent with the recreational and boating policies of the Coastal Act (Sections 30234, 30234.5, 30220, 30224).

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolutions and findings for the coastal development permit and the consistency certification:

I. APPROVAL WITH CONDITIONS. (Coastal development permit)

The Commission hereby grants a permit, subject to the conditions below, for the proposed development on the grounds that the development, located between the nearest public roadway and the shoreline, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, including the public access and recreation policies of Chapter 3, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS. (Coastal development permit)

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

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5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
6. 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.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS. (Coastal development permit)

A. Eelgrass Mitigation.

1. Compliance with Eelgrass Mitigation Plan. The applicant shall implement and comply with the "Eelgrass (Zostera Marina) Survey, Impact Assessment, and Mitigation Plan, County of Orange Sunset Harbor Maintenance Dredging Project, Phase II", dated February 28, 1997 prepared by Coastal Resources Management for Noble Consultants, Inc. The mitigation plan shall be undertaken in full compliance with the most recent version of the "Southern California Eelgrass Mitigation Policy" adopted by the National Marine Fisheries Service. Any changes to the approved mitigation plan, including but not limited to changes to the monitoring program to ensure success of the eelgrass mitigation site, shall require an amendment to this permit from the Coastal Commission or written concurrence from the Executive Director that the changes do not require a permit amendment.
2. Pre-construction Eelgrass Survey. Not more than one hundred twenty (120) days prior to commencement of dredging, the applicant shall undertake a new survey of the project site to determine the existence of eelgrass. The applicant shall submit the new eelgrass survey for the review and written approval of the Executive Director within five (5) working days of completion of the new eelgrass survey and in any event no later than ten (10) working days prior to commencement of dredging. If the new survey identifies, within the proposed dredging area, any eelgrass which is not documented in the eelgrass survey described in Special Condition No. A.1. above, the newly identified eelgrass shall be transplanted prior to commencement of dredging at a 1.2:1 ratio at the same transplantation locations identified in the eelgrass mitigation plan described in Special Condition No. A.1. above. The transplantation shall occur consistent with all provisions of the mitigation plan described in Special Condition A.1.
3. Post-construction Eelgrass Survey. Within one month after the conclusion of the dredging, the applicant shall survey the project site to determine if any eelgrass was adversely impacted, as proposed. The applicant shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace

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the impacted eelgrass at a 1.2:1 ratio at the transplantation site and in accordance with the mitigation plan described in Special Condition No. A.1. above.

4. Eelgrass Identification. Prior to commencement of construction, all identified eelgrass which is not proposed to be removed shall be identified with buoys or markers, as proposed, to ensure that dredging activities do not occur in the protected eelgrass.
5. Department of Fish and Game Approval. PRIOR TO ISSUANCE of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, final written comments from the California Department of Fish and Game demonstrating their approval of the proposed eelgrass mitigation plan described in Special Condition No. A.1.
6. Dredging Monitor. The permittee shall retain, as proposed, a qualified eelgrass biologist who will; 1.) monitor the dredging process and assist the project engineer and the County of Orange in avoiding and minimizing impacts to eelgrass, including turbidity impacts to eelgrass, and 2.) monitor the eelgrass transplantation.

B. Water Quality.

1. Compliance with Water Quality Approvals. The applicant shall comply with all requirements set forth in California Regional Water Quality Control Board, Santa Ana Region, Order No. 97-81, "Waste Discharge Requirements for Orange County Public Facilities and Resources Department, Sunset Harbor Maintenance Dredging Phase II".
2. Turbidity Control. The permittee shall use a hydraulic dredge in all proposed dredging areas to the maximum extent feasible. Where it is not feasible to use a hydraulic dredge, such as in areas where boat docks are located, the permittee may use a clamshell dredge provided silt curtains or other structural turbidity controls are placed around the areas in which the clamshell dredge would be in operation during all times of operation.

Dump scows or other vehicles used to transport the dredge material to the disposal site shall be loaded during ebb tide. Silt curtains or other structural turbidity controls shall be placed around the dump scows or other transport vessels during loading operations.

C. Navigation.

1. Marking of Construction Equipment. All dredges, barges, pipelines, and other construction equipment located in the water which have the potential to interfere with navigation shall be marked in accordance with the requirements of the U.S. Coast Guard and the Orange County Sheriff's Harbor Patrol.

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2. Relocation of Navigation Aids and Construction Markers. The temporary removal of any local aids to navigation, or construction equipment markers described in Special Condition C.1. above, shall be approved by the U.S. Coast Guard and Orange County Sherriff's Harbor Patrol.
3. Removal of Construction Equipment. Construction equipment shall not obstruct navigation in the channels or make navigation difficult or endanger the passage of vessels. Construction equipment which does so shall be promptly removed.

D. Timing of Construction.

Dredging activities shall not occur between March 1 and September 1.

IV. CONCURRENCE MOTION AND RESOLUTION. (Consistency Certification)

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with the County of Orange's consistency certification.

The staff recommends a YES vote on this motion. A majority vote in the affirmative will result in adoption of the following resolution:

Concurrence

The Commission hereby concurs with the consistency certification made by the County of Orange for the proposed project, finding that the project is consistent with the California Coastal Management Program.

V. FINDINGS AND DECLARATIONS. (Coastal development permit and Consistency Certification)

A. PROJECT DESCRIPTION.

1. Dredge Locations.

The proposed project is located between the outer Entrance Channel to the Bolsa Channel in the Cities of Seal Beach and Huntington Beach, County of Orange. Specific areas include; (1) the entrance channel, (2) main channel, (3) access channel, (4) Sunset Marina in Sunset Harbour (formerly known first as Sunset Aquatic Park and then Sunset Marina Park), (5) Bolsa Channel, and (6) Portofino Marina. (See Exhibit A, page 2)

2. Dredge Amounts.

The dredging is estimated to consist of 98,400 cubic yards without overdepth dredge and 106,400 cubic yards with overdepth dredge. The overdepth dredge is planned as advanced maintenance dredging in the event future sedimentation occurs more quickly than anticipated. Including overdepth dredging, the

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dredge materials would consist of 58,758 cubic yards of sand, 30,164 cubic yards of silt, 16,360 cubic yards of clay, and 1,118 cubic yards of gravel. (See Exhibit B, page 1)

3. Dredge Depths.

The proposed project depths would vary between -8 and -15 feet, Mean Lower Low Water ("MLLW"). (See Exhibit B, page 2) An overdepth dredge of one foot is specifically planned for Sunset Marina to account for the potential rapid development of shoaling within the marina (-8 feet, MLLW for the design project depth plus one foot of overdepth dredging). Overdepth dredging is not planned for the other proposed dredge locations.

4. Dredge Spoils Disposal.

The County of Orange proposes to dispose of approximately 106,000 cubic yards of sediment at the EPA-designated LA-2, an EPA-designated ocean disposal site located 6 miles southwest of Point Fermin, Los Angeles County. This consistency certification is needed to authorize the disposal of the dredged material beyond the three mile limit of state waters. Part of the dredge spoils, up to one thousand five hundred (1,500) cubic yards, will be used for the establishment of transplanted eelgrass, as described below.

5. Eelgrass Removal and Transplantation.

Also proposed is the removal of 7,896 square feet (0.181 acres) of eelgrass. The removed eelgrass will be transplanted to another location within Sunset Harbor. As mitigation for the removal and relocation of the eelgrass, the applicant is proposing a mitigation plan. The proposed mitigation plan would follow the requirements of the Southern California Eelgrass Mitigation Policy ("SCEMP"). These requirements include mitigation at a 1.2:1 ratio. Therefore, the applicant is proposing to also plant new eelgrass so that a combined total of 9,461 square feet (0.217 acres) of relocated and new eelgrass beds will be planted at the transplantation sites (1.2:1 mitigation ratio). The mitigation site proposed was used as the mitigation site during the last dredging project during 1988. This mitigation site proved to be a successful location then which is the reason why it was chosen for the proposed project.

The applicant's proposed mitigation plan also includes five year monitoring and remedial measures in the event the transplantation is not successful. The monitoring requirements and time intervals would be in accordance with the SEMP. Further, the proposed mitigation plan includes retaining an eelgrass biologist who would monitor the dredging project. In addition, the proposed mitigation plan includes marking eelgrass areas not to be disturbed.

B. PREVIOUS SUNSET HARBOR DREDGING.

The South Coast Regional Commission of the California Coastal Zone Conservation Commission approved coastal development permit P-4-9-76-7586

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allowing the County of Orange Environmental Management Agency to dredge approximately one hundred thousand (100,000) cubic yards of a shoal and accumulated sediments from the Bolsa Chica Flood Control Channel, 950 feet southwest of Edinger Avenue. The material was disposed of on an adjacent land fill site. The permit was approved with special conditions which included compliance with State Water Quality Control Board conditions.

The Commission approved coastal development permit 5-87-444 for maintenance dredging of one hundred fifty six thousand (156,000) cubic yards of material in Sunset Harbor (including the main channel, Sunset Harbour access channel, Sunset Channel, and Huntington Harbour). Overdepth dredging two feet over the 1964 constructed channel depth as advanced maintenance dredging was proposed. The main channel of Sunset Harbor was realigned to reduce eelgrass impacts. The approved project also involved the removal and transplantation of fourteen thousand (14,000) square feet of eelgrass. The permit was conditioned for the submittal of a final eelgrass mitigation plan. The permit was subsequently amended in 1989 to include the dredging of ten thousand (10,000) square feet of the Bolsa Chica Channel.

C. APPLICANT'S CONSISTENCY CERTIFICATION.

The County of Orange has certified that the proposed activity complies with California's approved coastal management program and will be conducted in a manner consistent with such program.

D. STANDARD OF REVIEW.

The standard of review for permit applications for development within the Commission's original permit jurisdiction and for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal program (LCP) of the affected area. If the LCP has been certified by the Commission and incorporated into the California Coastal Management Program (CCMP), it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information.

The majority of the project site is located within the City of Seal Beach, which does not have a certified LCP. Because only a small portion of the project site (Portofino Marina and the Bolsa Channel) is located within the City of Huntington Beach, the certified Huntington Beach LCP will not be used for guidance nor background information.

E. CHAPTER 3 POLICY ANALYSIS.

1. Marine Resources.

Section 30230 of the Coastal Act provides that:

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

Section 30231 of the Coastal Act states:

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

Section 30233 of the Coastal Act states, in relevant 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:

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

(7) Restoration purposes.

(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.

Section 30234 provides that:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

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Section 30234.5 of the Coastal Act provides that:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Section 30240(a) of the Coastal Act provides that:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

a. Allowable Use.

The proposed project involves; (1) dredging of open coastal waters to restore previously dredged depths in the existing navigation channels leading into Sunset Harbor and Huntington Harbour, and in the turning basins, vessel berthing and mooring areas, and boat launching ramps of Sunset Marina and Portofino Marina, and (2) fill of open coastal waters through the disposal of the material dredged from the boating facilities and existing navigation channels. Thus, the proposed project is an allowable use under Section 30233(a)(2) of the Coastal Act.

The proposed project also involves mitigation for impacts to eelgrass. The mitigation involves placing up to 1,500 cubic yards of the dredge spoils along the west bank of the entrance channel inland of Pacific Coast Highway ("PCH"), near where it crosses under PCH. This fill would be used to transplant the removed eelgrass and create additional eelgrass beds. Thus, the proposed fill for the eelgrass mitigation site is for wetland restoration purposes and is an allowable use under Section 30233(a)(7) of the Coastal Act.

The proposed project has been designed to result in the removal of the least amount of eelgrass, with appropriate mitigation, while still ensuring that the navigation channels are sited to be safe for navigation. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30233(a) of the Coastal Act.

b. Eelgrass Impacts. (Coastal development permit)

Eelgrass is considered worthy of protection because it functions as important habitat for a variety of fish and other wildlife, according to the Southern California Eelgrass Mitigation Policy ("SCEMP") adopted by the National Marine Fisheries Service ("NMFS"), the U.S. Fish and Wildlife Service ("USFWS"), and the California Department of Fish and Game ("CDFG").

The applicant is proposing to minimize destruction of eelgrass. First, the applicant has sited the majority of the dredging away from existing eelgrass. Second, where the dredging would be in close proximity to eelgrass, the dredge design consists of box cut slopes which would lessen the potential for eelgrass beds to slough into the navigation channel and be damaged by boats.

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However, the proposed dredging would damage some areas of eelgrass which cannot be avoided. (See Exhibit C) Construction vessels which anchor over the eelgrass would reduce the amount of sunlight reaching the eelgrass, impeding their growth. Anchors which are pulled through the eelgrass, and vessel propellers which could produce scars in the channel and marina bottoms, would also damage the eelgrass.

To mitigate this impact, the applicant has prepared a mitigation plan. The proposed mitigation plan would follow closely the requirements of the SCEMP. For instance, the SCEMP requires mitigation at a ratio of 1.2:1. The rationale for this ratio, according to the SCEMP, is based on; (1) the time (usually 3 years) necessary for an eelgrass mitigation site to reach full fishery utilization, and (2) the need to offset any productivity losses during this recovery period within 5 years.

As part of the mitigation plan, the applicant is proposing to remove the 7,896 square feet (0.181 acres) of eelgrass which would be damaged by dredging. The removed eelgrass would be transplanted to an area near other eelgrass which would not be disturbed by the proposed dredging. Further, the applicant is proposing to increase the amount of eelgrass by planting additional eelgrass beds. To ensure genetic variety as required by the SCEMP, the eelgrass used in mitigation would also include donor material from eelgrass outside the areas proposed to be dredged. The combination of the relocated and new eelgrass would comprise an area of 9,461 square feet (0.217 acres) of eelgrass, for a mitigation ratio of 1.2:1.

Further, as part of the mitigation plan, the applicant is proposing a monitoring program to evaluate whether the transplanted eelgrass and newly created eelgrass grows successfully. The monitoring would take place between March through October, when eelgrass growth is typically at it's most active. The monitoring would occur at intervals of 3 months, 6 months, and yearly for five years after the transplantation, as recommended by the SCEMP. The success criteria contained in the SCEMP would be used in the proposed monitoring plan.

If the transplantation is not successful, a replant will be conducted based on the requirements of the SCEMP. The Commission previously accepted the use of the criteria contained in the SCEMP in its recent approval of coastal development permit 5-97-230 (City of Newport Beach) for the Balboa Island Bridge retrofit project which involved construction near eelgrass areas.

To ensure compliance with the mitigation plan, the Commission finds it necessary to impose a special condition requiring compliance with the proposed mitigation plan. Further, because the mitigation plan is based on the SCEMP which has been adopted by the NMFS, USFWS, and CDFG, the Commission finds that it is necessary to require that the proposed mitigation plan fully comply with the SCEMP requirements.

Further, to ensure that areas of eelgrass not proposed to be impacted are not accidentally impacted, the Commission finds that it is necessary to impose a special condition requiring that the eelgrass areas not to be impacted are

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identified with buoys or other markers, as proposed. This condition was also imposed on coastal development permit 5-97-230.

Also, the Commission finds that it is necessary to require a post-construction eelgrass survey, as proposed, to determine whether any eelgrass not proposed to be impacted was inadvertently impacted. Any eelgrass inadvertently impacted which was not proposed to be impacted must be mitigated under the proposed mitigation plan in the same manner as identified eelgrass to be impacted - e.g., the same ratio of 1.2:1, same transplantation site, same procedures, etc. The Commission required similar post-construction eelgrass surveys, and mitigation for inadvertently impacted eelgrass, in approving coastal development permits 5-97-230 and 5-97-071.

The proposed monitoring plan suggests that construction not occur between March 1 and September 1. This is because eelgrass growth occurs primarily during that time. Therefore, dredging activities should not take place during sensitive growth periods for eelgrass. Further, the endangered wildlife and species of concern, such as least terns, which use eelgrass for foraging also forage primarily during that time. Thus, the Commission finds that it is necessary to impose a condition prohibiting construction between March 1 and September 1, 1997. Prohibiting dredging activities during these times would also minimize interference with foraging activities. The Commission also previously imposed similar time limits on construction in approved coastal development permits 5-97-230 and 5-97-071.

The Commission finds that compliance with the proposed mitigation plan would minimize adverse impacts to eelgrass. However, the Commission also finds it necessary to require an amendment to this permit for any changes to the proposed mitigation plan, or written concurrence from the Executive Director that the changes do not require a permit amendment. This would ensure that the Commission is specifically notified, along with other resources agencies, of any changes. This would allow the Commission to review, for example, remediation measures which may be necessary to ensure the success of the eelgrass mitigation.

Further, the Commission finds that it is also necessary for the applicant to submit final written comments on the proposed project from the CDFG. CDFG staff have verbally indicated to Commission staff that the CDFG would not oppose the project provided that the applicant complies with the proposed monitoring plan, including the SCEMP, and conducts a more recent eelgrass survey. Therefore, the Commission is also imposing a condition for a current eelgrass survey (pre-construction) which is not specifically proposed in the mitigation plan.

The eelgrass survey in the proposed mitigation plan was conducted in July and August of 1996. Because of the ephemeral nature of eelgrass locations, the SCEMP recommends that eelgrass surveys be conducted not more than one hundred twenty (120) days prior to the start of a project that would impact eelgrass. Therefore, based on this criteria, the eelgrass survey in the proposed mitigation plan is outdated, and no new eelgrass survey is proposed.

Therefore, the Commission finds that a special condition is necessary requiring that a new eelgrass survey within the boundaries of the proposed dredging be undertaken not more than 120 days before the start of dredging. The Commission previously imposed similar conditions for pre-construction eelgrass surveys on coastal development permits 5-97-230 (City of Newport Beach) for the Balboa Island Bridge retrofit project and 5-97-071 (County of Orange) for dredging of Upper Newport Bay.

Thus, as conditioned, the Commission finds that the proposed project would minimize adverse impacts to eelgrass. Therefore, the Commission finds that, as conditioned, the proposed project would be consistent with Section 30231 of the Coastal Act.

c. Water Quality.

i. Dredging.

The proposed project would result in temporary increases in turbidity. Turbidity occurs when fine grained material such as silts and clays become suspended in water. The material to be dredged contains 22% to 47% silts and clays, the type of fine-grained material likely, if disturbed through means such as dredging, to become suspended in water and cause turbidity. This results in the water becoming cloudy, which can prevent sight-feeding birds from seeing their prey in the water. Turbidity also results in decreased oxygen concentrations in the water, which can reduce the flow of oxygen to oxygen-dependent marine life. Thus, turbidity results in decreased water quality and adverse impacts to marine life and shorebirds.

The California Regional Water Quality Control Board, Santa Ana Region ("RWQCB"), adopts a Water Quality Control Plan ("Basin Plan") which is consistent with the directives of the State Water Resources Control Board, pursuant to the State Porter-Cologne Act (commencing with State Water Code Section 13000). The Basin Plan sets forth numerical water quality standards to protect the beneficial uses designated for the waters in the Santa Ana Region, and establishes programs to ensure that the water quality standards are met.

The subject site is located within the Santa Ana Region. The RWQCB has adopted Order No. 97-81 which deals specifically with the proposed project. Order No. 97-81 contains provisions which implement the requirements of the Basin Plan. Order 97-81 contains a condition of approval which requires the applicant to ensure that turbidity is not increased greater than values specified in the objectives of the Santa Ana Region's Basin Plan. In addition, Order No. 97-81 contains a condition of approval specifying that the dredging shall not cause the dissolved oxygen to be depressed below 5.0 mg/l.

The Commission finds that compliance with the conditions of approval of Order No. 97-81 would minimize increases in turbidity and the resultant adverse impacts. Therefore, the Commission finds that it is necessary to impose a condition of approval on the coastal development permit requiring compliance with the provisions of RWQCB Order No. 97-81.

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In addition, the Commission finds that it is necessary to impose additional conditions to minimize turbidity. First, the Commission finds that a hydraulic dredge should be used to the maximum extent feasible. In approving coastal development permit 5-87-444 for the previous dredging of Sunset Harbor, the Commission found that, compared to a clamshell dredge, a hydraulic dredge creates less turbidity. However, the applicant has indicated that in certain locations, such as in the shallower water near the boat docks, it may not be feasible to use a hydraulic dredge and a clamshell dredge may have to be used. The Commission finds that a special condition is necessary to allow the use of a clamshell dredge only if it is not feasible to use a hydraulic dredge and only if the area is surrounded by silt curtains or other turbidity control measures. RWQCB Order No. 97-81 also requires the use of turbidity control measures if turbidity increases cannot be minimized through changes in the method of dredging.

Further, the Commission finds that it is necessary to impose a condition requiring that the loading of dredged material onto dump scows, or other vessels used to transport the dredged material to the disposal site, occur during ebb tide. If approving coastal development permit 5-87-444, the Commission found that, in the event the transport vessels were inadvertently overloaded and dredged material were to spill in the water and create turbidity, the suspended material would wash away quicker during a ebb tide. The Commission also finds that it is necessary to impose a condition requiring that silt curtains or other turbidity controls be employed around the transport vessels during loading operations to contain spill material. This would further ensure that turbid water created by inadvertent spills of dredge material is minimized.

Also, the Commission finds that, by prohibiting dredging activities between March 1 and September 1 when naturally occurring turbidity is at its highest due to winter storm activity, impacts from increased turbidity from the proposed project would be minimized. Further, the Commission finds that it is necessary to require that a qualified water quality expert oversee dredging activities to monitor increases in turbidity. The monitor would ensure that RWQCB requirements for turbidity are met. Thus, only as conditioned does the Commission find the proposed project to be consistent with Section 30231 of the Coastal Act.

ii. Off-shore Disposal.

With respect to the proposed disposal at LA-2, the Commission's main concern over effects on marine resources and commercial and recreational fishing has been over the need to assure that material to be disposed of at LA-2 is uncontaminated and suitable for ocean disposal. The quality of the sediments proposed for dredging and disposal have been evaluated by the applicant pursuant to the procedures described in the 1991 EPA/Corps testing manual, Evaluation of Dredged Material Proposed for Ocean Disposal -- Testing Manual (i.e., the "Green Book"). The testing procedures described in the Green Book allow for a tiered approach to analysis of the dredged sediments. This hierarchical approach allows for optimal use of resources by focusing the

least effort on dredging operations where the potential for unacceptable adverse impact is clear, and expending the most effort on operations requiring more extensive investigation to determine the potential for impact. It is necessary to proceed through the tiers only until information sufficient to determine compliance or noncompliance with EPA's regulations has been obtained. Only if there is not enough information to determine suitability or unsuitability for ocean disposal after the completion of a tier, will the applicant be required to complete the next tier testing.

In order to dispose of its sediments at LA-2, the County evaluated its material according to the current Green Book procedures. The sediment chemistry results showed that the reference site sediment concentrations were somewhat lower than those from most of the test site sediments, particularly for heavy metals (Advanced Biological Testing Inc., 1997). However, the test sediment levels are not considered high enough to affect sediment or water quality at LA-2. Detectable levels of organic tin, PCBs, and pesticides were observed for reference and test sites, which is expected for most areas within the Southern California Bight. Short and long term toxicity assays on several different organisms suggested that no significant potential exists for toxicity in the water column during test sediment disposal. Overall, the disposal of sediments from these three test sites is not expected to have no significant short or long term effect on the sediment quality at the LA-2 disposal site.

In conclusion, the Commission staff, EPA, and the Corps of Engineers have reviewed the County's test results, which establish that the dredged sediments proposed for disposal at LA-2 are uncontaminated and suitable for ocean disposal. Therefore, the Commission finds that the ocean disposal of this material will not affect the biological productivity of marine resources, commercial and recreational fishing, or water quality of the coastal zone, and that the project is consistent with Sections 30230, 30231, 30234, 30234.5, and 30240 of the Coastal Act.

d. Beach Replenishment.

The applicant has provided a bioassay test of core samples of the proposed dredge material. The results indicate that the percentage by weight of fine-grained materials ("fines") such as silts and clays ranges from 22% to 47%. The high content of fines would render it not suitable for beach replenishment. This is because the high concentration of fines would mean that much of the material would wash away, creating turbidity but more importantly defeating the purpose of placing material on a beach to nourish the beach. The applicant has indicated that material containing more than fifteen percent (15%) fines would not be suitable for beach nourishment.

Further, the Commission has previously accepted the U.S. Army Corps criteria that the percentage of fines in dredge material not exceed the percentage of fines in the existing sand at the beach to be nourished by more than ten percent in order for the dredged material to be considered suitable for beach nourishment. Because of the high percentage of fines in the proposed dredge

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material, it is likely that the difference between the percentage of fines in the dredge material would exceed the amount of fines in most nearby beaches by more than ten percent requirement. For instance, the percentage of fines in the sand at nearby East Beach in Seal Beach is only about seven percent, more than a 10% difference than the 22% to 47% fines in the dredged material. Therefore, the Commission finds that the dredge spoils which would result from the proposed project would not be suitable for beach nourishment. Thus, the Commission finds that the proposed dredge spoils should not be used for beach replenishment, consistent with Section 30233(b) of the Coastal Act.

2. Public Access - Recreation.

Section 30210 of the Coastal Act states:

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

Section 30224 of the Coastal Act states:

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

The proposed project involves maintenance dredging of existing navigational channels leading to the public and private recreational boat dock facilities of Sunset Harbor and Huntington Harbour. The proposed dredging would also restore access to berthing and boat launch facilities in Sunset Marina and Portofino Marina by removing sedimentation which currently blocks access to these facilities. Thus, the proposed project would restore public access and recreation.

However, the navigational channels being dredged are the only channels leading from Huntington Harbour and Sunset Harbor to the open ocean. Construction activities which block the channels would prevent boaters from accessing the ocean, thus adversely impact public recreation. Therefore, the applicant is proposing measures to minimize disturbance to navigation during dredging activities. These measures include; (1) marking the construction equipment to make their presence known to boaters, (2) receiving U.S. Coast Guard and Orange County Harbor Patrol permission to temporarily remove navigational aids and markers if necessary, and (3) promptly removing any construction equipment which blocks navigation, or makes navigation difficult, or endangers the passage of boats.

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Thus, the Commission finds that, to ensure public access and recreation is not restricted, special conditions must be imposed requiring to the applicant to carry out the proposed measures to minimize interference with navigation. Therefore, the Commission finds the proposed development, as conditioned, to be consistent with Sections 30210 and 30224 of the Coastal Act.

F. LOCAL COASTAL PROGRAM.

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter Three policies of the Coastal Act.

On July 28, 1983, the Commission denied the City of Seal Beach Land Use Plan (LUP) as submitted and certified it with suggested modifications. The City did not act on the suggested modifications within six months from the date of Commission action. Therefore, pursuant to Section 13537(b) of the California Code of Regulations, the Commission's certification of the land use plan with suggested modifications expired. The LUP has not been resubmitted for certification since that time.

The proposed development, as conditioned, is consistent with the Chapter Three policies of the Coastal Act. Therefore, the Commission finds that the proposed development would not prejudice the ability of the City to prepare a certified local coastal program consistent with the Chapter Three policies of the Coastal Act.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT.

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) 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 impact which the activity may have on the environment.

Dredging similar to the proposed project with similar impacts has previously occurred in the vicinity of the proposed dredge area. The proposed project has been conditioned in order to be found consistent with the wetland fill, marine resources, and public access/recreation policies of Chapter Three of the Coastal Act. Mitigation measures requiring; (1) compliance with the proposed eelgrass mitigation plan, (2) a pre-construction eelgrass survey, (3) a post-construction eelgrass survey, (4) compliance with the Southern California Eelgrass Mitigation Policy adopted by the National Marine Fisheries Service, (5) identification of eelgrass proposed not to be impacted, (6) submission of final written comments on the proposed project from the California Department of Fish and Game, (7) requiring a marine biologist monitor, (8) compliance with Regional Water Quality Control Board, Santa Ana

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Region, Order No. 97-81, (9) the use of a hydraulic dredge, when feasible, and use of structural turbidity controls such as silt curtains, (10) requiring a dredging monitor, (11) marking of construction equipment, (12) approval by the Coast Guard and Harbor Patrol for the temporary removal of navigation aids or markers, (13) removal of construction equipment which impedes navigation, and (14) prohibiting construction between March 1 and September 1; will minimize all significant adverse impacts.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

9584F:jta

Appendix A

Substantive File Documents

1. "Eelgrass (Zostera Marina) Survey, Impact Assessment, and Mitigation Plan, County of Orange Sunset Harbor Maintenance Dredging Project, Phase II", dated February 28, 1997 prepared by Coastal Resources Management for Noble Consultants, Inc.
2. California Regional Water Quality Control Board, Santa Ana Region, Order No. 97-81, "Waste Discharge Requirements for Orange County Public Facilities and Resources Department, Sunset Harbor Maintenance Dredging Phase II"
3. Coastal development permits EME-74-2647, P-76-7586, 5-87-444, and 5-87-444A (County of Orange) for maintenance dredging of Sunset Harbor.
4. Coastal development permit 5-97-230 (City of Newport Beach); Balboa Island Bridge retrofit
5. Coastal development permit 5-97-071 (County of Orange); Upper Newport Bay dredging
6. "Green Book" - Evaluation of Dredged Material Proposed for Ocean Disposal, Testing Manual, Environmental Protection Agency and the Corps of Engineers, February, 1991.

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List of Exhibits

Exhibit A - Project Location

- Page 1: Vicinity Map of Dredge Project
- Page 2: Location of Specific Dredge Areas
- Page 3: Off-shore Disposal Location at LA-2

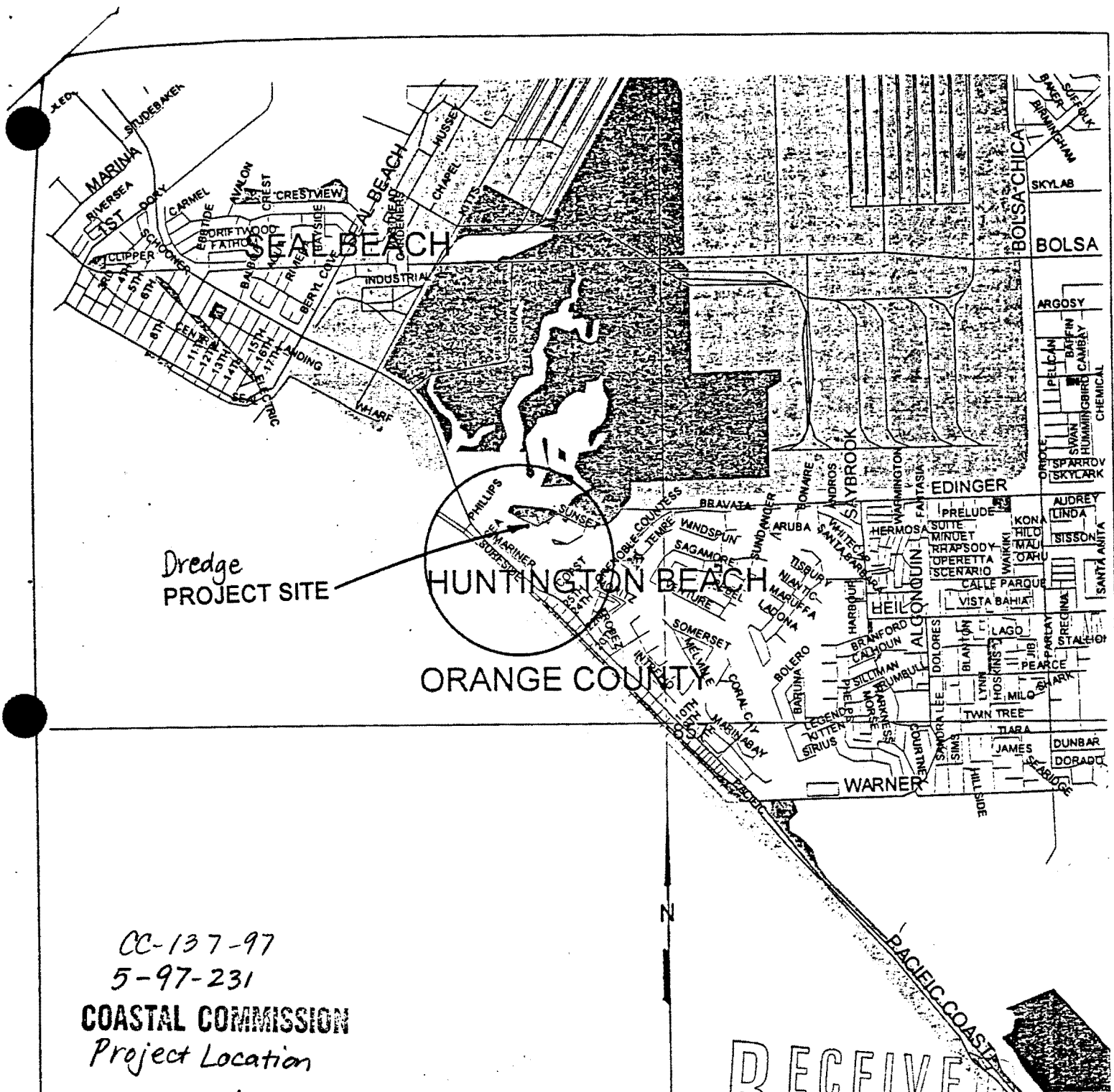
Exhibit B - Dredge Amounts

- Page 1: Quantities by Sediment Type
- Page 2: Quantities by Dredge Location

Exhibit C - Eelgrass Locations

Exhibit D - Dredging Plans

- Page 1: Entrance Channel (see Cross Section A)
Eelgrass Mitigation (see Cross Section B)
- Page 2: Cross Sections A and B
- Page 3: Eelgrass Impact area in Main Channel (see Cross-Section C)
Main Channel (see Cross Sections D and E)
Sunset Marina (see Cross Sections E and F)
Access Channel (see Cross Section F)
- Page 4: Cross Sections C and D
- Page 5: Cross Sections E and F
- Page 6: Sunset Marina (see Cross Section G)
Bolsa Channel (see Cross Section H)
Main Channel (see Cross Section H)
- Page 7: Cross Sections G and H



Dredge
PROJECT SITE

HUNTINGTON BEACH
ORANGE COUNTY

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5-97-231

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Project Location

EXHIBIT # A
PAGE 1 OF 3

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COASTAL COMMISSION
SUNSET HARBOR MAINTENANCE DREDGING

PURPOSE: MAINTENANCE DREDGING
DATUM: MLLW

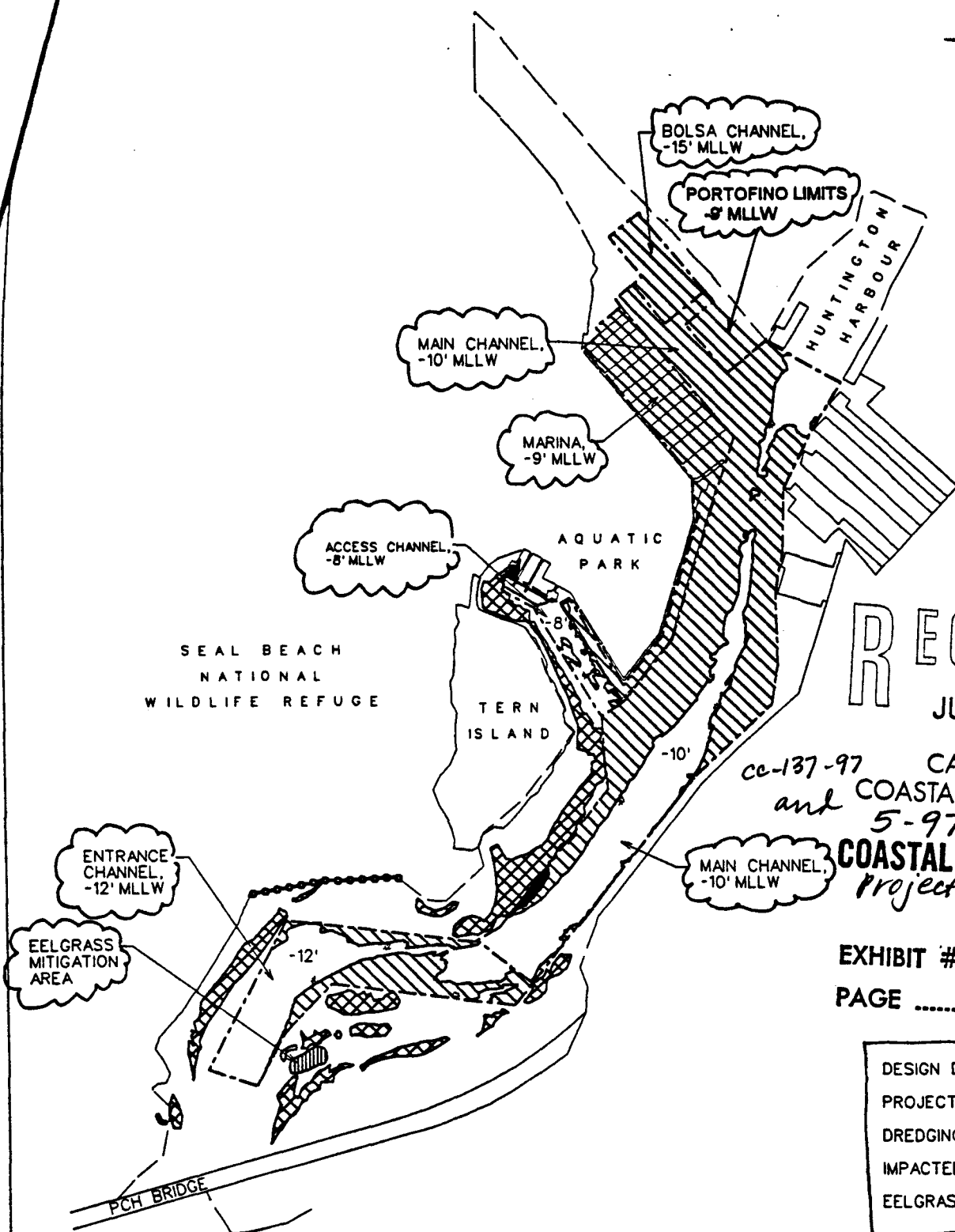
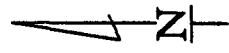
COUNTY OF ORANGE



2201 DUPONT DRIVE, SUITE 620
IRVINE, CA 92715
(714) 752-1530

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
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Project Location

EXHIBIT # A
PAGE 2 OF 3

DESIGN DEPTH	-8' to -12'
PROJECT LIMITS	---
DREDGING AREAS	
IMPACTED EELGRASS	
EELGRASS AREAS	



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APPLICATION BY: COUNTY OF ORANGE

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Off-shore Disposal Site Location Map

5-97-231

5-97-231

OC-137-97
5-97-231
COASTAL COMMISSION
Project Location

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N.T.S.

SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
APPLICATION BY: COUNTY OF ORANGE

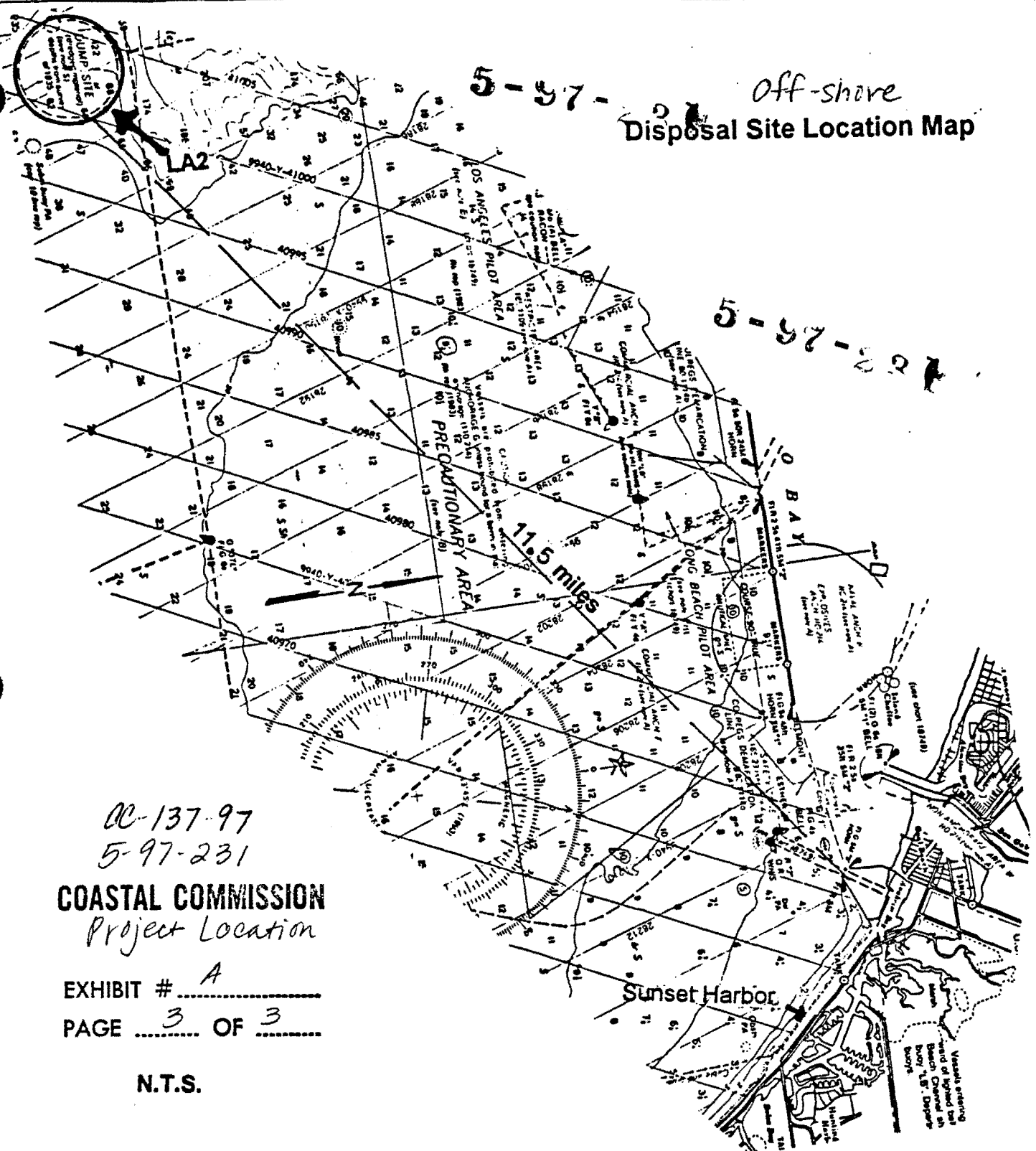
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Estimated Dredge Quantities according to Sediment Type

Sunset Harbor

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Sediment Type	Quantity Dredged without overdepth (cy)	Quantity Dredged with overdepth (cy)
GRAVEL	958	1,118
SAND	54,406	58,758
SILT	27,900	30,164
CLAY	15,136	16,360
TOTAL	98,400	106,400

*Sediment Classification	Criteria
Gravel	Larger than 2 mm
Sand	Between 0.062mm and 2mm
Silt	Between 0.0039 mm and 0.062 mm
Clay	Smaller than 0.0039 mm

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COASTAL COMMISSION
Dredge Quantities

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*: Wentworth Classification

PURPOSE: MAINTENANCE DREDGING
DATUM: MLLW

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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
APPLICATION BY: COUNTY OF ORANGE

SHEET 11 OF 13 DATE: 4/97

Estimated Dredge Quantity

5-97-231

Area	Dredge Depth ft, MLLW	Overdepth Dredge, ft	Estimated Quantity (cy)	
			w/o overdepth	w/ overdepth
SUNSET HARBOR:				
Outer Entrance Channel	-12	N/A	6,400	6,400
Main Channel	-10	N/A	44,900	44,900
Access Channel	-8	N/A	800	800
Sunset Marina	-9	1	26,500	34,500
Bolsa Channel	-15	N/A	13,800	13,800
Portofino Limits	-9	N/A	6,000	6,000
SUBTOTAL			98,400	106,400

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COASTAL COMMISSION
Dredge Quantities

EXHIBIT # B

PAGE 2 OF 2

PURPOSE: MAINTENANCE DREDGING
DATUM: MLLW

COUNTY OF ORANGE

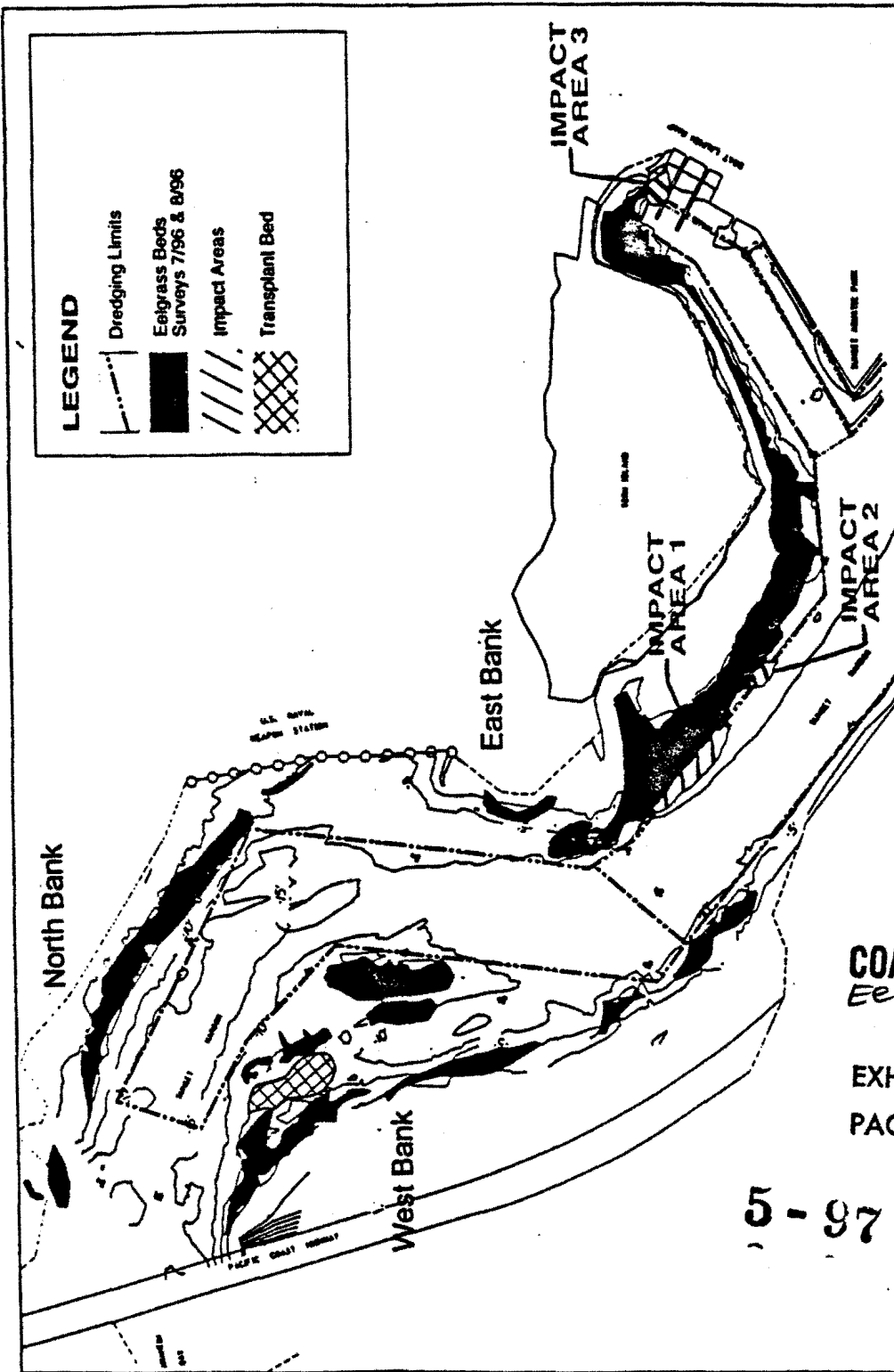


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IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
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Eelgrass Locations

EXHIBIT # C
PAGE 1 OF 1

5-97-231

PURPOSE: MAINTENANCE DREDGING
DATUM: MLLW

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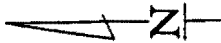


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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
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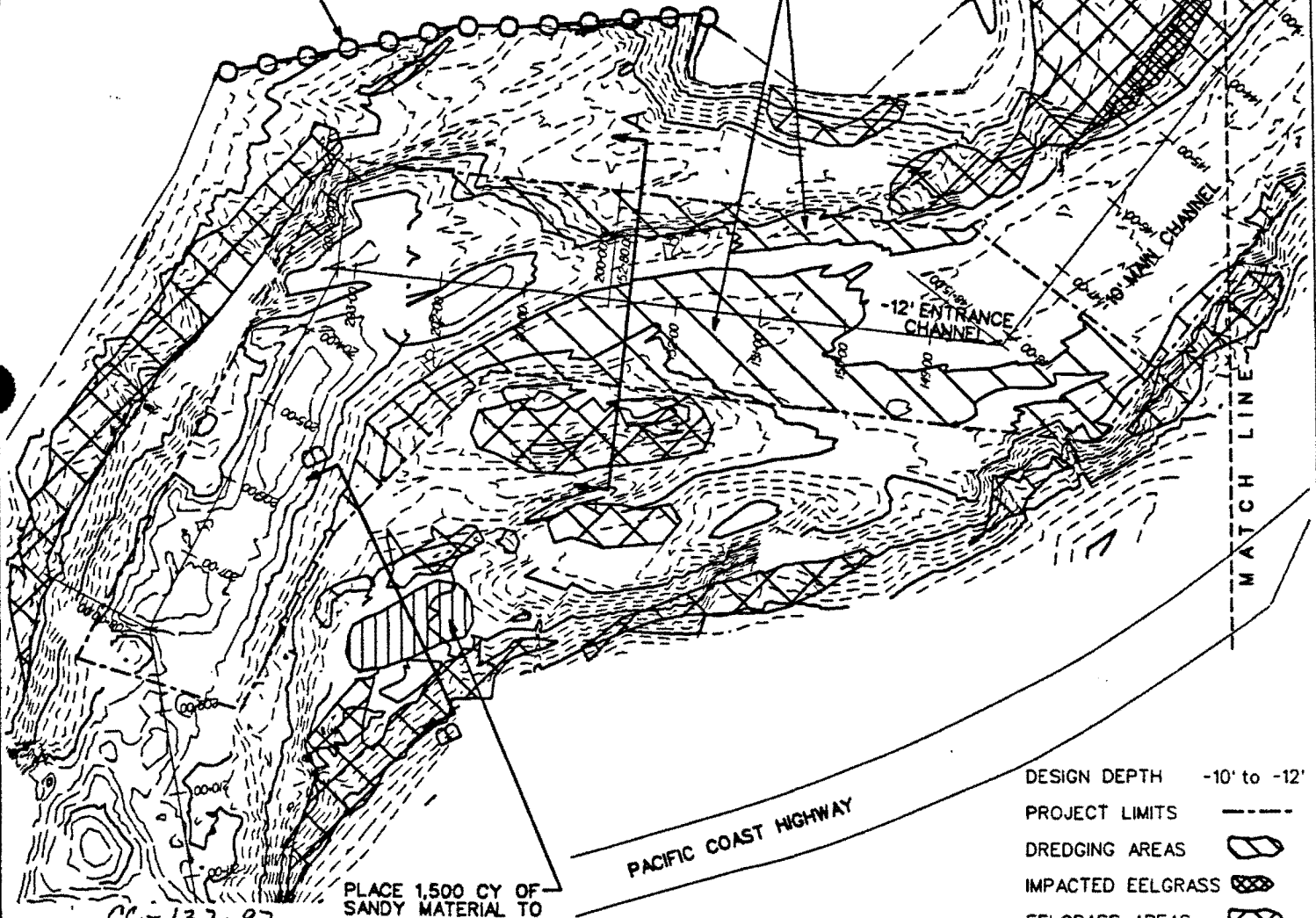
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SEAL BEACH
NATIONAL
WILDLIFE REFUGE

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DEMARICATION BUOYS




DREDGE 6,400 CY OF SANDY
MATERIAL TO -12' MLLW
(12' DESIGN, NO OVERDEPTH).
MAT'L MAY BE PLACED IN EELGRASS
MITIGATION SITE. REMAINING MAT'L
TO BE DISPOSED OF AT LA-2.



CC-137-97
5-97-231

PLACE 1,500 CY OF
SANDY MATERIAL TO
CREATE 9,461 SQUARE
FEET FOR EELGRASS
TRANSPLANT.

COASTAL COMMISSION

DESIGN DEPTH -10' to -12'
PROJECT LIMITS ---
DREDGING AREAS 
IMPACTED EELGRASS 
EELGRASS AREAS 
5' CONTOURS ---
1' CONTOURS ---

Plans

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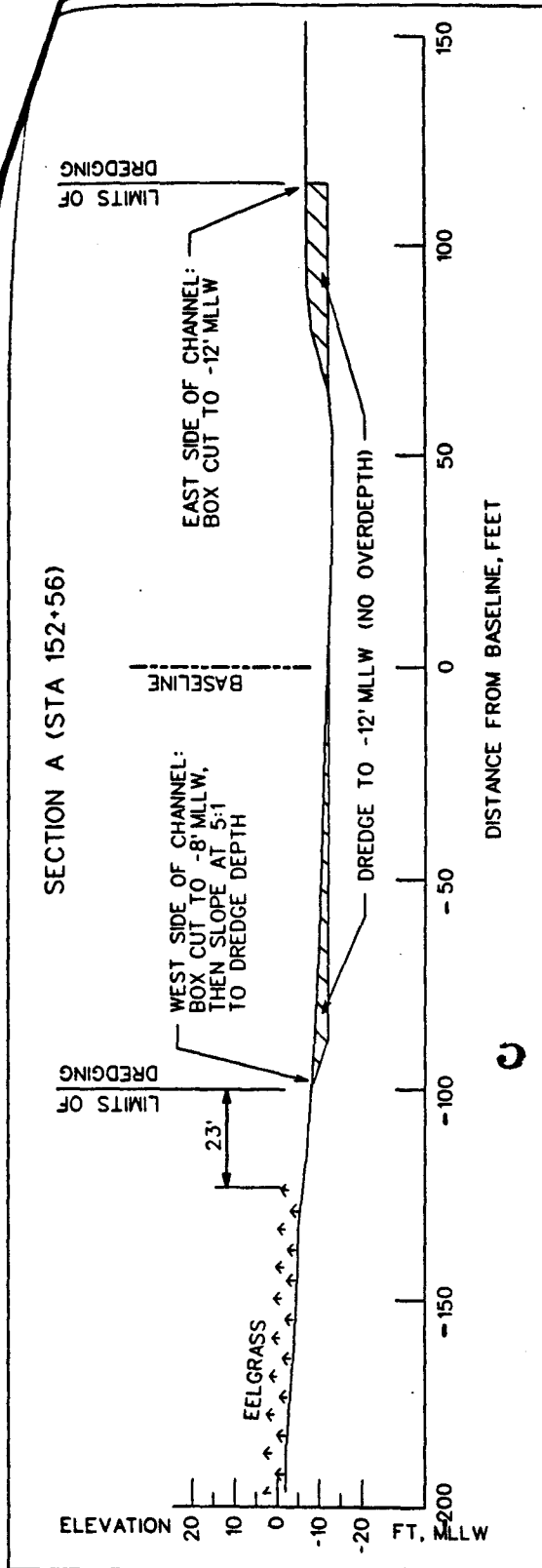


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SUNSET HARBOR MAINTENANCE DREDGING

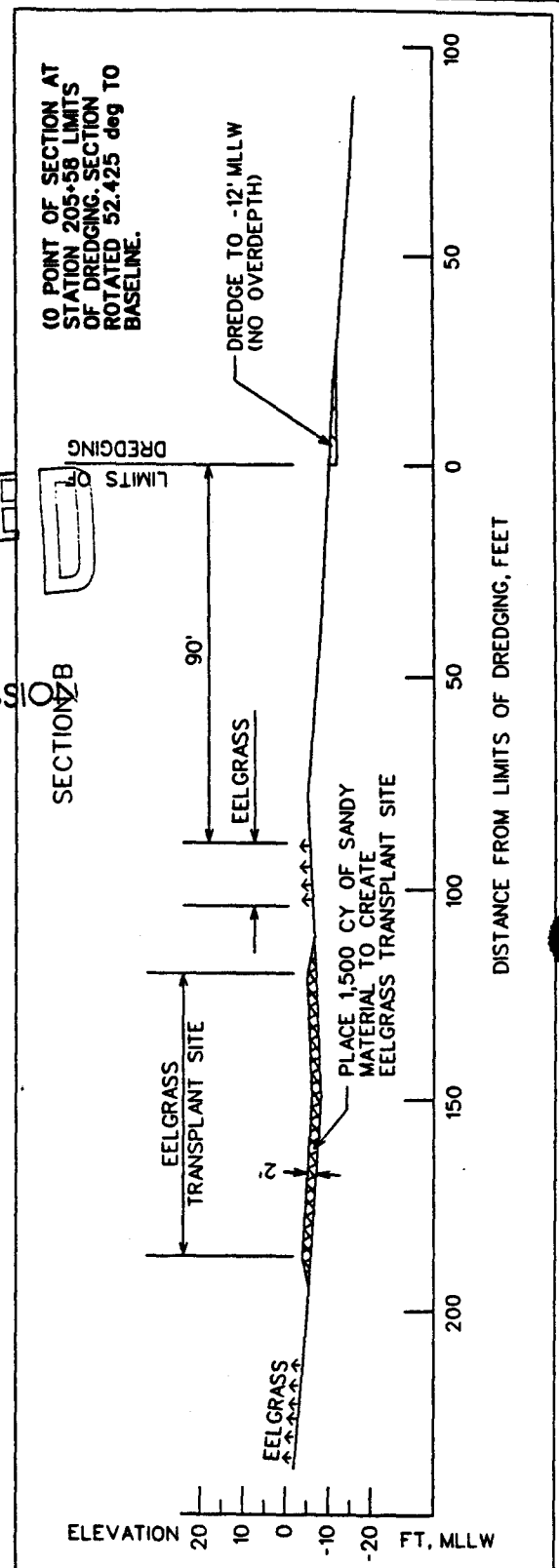
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AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN

AT: SEAL BEACH

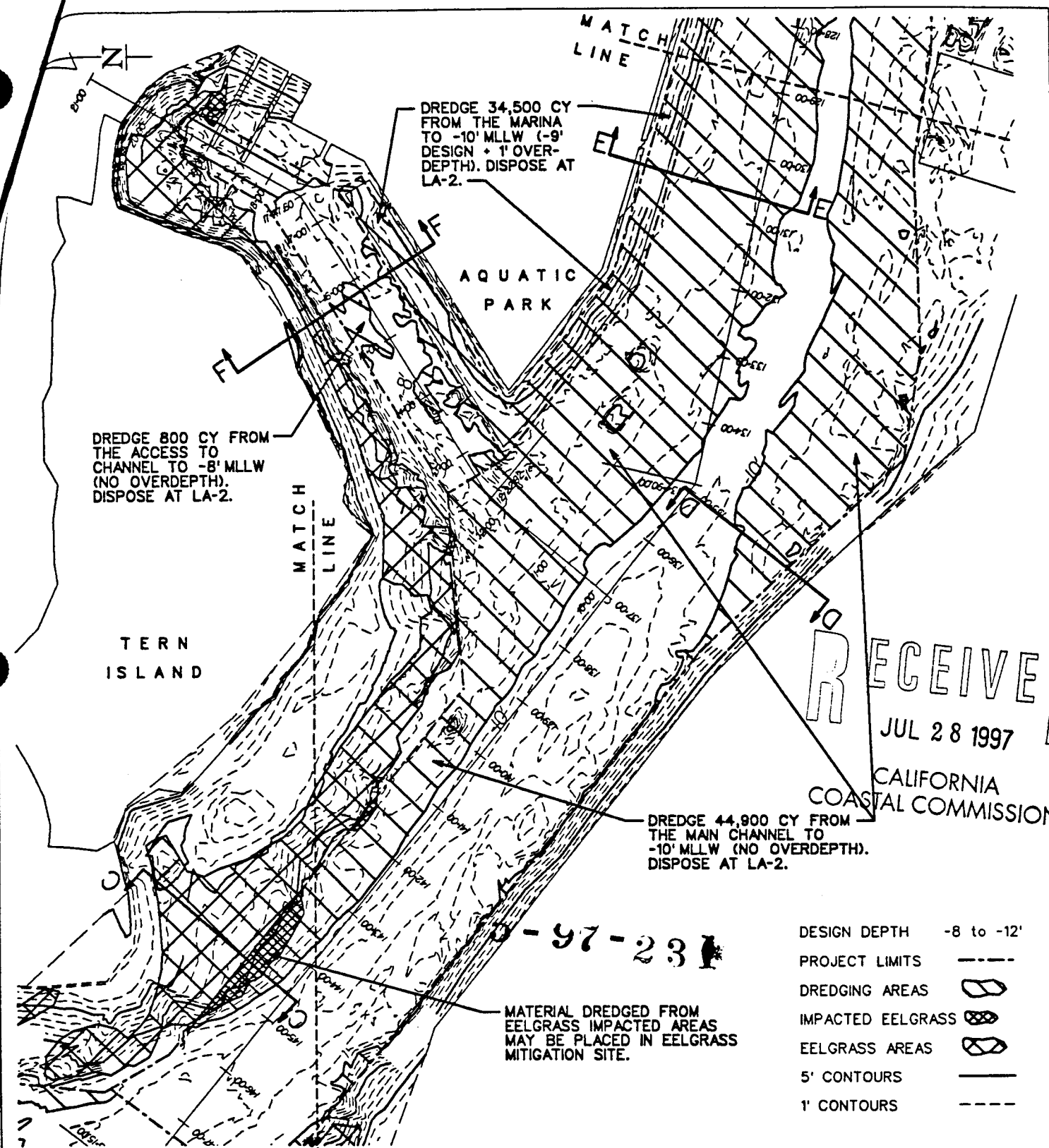
COUNTY OF: ORANGE

STATE: CA

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5-97-231 and CC-137-97
Plans

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SUNSET HARBOR MAINTENANCE DREDGING

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AT: SEAL BEACH

COUNTY OF: ORANGE

STATE: CA

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DREDGE 44,900 CY OF MATERIAL
IN THE MAIN CHANNEL & DISPOSE
OF AT LA-2.

SECTION D (STA 135+00)

LIMITS OF
DREDGING

DREDGE TO -10' MLLW (NO OVERDEPTH)

DISTANCE FROM BASELINE, FEET

ELEVATION 20 10 0 -10 -20 FT, MLLW

5-97-23

SECTION C (STA 144+50)

DREDGE 44,900 CY OF MATERIAL
IN THE MAIN CHANNEL & DISPOSE
OF AT LA-2.

LIMITS OF
DREDGING

EDGE OF
EELGRASS

IMPACTED EELGRASS
AREA

EELGRASS

DREDGE TO -10' MLLW (NO OVERDEPTH)

DISTANCE FROM BASELINE, FEET

ELEVATION 20 10 0 -10 -20 FT, MLLW

COASTAL COMMISSION

5-97-231 and CC-137-97
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COUNTY OF ORANGE

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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN

AT: SEAL BEACH

COUNTY OF: ORANGE

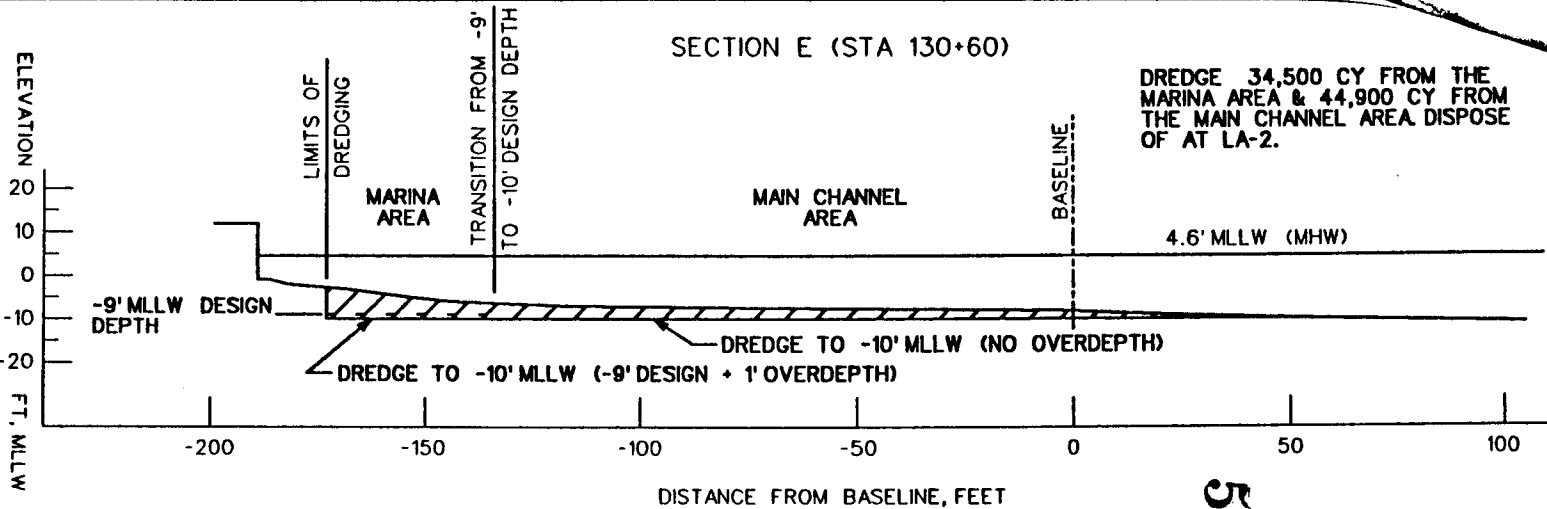
STATE: CA

APPLICATION BY: COUNTY OF ORANGE

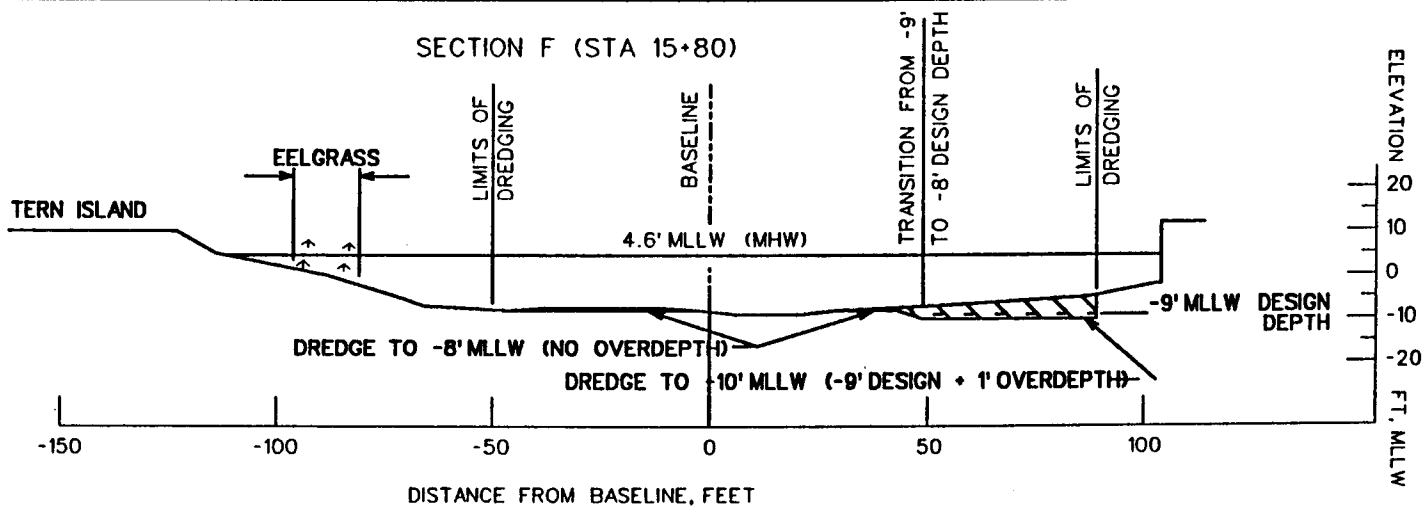
SHEET 6 OF 13

DATE: 5/97

DREDGE 34,500 CY FROM THE MARINA AREA & 44,900 CY FROM THE MAIN CHANNEL AREA DISPOSE OF AT LA-2.



5-97-231



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5-97-231 and cc-13797
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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN

AT: SEAL BEACH

COUNTY OF: ORANGE

STATE: CA

APPLICATION BY: COUNTY OF ORANGE

SHEET 7 OF 13

DATE: 5/97

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CALIFORNIA
COASTAL COMMISSION

5-97-231

DREDGE 13,800 CY FROM
BOLSA CHANNEL TO -15'
MLLW (NO OVERDEPTH).
DISPOSE AT LA-2.

DREDGE 6,000 CY FROM
PORTOFINO DOCK AREA
TO -9' MLLW (NO OVER-
DEPTH. DISPOSE AT LA-2.

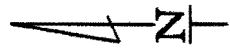
DREDGE 34,500 CY
FROM MARINA TO
-10' MLLW (-9'
DESIGN + 1' OVER-
DEPTH). DISPOSE
AT LA-2.


DREDGE 44,800 CY FROM
MAIN CHANNEL TO -10'
MLLW (NO OVERDEPTH).
DISPOSE AT LA-2.

AQUATIC
PARK

MATCH
LINE

HUNTINGTON
HARBOR



DESIGN DEPTH -9 to -15'
PROJECT LIMITS ---
DREDGING AREAS 
5' CONTOURS ---
1' CONTOURS - - -

COASTAL COMMISSION
5-97-231 and 137-97
Plans

EXHIBIT # D
PAGE 6 OF 7
0' 200'



DATUM: MLLW

COUNTY OF ORANGE

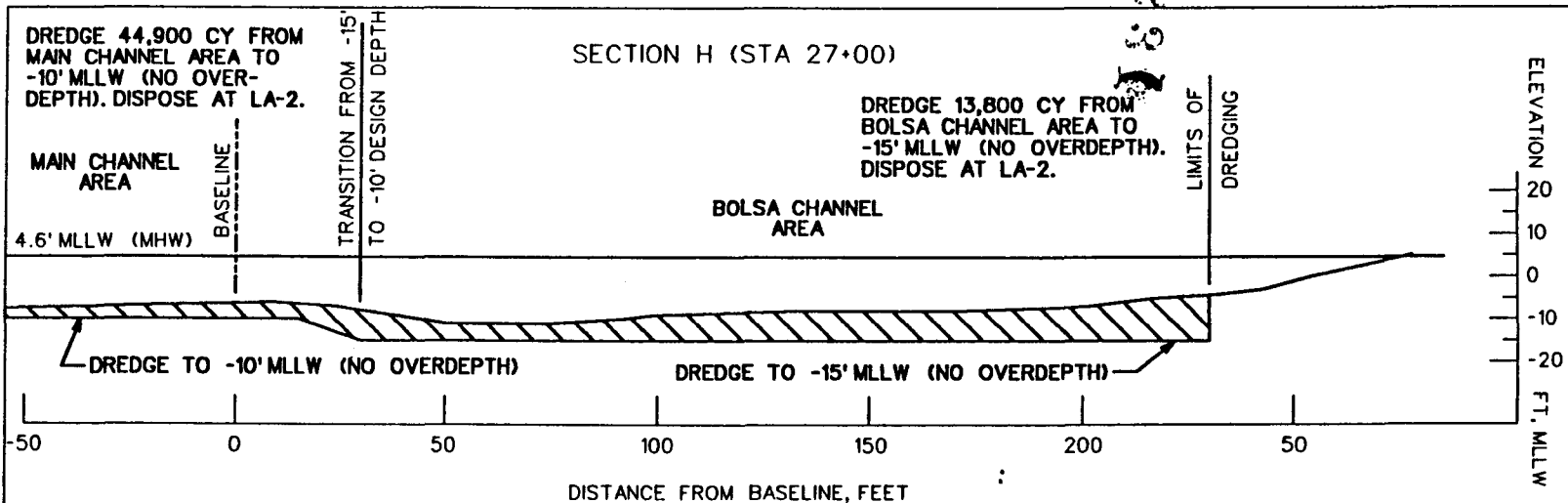
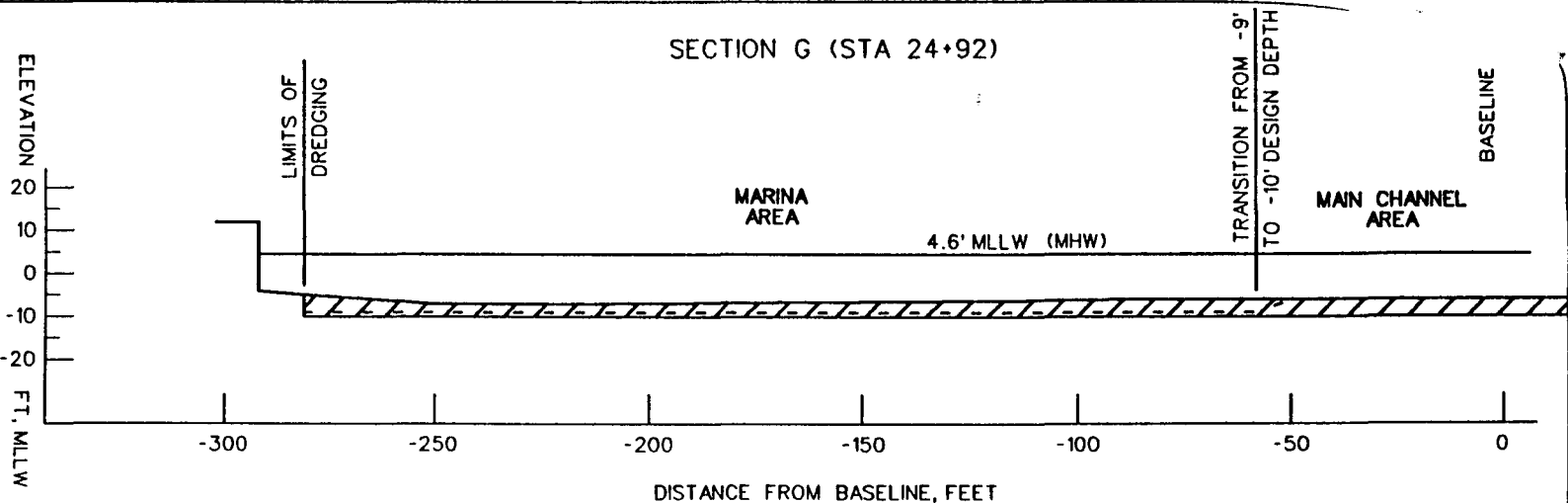


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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE STATE: CA
APPLICATION BY: COUNTY OF ORANGE

SHEET 8 OF 13 DATE: 5/97



COASTAL COMMISSION

5-97-231 and CC-137-97
Plans

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DATUM: MLLW

COUNTY OF ORANGE

NOBLE

2201 DUPONT DRIVE, SUITE 620
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SUNSET HARBOR MAINTENANCE DREDGING

IN: PACIFIC OCEAN
AT: SEAL BEACH
COUNTY OF: ORANGE
STATE: CA
APPLICATION BY: COUNTY OF ORANGE

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