

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

Th19c



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Addendum

August 30, 2016

To: Coastal Commissioners and Interested Parties

From: South Central Coast District Staff

Subject: Addendum to **Item Th19c**, Coastal Development Permit No. 4-16-0333 (Ventura Port District, San Buenaventura), for the Commission Meeting of Thursday, September 8, 2016.

The purpose of this addendum is to make revisions to the staff report. Staff recommends the following changes be made to the above-referenced staff report. Deletions are shown as ~~striketrough~~ and additions are shown by underlining:

1. On Page 10 of the staff report, the first section of Special Condition No. 6 (portion "A") shall be modified as follows:

6. Shoreline Monitoring Program.

A. The applicant shall conduct an annual shoreline monitoring program to document shoreline changes in the project vicinity. Documentation shall include but not be limited to:

- (1) An indication of beach width and sand volume changes to the beaches ~~within the~~ adjacent to all approved deposition sites ~~area profiles~~. This shoreline analysis shall include the deposition area along McGrath State Beach. The applicant shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.
- (2) Data detailing the annual quantity, location, and date of dredged material placement.
- (3) An annual summary of conditions at the Santa Clara River estuary mouth.

B. The monitoring information shall be submitted to the Executive Director by July 1 of each year as well as to other public and federal, state, and local entities who wish to obtain such information. At a minimum, the annual reports shall be furnished to the Executive Director of the Commission, the Cities of Ventura and Oxnard, the Army Corps of Engineers (Los Angeles District) and BEACON.

2. On Page 17 of the staff report, the first section of Special Condition No. 18 (portion “(a)”) shall be modified as follows:

18. Eelgrass Survey

(a) Pre-Construction Eelgrass Survey:

- a. A valid pre-construction eelgrass (*Zostera marina*) survey ~~shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey~~ shall be completed prior to commencement or re-commencement of any development authorized under this coastal development permit. The applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of eelgrass. ~~The survey shall be valid until the next period of active growth.~~
- b. The survey shall be prepared in full compliance with the “Southern California Eelgrass Mitigation Policy” dated October 2014 (except as modified by this special condition) adopted by the National Marine Fisheries Service (see http://www.westcoast.fisheries.noaa.gov/habitat/habitat_types/seagrass_info/california_eelgrass.html) and shall be prepared in consultation with the California Department of Fish and Wildlife.
- c. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development.
- d. If the eelgrass survey identifies any eelgrass within the project area which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit in order to address and allow eelgrass mitigation measures, as described in subsection B, below. However, no amendment or new permit is needed if the Executive Director determines that no amendment or new permit is required.

3. On page 46 of the staff report, the third full paragraph shall be modified as follows:

Therefore, Special Condition Eighteen (18) requires the applicant, within 60 days and no later than thirty (30) days prior to construction, to conduct a survey of the project area for eelgrass ~~during the period of active growth of eelgrass (typically March through October).~~ As part of projects that include construction of development in open water areas (such as placement of pilings, docks, etc.), eelgrass surveys are typically conducted during the period of active growth of eelgrass (usually March through October) before construction commences. In this case however, dredging will be carried out on an as-needed basis annually. There may be years when no dredging is necessary or when only

some portion(s) of the harbor will need to be dredged. Additionally, the identification of need may not be made until after the period of active eelgrass growth. Therefore, it is more appropriate in this case to require the applicant to survey for the presence of eelgrass within the areas to be dredged, just prior to the commencement of any development authorized under this coastal development permit. If the survey identifies any eelgrass within the project area which would be impacted by the proposed project, the Executive Director must be notified prior to construction. If any eelgrass is identified in the project area before dredging, the applicants shall conduct a second eelgrass survey within 30 days after the conclusion of dredging activities to determine if any eelgrass was adversely impacted. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.38:1. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

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Th19c

Filed: 7/21/16
180th Day: 1/17/17
Staff: J. Grace-V
Staff Report: 8/18/16
Hearing Date: 9/8/16

STAFF REPORT: REGULAR CALENDAR

Application No.: 4-16-0333

Applicant: Ventura Port District

Location: Ventura Harbor, City of San Buenaventura; Beach deposition sites in the cities of San Buenaventura and Oxnard (Ventura County)

Project Description: Implement a Maintenance Dredging Program in the outer and inner areas of Ventura Harbor through April 18, 2026.

Maintenance dredging of the *Inner Harbor*, to design depths, would entail up to 100,000 cu. yds. of material to be dredged annually from the navigation channels, berthing areas, and sand traps within the harbor and deposited: (1) within surf zone near the mouth of the Santa Clara River, (2) three interior depressions within the interior of the harbor; and/or (3) in the 4,000 feet of nearshore area off of McGrath State Beach. Of the proposed 100,000 cu. yds. of material to be dredged, up to 2,500 cu. yds. of fine-grained material may be dredged from the mouth of the Arundell Barranca and/or the Olivas Park storm drain with a shore-based clam shell, with deposition outside of the coastal zone.

Maintenance dredging of the *Outer Harbor*, to design depths, would entail up to 600,000 cu. yds. of material to be removed annually from the entrance channel and offshore sand traps and deposited: (1) within the surf zone along 10,000 feet of beach extending southward from the harbor's south jetty, including South Beach, the area near the Santa Clara River mouth, and McGrath

State Beach; (2) within the surf zone north of the harbor entrance in Cells 1 and 2 of the Pierpont Groin Field; (3) in the 4,000 feet of nearshore area off of McGrath State Beach; and/or (4) the 1,000 feet of nearshore area off of San Buenaventura State Beach south of the Ventura Pier.

Dredging would be accomplished by means of hydraulic dredging with pipeline deposition into designated *surf zone areas* or alternately by means of clamshell or hopper dredging with deposition in the *nearshore* waters. A shore-based clam shell may also be used to dredge up to 2,500 cu. yds. of material at the mouth of the Arundell Barranca and/or the Olivas Park storm drain, with deposition outside of the coastal zone. The dredging and deposition period will run from after Labor Day in September to Memorial Day in May of the following year, subject to timing constraints for resource protection.

Staff Recommendation: Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

The Ventura Harbor is located in the City of San Buenaventura (Exhibit 1), south of San Buenaventura State Beach and north of the Santa Clara River. It is used for both commercial and recreational activities. In order to maintain access for both commercial and recreational uses of the area, it must be maintained through an annual dredging program. The applicant proposes to dredge the harbor to the design depths on an annual basis for a period of ten years.

The maintenance dredging program would allow for a maximum of 100,000 cubic yards of sediment to be dredged annually from the Inner Harbor's navigation channels, berthing areas, and sand traps. Deposition sites include: (1) the surf zone near the mouth of the Santa Clara River; (2) three interior depressions within the interior of the harbor; and/or (3) in the 4,000 feet of nearshore area off of McGrath State Beach. Of the proposed 100,000 cubic yards of material to be dredged, up to 2,500 cubic yards of fine-grained material may be dredged from the mouth of the Arundell Barranca and/or the Olivas Park storm drain with a shore-based clam shell, with deposition outside of the coastal zone.

Additionally, it would allow for up to 600,000 cubic yards of sediment to be dredged annually from the Outer Harbor's entrance channel and offshore sand traps. Deposition sites include: (1) within the surf zone along 10,000 feet of beach extending southward from the Harbor's jetty,

including South Beach, the area near the Santa Clara River mouth, and McGrath State Beach; (2) within the surf zone north of the harbor entrance in Cells 1 and 2 of the Pierpont Groin Field; (3) in the 4,000 feet of nearshore area off of McGrath State Beach; and/or (4) the 1,000 feet of nearshore area off of San Buenaventura State Beach south of the Ventura Pier.

Dredging would be accomplished by means of hydraulic dredging, with pipeline deposition into designated surf zone areas or alternately by means of clamshell or hopper dredging with deposition in the nearshore waters. The deposition of dredge spoils as beach nourishment on public beaches has the potential to adversely public access during operations. The dredging and deposition period is proposed to occur after Labor Day in September until Memorial Day in May of the following year, subject to timing constraints for resource protection. This timing will avoid peak public beach usage during summer months. Additionally, staff recommends several conditions relating to the siting, design, timing, and practices employed by the applicant in the deposition operations in order to ensure that maximum public access is provided during the placement of sand.

Dredging and disposal in and near areas identified as providing habitat for sensitive wildlife species has the potential to adversely impact those species. Several sensitive species are present in the project area including the California brown pelican, western snowy plover, California least tern, steelhead trout, tidewater goby and California grunion. Little or no vegetation is found on most of the beach disposal sites since these are sandy beach locations subject to wave action. There is dune habitat present on South Beach and McGrath State Beach. Staff recommends that the CDP be conditioned to ensure the protection of marine resources and environmentally sensitive habitats/species.. These conditions require the applicant to carry out chemical and physical analysis/testing to ensure chemical levels do not exceed safety standards, and that sediment types/grain size are appropriate for the chosen deposition sites. In addition, biological monitoring is required before starting dredging operations, during the dredging operations, and after the operations have been completed. This is to ensure that significant adverse impacts to adjacent habitats and sensitive species are avoided. Detailed condition language can be found on page 6.

While the Cities of San Buenaventura and Oxnard have certified local coastal programs, the proposed project will be conducted in areas that are subject to the retained coastal development permit authority of the Coastal Commission. Thus, the applicable standard of review is the Chapter 3 policies of the Coastal Act. The motion and resolution for an “approval” finding (for which a “yes” vote is recommended) are found on page 5.

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1 – Vicinity Map

Exhibit 2 – Proposed Dredging Areas: North Harbor

Exhibit 3 – Proposed Dredging and Deposition Areas: South Harbor, South Beach, and Santa Clara River Mouth

Exhibit 4 – Proposed Deposition Areas: McGrath State Beach

Exhibit 5 – Proposed Deposition Area: Santa Clara River Mouth

Exhibit 6 – Proposed Deposition Area: Pierpont Groin Fields

Exhibit 7 – Proposed Deposition Area: South of Ventura Pier

Exhibit 8 – Proposed Dredging Sections

Exhibit 9 – Nearshore Monitoring Program

Exhibit 10 – Snowy Plover Critical Habitat

Exhibit 11 – RWQCD Monitoring and Reporting Program

APPROVALS RECEIVED: Ventura County Air Pollution Control District Permit to Operation through March 31, 2017 (dated May 24, 2016); U.S. Army Corps of Engineers, Permit No. SPL-2011-1154-AJS through August 13, 2017 (dated August 13, 2012); California Regional Water Quality Control Board Waste Discharge Requirements Order No. R4-2012-0027 through December 31, 2016 (dated February 6, 2012); State Lands Commission Amendment to Lease PRC 2881.9 (May 11, 2011).

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 4-16-0333 pursuant to the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. 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:

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 Three 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

This permit is granted subject to the following 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.

III. SPECIAL CONDITIONS

1. Timing and Implementation of Project Operations.

All dredging operations, including operation of equipment, spoil disposal, placement or removal of disposal pipelines, or other construction, maintenance, material removal, or activities involving mechanized equipment shall be prohibited in all of the following locations:

- (a) Within 100 yards of, and on the entire beach seaward of, the Least Tern nesting areas, identified annually by the Department of Fish and Game, or the State Park Resource Protection Area from March 15 through August 31 to avoid disturbance during the breeding season of the Least Tern.
- (b) On any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach.
- (c) On any part of the beach in those portions of the project area where California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods, as documented by the surveys conducted pursuant to **Special Condition Five (5)**. In the event that sediment needs to be placed below the high tide line from March 14 to August 31, the applicant shall submit evidence, for the review and approval of the Executive Director, that surveys for

grunion have been conducted pursuant to **Special Condition Eight (8)** at the project site and that no grunion were found. No work shall occur below the high tide line between March 14 and August 31 without the authorization of the Executive Director.

- (d) Within federally designated critical habitat of the Western Snowy Plover from March 1 through September 30 to avoid adverse effects to nesting Western Snowy Plovers, or in any other area where snowy plovers may be, if they are exhibiting nesting or reproductive activity, as documented by the surveys conducted pursuant to **Special Condition Eight (8) and Special Condition Fourteen (14)**.

2. Dredging and Disposal Operation Plan.

The applicant shall submit a dredging and disposal operation plan within thirty (30) days, but no later than two (2) weeks, prior to each dredging operation for the review and approval by the Executive Director. The plan shall include at a minimum:

- (a) Site map showing the area of the Ventura Harbor to be dredged and receiver site(s). Nearshore disposal areas shall be plotted in latitude and longitude coordinates. All maps shall be drawn to scale.
- (b) Detailed description of the dredging operation, including the method of dredging and disposal, volume of dredged spoils to be removed, and volume to be deposited at the receiver site(s).
- (c) Description (e.g., size, type, capacity) of equipment to be used, including bin capacity when hopper and/or clamshell dredging is utilized.
- (d) Schedule of the dredging operation's proposed beginning and ending dates.
- (e) Results of a grain size and chemical analysis, pursuant to **Special Condition Three (3)**.
- (f) Evidence that local agencies were apprised of the availability of sand resources and the target destination for the current year's dredging operation.
- (g) Explanation of receiver site(s) priority.
- (h) All relevant monitoring reports required pursuant to this permit.
- (i) Debris management plan to prevent disposal of solid debris at receiver site(s). The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

3. Sediment Analysis.

Physical (grain size) analysis shall be conducted of a representative sample of the sediments to be dredged from the Outer Harbor areas, consistent with the Environmental Protection Agency (EPA) and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Testing of Outer Harbor sediment shall be

conducted upon initiation of the dredging operation. If sampling reveals that any sediment does not meet beach replenishment standards, the applicant shall cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

Chemical and physical analysis shall be conducted of a representative sample of the sediments to be dredged from the Inner Harbor, consistent with the requirements of the joint EPA/Corps *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. --Testing Manual* and CRWQCB waste discharge requirements. Re-testing of Inner Harbor sediment shall be conducted a minimum of three years from the date of the previous sediment sampling survey, where samples continue to meet EPA and CRWQCB guidelines. If the EPA or CRWQCB determine that the sediment exceeds any contaminant threshold levels, sampling shall commence at least six (6) weeks prior to any dredging event for all subsequent years. The results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

In the event of a spill, release, or similar event that has the potential to result in contamination of sediments in the project area, the applicant shall submit a written report of the event to the Executive Director within 30 days of its occurrence, and shall commence sampling at least six (6) weeks prior to any subsequent dredging event. Sampling results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

4. Dredge Spoil Compatibility.

- A. The dredged material shall meet all applicable federal and state beach nourishment or dredge spoil discharge requirements and comply with the grain size requirements for the locations as cited below.
- B. Dredged material meeting EPA and Regional Water Quality Control Board criteria for beach replenishment, and for which an average of 91% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200), may be deposited in the following locations, in accordance with project plans shown in Exhibits 3 through 7:
 - (1) Nearshore area south of San Buenaventura pier;
 - (2) Cells 1 and 2 of the Pierpont Groin Field;
 - (3) South Beach;
 - (4) Surf zone of the Santa Clara River;
 - (5) Surf zone at McGrath State Beach; and/or
 - (6) Nearshore area at McGrath State Beach;
- C. Finer sands and silts meeting applicable federal and state dredge spoil discharge requirements, and for which an average of 90% or less of the material is coarse

grained (retained on a Standard U.S. Sieve Size No. 200), may be deposited in the following locations, in accordance with project plans shown in Exhibits 3 through 5:

- (1) Inner Harbor Depressions;
 - (2) Surf zone of the Santa Clara River no closer than 300 feet from the Santa Clara River and only while the Santa Clara River estuary mouth is open, and the river is flowing at 100 cubic feet per second or more as measured at the County of Ventura Flow Gage at the Victoria Avenue bridge; and/or
 - (3) Nearshore area at McGrath State Beach.
- D. Fine-grained material dredged by a shore-based clam shell from the mouth of the Arundell Barranca and/or the Olivas Park storm drain must be deposited outside of the coastal zone.
- E. Dredged material that does not meet the physical or chemical standards for beach replenishment or spoil discharge shall not be discharged at any of the deposition sites. At such time, the applicant shall identify an alternate location suitable to accept contaminated sediment. Should the dumpsite be located in the Coastal Zone, a coastal development permit shall be required.

5. Nearshore Disposal Project Monitoring.

Maintenance dredging may be conducted using a clamshell or hopper dredge with nearshore disposal off of McGrath State Beach as shown in Exhibit 4. Upcoast nearshore disposal may also be conducted pursuant to the beach nourishment agreement with the City of San Buenaventura, off San Buenaventura State Beach downcoast of the Ventura Pier as shown in Exhibit 7. To evaluate the appropriateness of nearshore disposal at these two locations and its effectiveness in beach nourishment, the nearshore alternative shall be subject to the review and approval of the Executive Director based on the following monitoring report:

- (a) The applicant shall measure and document the response of adjacent shorelines to the placed berm and the prevailing environmental conditions, and document the dispersion and migration of the berm itself. The monitoring program parameters shall correspond to the Maintenance Dredging Monitoring Plan for Nearshore Disposal (Exhibit 9), including pre- and post- dredge surveys of the beach profiles and bathymetry. A baseline survey of the nearshore project area shall take place no earlier than four (4) weeks prior to any dredging operation. As described in the Monitoring Program, data shall be collected for a period of one year, a minimum of quarterly, after any disposal operation at a nearshore site. Monitoring results shall be provided to the Executive Director following completion of the first year of the program. Subsequent utilization of the nearshore method shall require Executive Director review and approval, and shall be contingent upon the monitoring program demonstrating that no adverse impacts to downcoast shoreline sand supply result from this method. The Executive Director's consideration will include impacts to recreational uses including surfing and swimming. Modifications to the monitoring

program specified in Exhibit 9 are subject to review and approval of the Executive Director.

- (b) The Executive Director may waive the full year post-dredging monitoring requirement, if the applicant submits evidence, subject to the Executive Director's review and approval, which shows that the nearshore berm has completely dispersed.

6. Shoreline Monitoring Program.

- A. The applicant shall conduct an annual shoreline monitoring program to document shoreline changes in the project vicinity. Documentation shall include but not be limited to:
 - (1) An indication of beach width and sand volume changes to the beaches within the area profiles. This shoreline analysis shall include the deposition area along McGrath State Beach. The applicant shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.
 - (2) Data detailing the annual quantity, location, and date of dredged material placement.
 - (3) An annual summary of conditions at the Santa Clara River estuary mouth.
- B. The monitoring information shall be submitted to the Executive Director by July 1 of each year as well as to other public and federal, state, and local entities who wish to obtain such information. At a minimum, the annual reports shall be furnished to the Executive Director of the Commission, the Cities of Ventura and Oxnard, the Army Corps of Engineers (Los Angeles District) and BEACON.

7. Caulerpa Surveys and Monitoring.

- A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit, the applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate and inspection of dredging equipment.
- B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.
- C. Within two (2) weeks of completion of the survey, the applicant shall submit the results of the survey:
 - (1) for the review and approval of the Executive Director; and

- (2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Wildlife (858-467-4218), William.Paznokas@wildlife.ca.gov) or Bryant Chesney, National Marine Fisheries Service (562-980-4037, Bryant.Chesney@noaa.gov), or their successors.
- D. Unless the Executive Director otherwise determines, if the survey identifies any *Caulerpa taxifolia* within the project area, the applicant shall submit to the Commission an application for a new coastal development permit or an amendment to this permit authorizing measures formulated to avoid, minimize and otherwise mitigate impacts that the proposed development might have resulting from the dispersal of *Caulerpa taxifolia* in the project area. The applicant shall: 1) refrain from commencement of the project until a valid permit or amendment is obtained, and 2) upon authorization of the permit or amendment, implement the approved mitigation measures in the manner and within the timeframe(s) specified in the approval.

8. Sensitive Species Surveys and Monitoring.

- A. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to commencement of dredging or discharge activities. The environmental resource specialist shall conduct a survey of the project site, to determine presence and behavior of sensitive species, one day prior to commencement of installation or removal of the discharge pipeline, or any grading activities on the beach. In the event that any sensitive wildlife species (including but not limited to California least tern, western snowy plover, California grunion) exhibit reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.
- B. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to any dredging or discharge activities from March through August. The environmental resource specialist shall conduct a survey of the project site, to determine presence of California grunion during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game. If any grunion spawning activity and/or if grunion are present in or adjacent to the project site in any life stage, no construction, maintenance, or any grading and grooming activities on the beach or other project activities shall occur until the next predicted run in which no grunion are observed. Surveys shall be conducted for all seasonally predicted run periods in which material is proposed to be placed at any of the above sites. If material is in the process of being placed, the material shall be rough graded and returned to contours that will enhance the habitat for grunion prior

to the run period. Furthermore, placement activities shall cease in order to determine whether grunion are using the beach during the following run period. The resource specialist shall provide inspection reports after each grunion run observed and shall provide copies of such reports to the Executive Director and to the California Department of Fish and Game.

- C. The applicant shall submit documentation, prepared by the biologist or environmental specialist, which indicates the results of each pre-construction survey, including if any sensitive species were observed and associated behaviors or activities. Location of any nests observed shall be mapped.
- D. The environmental specialist shall be present during the installation and removal of the discharge pipeline, and during grading of the beach. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The biological monitor(s) shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-06-086 occur or if habitat is removed or impacted beyond the scope of the work indicated in Coastal Development Permit 4-06-086. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

9. Operational Responsibilities.

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

- (a) At the completion of each year's dredging and deposition, but prior to the timing restrictions specified in Special Condition One (1) above, the sand deposited on the beach shall be rough graded to natural beach contours to restore the dynamic shoreline habitat and to facilitate recreational use.
- (b) All pipeline operations and vehicle traffic shall be limited to the 50-foot wide corridor along the proposed pipeline route.
- (c) All vehicle traffic associated with placement of the pipeline, including the movement of sections of the pipeline, must be preceded by a designated individual walking ahead of the equipment being moved to ensure that no snowy plovers or other sensitive species are at risk from vehicle or equipment movement.
- (d) No pipes or any other equipment shall be stored on the beach consistent with timing constraints identified pursuant to Special Condition One (1).
- (e) The disposal pipeline, access routes, and equipment corridor shall not cross or disturb sand dunes and shall minimize crossings or disturbance of the wrack zone. Wrack shall be separated and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack shall be moved to the side during discharge operations, pipeline placement, and other project

activities, and replaced in its original location/configuration, to the maximum extent feasible, at the completion of project operations where possible.

- (f) At no time shall disposal or associated activities interfere with the breaching or retention of flow within the Santa Clara River estuary in such a way as to cause or threaten flooding on adjacent lands.

10. Operation Staging.

- A. At least two (2) weeks prior to commencement of any dredging operation, the applicant shall submit to the Executive Director for review and approval, final staging plans that include the following:

- (1) A map of the location of the project construction headquarter(s).
 - (2) Site plans for all construction staging areas and access routes, including stockpile areas for pipe and the access corridor necessary for placement of the pipeline.
 - (3) Special staging and parking needs for heavy equipment.

- B. The plan shall be consistent with the following criteria:

- 1. Staging areas shall be used only during active construction operations and will not be used to store materials or equipment between operations.
 - 2. The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.
 - 3. Construction equipment shall not be cleaned on the beach or in the beach parking lots.
 - 4. Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
 - 5. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
 - 6. The applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be

unsuitable for any reason, at any time, when unsuitable material/debris can reasonably be associated with the placement material. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.

7. Stockpiled materials shall be located as far from stream areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of a stream bank.
8. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial grading operations and shall be monitored and maintained until all stockpiled fill has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.

C. The applicant shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

11. Agency Coordination.

No less than sixty (60) days prior to commencement of each dredging operation, the applicant shall provide notice to local agencies and any other known interested parties of the volume and quality of shoal material. Those parties that shall receive notice include, but are not limited to, the cities of San Buenaventura and Oxnard, California Parks and Recreation, Army Corp of Engineers, Regional Water Quality Board, BEACON, and the Executive Director of the Coastal Commission. If any party requests to use the dredged material which meets beach replenishment requirements, and if the Executive Director determines that the proposed beach nourishment will not have adverse impacts on coastal resources and that these materials are not more appropriate at alternative disposal sites, the applicant shall make the dredged material available to that party, for transport and use for beach nourishment, at that party's expense.

12. Public Access Program.

Prior to issuance of this coastal development permit, the applicant shall submit, for review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the beach deposition sites and/or staging areas shall be maintained during dredging and discharge operations.

13. Required Approvals.

Prior to commencement of any sediment management activities authorized by this coastal development permit, the applicant shall provide evidence to the Executive Director of receipt of all necessary State and Federal permits including the U.S. Army Corps of Engineers, the California State Lands Commission, and the California Regional Water Quality Control Board.

14. Snowy Plover and Least Tern Monitoring.

- A. A biologist(s) or environmental specialist(s) with appropriate qualifications acceptable to the Executive Director shall conduct a survey(s) of western snowy plover and California least tern in all shorefront portions of the project area, from the northernmost point at the Pierpont Groinfield deposition site to the southern terminus of McGrath State Beach property. Survey(s) shall commence at least two (2) weeks prior to any dredging activities and extend at least two (2) weeks after the final dredging activity is completed. Prior to the commencement of the survey(s), the biologist(s) or environmental specialist(s) shall submit a survey methodology report for the review and approval of the Executive Director. The report shall include, at a minimum, an illustration of monitoring sites/transects, survey dates and time, names of surveyors, and survey protocol. The survey(s) shall be conducted a minimum of twice weekly and shall be designed to assess the abundance, distribution, behavior, and any disturbances to snowy plovers and least terns foraging, roosting, or nesting in the survey area. If any snowy plover or least tern exhibits reproductive or nesting behavior, then the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

The applicant shall submit a western snowy plover and California least tern monitoring report to the Executive Director for review and approval by July 1 of each year. The monitoring report shall be prepared by a qualified biologist and shall at a minimum include, but not be limited to, the following components: 1) population and trend analysis; 2) analysis and illustration of population density and spatial distribution before, during, and after each dredging operation; 3) documentation of all known incidents of snowy plover and least tern disturbance (including incidents resulting in mortality, citing the probable cause of mortality) including dates, times, location, degree of plover disturbance (e.g., plover behavior such as moving, running, or flying from a disturbance or other actions such as elevating wings), source of disturbance (e.g., pedestrians, vehicles, dogs on or off leash, equestrians, predation, spills, dredging operations and support activities including pipeline installation and removal and any beach grading or grooming activities, or vandalism of unknown origin), length of time of disturbance, level of disturbance (i.e., how many plovers made to fly or move and how far plovers were displaced), and the approximate distance between the source and plovers which resulted in the disturbance; 4) analysis of any other activities with the potential to impact the species' population in the project area, such as use patterns (e.g., public recreation), weather patterns, and

habitat changes; and 5) conclusions regarding the impact of the dredging operations on the snowy plover and least tern populations and habitat. If the Executive Director determines that adverse impacts have occurred to the species' population or habitat as a result of the dredging operations, the Executive Director shall provide written notice to the applicant of such determination. The applicant shall cease work (if work is underway) and shall notify local resource agencies in a timely manner. The applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

15. Water Quality Monitoring.

The applicant shall conduct a water quality monitoring program that will analyze potential adverse impacts on the near-shore and offshore marine environment resulting from disposal of dredged materials into the intertidal zone. The monitoring program will be conducted each time dredged materials are deposited into or graded near the intertidal zone and will contain the following components:

(a) The applicant shall retain the services of a qualified biologist(s) or environmental resources specialist(s) with appropriate qualifications acceptable to the Executive Director. The environmental resource specialist shall monitor and document the turbidity of coastal waters during all project construction activities consistent with California Regional Water Quality Control Board (RWQCB) Monitoring and Reporting Program No. 6300 for Ventura Port District (Maintenance Dredging) (File No. 76-59) which is attached to this report as Exhibit 11. The applicant shall submit, for the review of the Executive Director, all weekly monitoring reports that indicate non-compliance with the waste discharge requirements outlined in the Monitoring and Reporting Program. The weekly reports shall be submitted within 10 days of completion of each weekly sampling period for which non-compliance is found. In addition, the applicant shall submit, for the review of the Executive Director, a final report, summarizing the weekly monitoring, within 30 days of the completion of each dredging operation.

(b) Should the water quality monitoring program yield results that indicate sediment disposal into the intertidal zone causes a significant adverse impact on water quality or the marine environment the applicant is required to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to the permit or a new coastal permit shall be required.

16. Assumption of Risk.

By acceptance of Coastal Development Permit 4-06-086, the applicant acknowledges and agrees (i) that the project site may be subject to hazards from erosion and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

17. Project Term.

All development approved pursuant to this coastal development permit shall be completed by April 18, 2026.

18. Eelgrass Survey**(a) Pre-Construction Eelgrass Survey:**

- a. A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to commencement or re-commencement of any development authorized under this coastal development permit. The applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of eelgrass. The survey shall be valid until the next period of active growth
- b. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" dated October 2014 (except as modified by this special condition) adopted by the National Marine Fisheries Service (see http://www.westcoast.fisheries.noaa.gov/habitat/habitat_types/seagrass_info/california_eelgrass.html) and shall be prepared in consultation with the California Department of Fish and Wildlife.
- c. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development.
- d. If the eelgrass survey identifies any eelgrass within the project area which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit in order to address and allow eelgrass mitigation measures, as described in subsection B, below. However, no amendment or

new permit is needed if the Executive Director determines that no amendment or new permit is required.

(b) Post-Construction Eelgrass Survey:

- a. If any eelgrass is identified in the project area by the survey required in subsection A of this condition above, within one month after the conclusion of construction, the applicant shall survey the project site to determine if any eelgrass was adversely impacted.
- b. The survey shall be prepared in full compliance with the “Southern California Eelgrass Mitigation Policy” dated October 2014 (except as modified by this special condition) adopted by the National Marine Fisheries Service (see http://www.westcoast.fisheries.noaa.gov/habitat/habitat_types/seagrass_info/california_eelgrass.html) and shall be prepared in consultation with the California Department of Fish and Wildlife.
- c. 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.
- d. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.38:1 ratio on-site, or at another location, in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP). All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.38:1 (mitigation:impact).
- e. The exceptions to the required 1.38:1 mitigation ratio found within SCEMP shall not apply. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION

Ventura Harbor is a man-made commercial and recreational harbor located in the southwest portion of the City of San Buenaventura, Ventura County (Exhibit 1). The harbor can be classified into two zones: (1) the Outer Harbor Zone includes the federally maintained entrance channel, offshore sand traps, and associated protective structures and (2) the Inner Harbor Zone consists of the navigation channels, berthing areas, and sand traps within the interior of the harbor. The entrance channel is comprised of two rubble-mound jetties, a detached rubble-mound breakwater, sand trap, and the south beach groin. The inner harbor has approximately 200 commercial berths and 1,600 recreational berths, and it provides ocean access for the Ventura Keys, an adjacent waterfront residential community with private docks.

The applicant proposes to implement an annual Maintenance Dredging Program in the outer and inner areas of Ventura Harbor through April 18, 2026 (Exhibits 3-9). The maintenance dredging is necessary to remove accumulated sediment from the marina bottom and entrance channel to secure the minimum depth required for navigational safety and the continued use of recreational facilities. Maintenance dredging of the inner harbor, to design depths, would entail up to 100,000 cu. yds. of material to be dredged annually from the navigation channels, berthing areas, and sand traps within the harbor and deposited: (1) within surf zone of the mouth of the Santa Clara River, (2) three interior depressions within the interior of the harbor; and/or (3) in the 4,000 feet of nearshore area off of McGrath State Beach. In addition, up to 2,500 cu. yds. of fine-grained material is proposed to be dredged from the mouth of the Arundell Barranca and/or the Olivas Park storm drain with deposition outside of the coastal zone.

Maintenance dredging of the outer harbor, to design depths, would entail up to 600,000 cu. yds. of material to be removed annually from the entrance channel and offshore sand traps and deposited: (1) within the surf zone along 10,000 feet of beach extending southward from the harbor's south jetty, including South Beach, the area near the Santa Clara River mouth, and McGrath State Beach; (2) within the surf zone north of the harbor entrance in Cells 1 and 2 of the Pierpont Groin Field; (3) in the 4,000 feet of nearshore area off of McGrath State Beach; and/or (4) the 1,000 feet of nearshore area off of San Buenaventura State Beach.

Dredging would be accomplished by means of a cutterhead hydraulic pipeline dredge with deposition into designated surf zone areas or, alternately, by means of clamshell or hopper dredging with deposition in the nearshore waters. Mechanical dredges such as the clamshell type may occasionally be needed for small, shoaled areas. One or more dredge types may be used during the dredging operation. Up to 2,500 cu. yds. of fine-grained material may be dredged at the mouth of the Arundell Barranca and/or the Olivas Park storm drain by a shore-based clamshell.

Dredging and deposition would take place in the project area between Labor Day in September to the Friday prior to Memorial Day in May of the following year; however, the dredging operations are subject to sensitive resources timing restrictions. As with past dredging operations, the proposed dredging would typically take place between November and March. Dredging is usually accomplished on a 24-hour per day, 7 days per week basis. However, equipment failures and malfunctions are common.

Past dredging of the harbor has been accomplished almost entirely by means of hydraulic dredging. This method requires the placement of pipeline, up to 3 ft. in diameter, from the dredge in the harbor to the deposition sites. The route of the discharge pipeline is shown in Exhibits 2 through 6. As proposed, the pipeline route avoids the sand dunes and least tern sites at South Beach and the dunes at McGrath State Beach. Upon completion of each dredging cycle, the pipe is removed from the beach.

A total of six sites (2 nearshore sites, 3 surf zone sites, and the inner harbor sites) have been identified to receive material from the proposed dredging project. The approximate locations of

these sites are shown in Exhibit 1. After surf zone disposal, mounds would be rough graded to obtain the desired beach profile. Material from the inner harbor and outer harbor are appropriate for disposal at different locations due to the finer nature of the sediment obtained from the inner harbor (see Table 1). The receiver sites are described in more detail below.

Table 1. Sites identified as potential receiver sites for inner and outer harbor dredged material.

Site	Outer Harbor (Coarse grained sediment)	Inner Harbor (Finer sands and silts)
Nearshore San Buenaventura State Beach	X	
Surf zone Cells 1 & 2 of Pierpont Groin Field	X	
Inner Harbor Depression Areas		X
Surf zone South Beach	X	
Surf zone Santa Clara River	X	X
Surf zone McGrath State Beach	X	
Nearshore McGrath State Beach	X	X

Nearshore waters off of San Buenaventura State Beach (Exhibit 7). The nearshore deposition area off of San Buenaventura Beach is situated just to the east of the Ventura Pier, and approximately 2 miles upcoast of the Ventura Harbor. Dredged material from the outer harbor would be deposited as a nearshore berm in shallow water, at a depth of minus 15 ft. to minus 30 ft. below the Mean Lower Low Water (MLLW). The berm would be oriented parallel to the shoreline, extending about 1,000 ft. southerly from the Ventura Pier. Deposition at this site would be accomplished via hopper or clamshell dredging.

This area is offshore of the federally designated critical habitat for the western snowy plover. In addition, there are sand dunes along portions of this State Beach. These resources would not be impacted by the offshore deposition since no equipment, or pipeline, would be required on shore. Deposition at this site has not been utilized in the past, pursuant to CDP 4-83-257, CDP 4-01-143, or CDP 4-06-086.

Surf zone at Cells One (1) and Two (2) of the Pierpont Groin Field (Exhibit 6). Cells 1 and 2 of the Pierpont Groin Field are located in between the three southernmost groins along the beach in the Pierpont Community, roughly from the terminus of Shellburn Lane to the northern boundary of Marina Park (Exhibit 1). This site is located between ¼-mile and ¾-mile upcoast of Ventura Harbor. Dredged material from the outer harbor would be deposited into the surf zone by means of hydraulic dredging and pipeline deposition. Sand dunes are in the vicinity but not located in the project area. This area is identified as critical habitat for the federal-threatened western snowy plover. This is discussed in further detail in Section E, Environmentally Sensitive Resources. The last time material was placed on the Pierpont beaches, pursuant to CDP 4-83-257, was in 1991. It is unlikely that this site will be used for regular disposal however, since any materials deposited at Pierpont beach would be immediately redeposited in the sand trap area, due to the prevailing direction of littoral transport (Parsons, 2001). This may in turn require additional dredging of the federal transport area, reducing the effectiveness of the program. The City has an agreement with the ACOE to operate and maintain the Pierpont beach area at its own expense. Disposal at this site must be in accordance with this agreement.

Surf zone at South Beach (Exhibits 2 and 3). This site is located immediately downcoast of the Ventura Harbor along the south peninsula, immediately south of the south jetty. Dredged material from the outer harbor would be deposited into the surf zone by means of hydraulic dredging and pipeline deposition. The proposed pipeline route (Exhibits 2 through 6) avoids the sand dunes aligning the back beach and the least tern site identified north of the Santa Clara River. A portion of this site is within the federally designated critical habitat for the western snowy plover. This is discussed in further detail in Section E, Environmentally Sensitive Resources.

This disposal site is considered as an option in case disposal cannot occur on McGrath State Beach (e.g., if flows from the Santa Clara River compromises the placement of pipeline across the river, as has occurred in 2005 and 2006) or if the site is undernourished and supplemental material is needed to help protect against erosion. In the early and mid-1980s, the dredged material from the outer harbor was deposited on the beach just to the south of the harbor entrance and north of the Santa Clara River due to shoreline recession which at that time was threatening portions of Spinnaker Drive.

Surf zone near the mouth of the Santa Clara River (Exhibit 5). This site is located approximately 4,500 feet downcoast of Ventura Harbor, near the mouth of the Santa Clara River. Dredged materials from the inner or outer harbor would be deposited into the surf zone via hydraulic dredging and pipeline deposition. The dredged material from the Inner Harbor, which contains approximately 70% fine-grained material, would be deposited in the surf zone in the vicinity of the mouth of the Santa Clara River where it mixes with similar grain size material carried by the river. The dredged material would be conducted below the mean high water line along the 2,500 feet of beach at the mouth of the Santa Clara River with the actual discharge point being at least 300 feet away (north or south) from the location at which the river flows into the ocean. There are occasions when high flows in the Santa Clara River make it infeasible to maintain the discharge pipeline across the mouth of the river, in which case the deposition activity would take place to the north of the river mouth. Discharge of material would only occur near the mouth of the Santa Clara River when the River estuary is open, and when the River flow, as measured at Ventura County's stream flow gage, located on the Victoria Street Bridge, is 100 cu. feet per second or greater.

Least tern nesting sites have been identified to the north and south of the river channel. In addition, the area is designated as critical habitat for the federal threatened western snowy plover. When deposited to the south of the main river channel, the pipeline corridor crosses the Santa Clara River mouth on the protected, backside of the sand spit at the mouth of the river. The route is placed to avoid the least tern nesting sites. These issues are discussed in further detail in Section E, Environmentally Sensitive Resources.

Surf zone at McGrath State Beach (Exhibit 4). This site is located more than a mile downcoast of Ventura Harbor, on California Department of Parks and Recreation property within the city limits of Oxnard. The site extends from approximately 300 feet south of the Santa Clara River to approximately where Gonzales Road would reach the ocean if it extended to the west. Dredged material from the outer harbor would be deposited in the surf zone by means of hydraulic

dredging and pipeline deposition. This location is within federally designated critical habitat for the western snowy plover. In addition, a sand dune system is situated along the upper beach area. These areas would not be impacted since the pipeline route avoids this sensitive habitat. Sensitive species issues at this site are discussed in further detail in Section E, Environmentally Sensitive Resources.

This location is the applicant's preferred receiver site for material from the outer harbor. Prior to 2005, the dredged material from the federal areas, which is more than 95% sand, was deposited into the surf zone at the McGrath State Beach. However, since 2005 this beach has not been used due to the width of the mouth of the Santa Clara River.

Nearshore waters off of McGrath State Beach (Exhibit 4). The nearshore deposition area off of McGrath State Beach is situated more than a mile downcoast of the Ventura Harbor. Deposition at this site would be accomplished via hopper or clamshell dredging. The dredged material from the inner or outer harbor would be deposited as a nearshore berm in shallow water, at a depth of minus 15 ft. to minus 30 ft. below the Mean Lower Low Water (MLLW). The berm would be oriented parallel to the shoreline, beginning about 500 feet south of the mouth of the Santa Clara River, extending approximately 4,300 feet to the south. The width of the berm would be approximately 900 ft. The berm of sediment created by this process would dissipate within several months, as the material moves with the littoral transport system, becoming available for beach replenishment.

This area is offshore of the federally designated critical habitat for the western snowy plover. In addition, there are sand dunes along portions of this State Beach. These resources would not be impacted by the offshore deposition since no equipment, or pipeline, would be required on shore.

Inner Harbor Depressions (Exhibit 3). Three low areas have been identified within the harbor which may need periodic nourishment. Dredged material from the inner harbor may be deposited within these depressions on the harbor bottom using a hydraulic pipeline placed in the bottom portion of the pits to minimize turbidity. No sensitive habitats or fisheries are known to exist in the mapped harbor areas which would receive approximately 50,000 cu. yds. of inner harbor dredged material. These are areas of high, chronic disturbance and do not contain significant, sensitive populations or habitats.

B. BACKGROUND

The harbor was constructed in 1963 with major structural modifications to the harbor entrance built in 1972 (addition of the detached breakwater and sand trap) and 1994 (spur groin was added to the north jetty and south beach groin). The Commission approved dredging operations in the Ventura Harbor and shoreline deposition locations under Coastal Development Permit 4-83-257 as amended (a total of eleven amendments have been approved), granted to the Ventura Port District as local sponsor and through various federal consistency determinations granted to the Army Corps of Engineers as federal sponsor. Responsibility for maintenance dredging of the harbor is divided between the Port District and U.S. Army Corps of Engineers (ACOE). The Port District dredges the inner harbor areas and the ACOE maintains the outer harbor.

Maintenance dredging of the outer harbor area occurs on an annual basis and is usually, but not always, performed by a U.S. Army Corps of Engineers' (ACOE) contractor operating within the federal project boundaries, as depicted in Exhibit 2. The Commission has previously authorized similar dredging and disposal in the manner proposed by the applicant, in its review of past Army Corps of Engineers (ACOE) consistency determinations (CD-64-98, CD-54-94, CD-53-91, CD-42-88, CD-51-86, CD-30-85, and CD-2-83) for the federally maintained entrance. Under federal Consistency Determination CD-64-98, the Commission approved the ACOE's Six-year Maintenance Dredging Program in 1998. In recent years, the dredged material from the outer harbor, which is more than 95% sand, has been deposited in the surf zone at McGrath State Beach. The applicant has asserted that this would continue to be the preferred deposition site in the near future. However, since 2005 this beach has not been accessible via pipeline due to the width of the mouth of the Santa Clara River.

The responsibility for maintenance dredging of the inner harbor (Exhibits 2 and 3) is retained solely by the Ventura Port District. The Port District has been dredging the Harbor under Commission permit since 1983 (CDP 4-83-257, as amended). During that time, some portions of the inner harbor have been dredged almost every year. The Port District has often coordinated the inner harbor dredging with the same ACOE contractor to be accomplished before or after the dredging of the federal area.

CDP 4-83-257 was amended in 1986, 1989, 1992, and 1995 to extend the permit for additional three-year terms. In 1995, the permit was amended to allow a five-year extension. The permit was not extended upon expiration in 2000 in order to complete a comprehensive evaluation of the potential impacts of the project, given the significant changes in environmental data and regulation (e.g., the designation of portions of the project area as critical habitat for the western snowy plover). Subsequently, the Commission approved CDP No. 4-01-143, followed by CDP No. 4-06-086, both with sixteen special conditions intended to ensure protection of sensitive resources, coastal waters, and coastal access and recreation. The term of CDP No. 4-01-143 was six (6) years, and the term of the following permit, CDP No. 4-06-086, was ten (10) years. As part of the subject permit application, the applicant proposes to implement the dredging project for another ten (10) years, through April 18, 2026. The project term will expire upon that date, as stated in **Special Condition Sixteen (16)**.

C. DIKING, FILLING, DREDGING OPEN COASTAL WATERS

Section 30233 of the Coastal Act states in part:

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

(1) New 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.

...

(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 longshore current systems.

Section 30233 of the Coastal Act states that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries, and for maintaining or restoring previously dredged depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233 of the Coastal Act also mandates that dredging and disposal operations shall be carried-out to avoid disruption of marine and wildlife habitats, and that suitable dredge sediments shall be deposited for beach replenishment.

The Port District proposes to annually dredge and dispose up to 700,000 cubic yards of material from the Ventura Harbor after Labor Day in September to the Friday before Memorial Day in May of the following year, subject to timing constraints for resource protection (See Section E, Marine and Environmentally Sensitive Habitat Areas). The Ventura Harbor has historically been dredged on an annual basis. The proposed dredging is necessary to maintain and restore previously dredged navigation channels, sand traps, and berths.

Section 30233(a) of the Coastal Act imposes a three-part test on dredging and filling projects (1) the allowable use test; (2) an alternatives test; and (3) a mitigation test. Ventura Harbor maintenance dredging with beach disposal at each of the six receiver sites complies with these tests because (1) maintenance dredging of existing channels is an allowable use under Section 30233(a)(2) of the Coastal Act; (2) when the material is suitable for beach disposal, and when habitat and access issues have been adequately addressed (as described in Sections D and E), there is no less damaging feasible alternative; and (3) with the avoidance, monitoring, and mitigation measures addressing environmentally sensitive habitat and sensitive species required through the special conditions (discussed in Section E), all feasible mitigation measures have been provided to minimize adverse environmental impacts.

1. Dredge Spoil Compatibility

The applicant submitted an analysis of the physical and chemical characteristics of the material to be dredged. The *Final Report, Sampling and Analysis, Ventura Harbor Sediment Investigation* (Applied Environmental Technologies, Inc., February 10, 2016) found that the Ventura Harbor generally consists of sandy silts and sandy clays. The consultants also encountered fine to coarse grain sand during their investigation of the inner harbor. The analysis concluded that:

“[...] the sediment in the Ventura Harbor (approximately 89.6 percent retained on the 200 sieve) is considered optimal for placement on the adjacent beaches. Sediments regularly discharged by the Santa Clara River contain only 21 percent retained on the 200 sieve. It is the conclusion of the report that the sediments dredged from the Ventura Harbor could be placed near the river mouth without causing long-term alteration of the grain size distributions in the area of the river mouth. The effects of weather, wave action, and the Santa Clara River discharge are considered to have significantly more impact on the beaches than dredging activities.”

Therefore, sediments dredged from the interior harbor are physically suitable for surf zone or nearshore deposition at the river mouth location, and within the depression at the interior of the harbor.

Physical testing performed in the federally maintained entrance channel (outer harbor) re-established the compatibility of this littoral material with the proposed disposal sites, and confirmed that it is comprised primarily of sand. It has been assumed that the material dredged is comprised of recent seasonal input from the littoral system, and would consist primarily of clean sand.

Chemical analysis of the inner harbor sediments have been conducted every three years by the applicant. The tests indicated that the chemical concentrations measured in the sediments are not environmentally significant and are comparable to the concentrations detected in the offshore samples. The analysis concluded that the inner harbor sample falls within the range of those of the proposed deposition sites near the mouth of the Santa Clara River and within the three depressions within the interior of the harbor. The consultant further found that:

“Based on existing regulatory standards and guidelines the chemical concentrations measured in the Ventura Harbor sediments are not considered to be environmentally significant. In addition, no significant impact is expected to occur from the deposition of Ventura Harbor sediments to waters offshore the Santa Clara River mouth or to authorized depressions on the harbor bottom.”

Therefore, relative to chemical concentrations the sediments proposed for deposition are suitable for surf zone or nearshore deposition near the mouth of the Santa Clara River, and within the low spots identified within the Harbor. However, these conditions may be altered by a number of episodic factors, including heavy rainfall events or potential chemical spills within the harbor. To ensure that future shoal material dredged is physically and chemically compatible with the proposed deposition sites, the Commission finds it necessary to require **Special Condition Three (3)** which requires the applicant to continue to test the physical and chemical characteristics of representative samples of the dredging area(s) and to submit the results for the review and approval of the Executive Director. **Special Condition Three (3)** requires that physical (grain size) analysis of a representative sample of outer harbor sediment be conducted during the dredging operations to ensure that it meets criteria for beach replenishment. Physical

analysis of outer harbor sediment has historically taken place concurrent with dredging of the Ventura Harbor and has re-established the compatibility of the littoral sediment with the deposition sites. **Special Condition Three (3)** requires the applicant to notify the Executive Director if the samples indicate that the dredged material no longer meets the physical standards for beach replenishment as described in **Special Condition Four (4)**. Chemical analysis for the outer harbor sediment has not been historically conducted because it is assumed that the material dredged will consist of recent seasonal input from the littoral system, comprised primarily of clean sand. The results of the chemical analysis for the inner harbor have served as an indicator of the sediment quality in the surrounding area. These chemical analyses have demonstrated that the sediments to be dredged from the inner harbor do not contain elevated levels of trace metals or organic contaminants.

In addition, **Special Condition Three (3)** requires the applicant to continue to analyze the chemical and physical qualities of inner harbor sediment, consistent with EPA and Regional Water Quality Control Board requirements. Pursuant to **Special Condition Three (3)**, inner harbor sediment quality analyses shall be conducted a minimum of every three years, unless the EPA or RWQCB determine that the sediment exceeds any contaminant threshold levels. If sediment samples exhibit elevated levels of any contaminant, sampling will be conducted prior to any dredging event for all subsequent years of the subject permit. The results of all grain size and chemical analysis shall be included in the Dredging and Disposal Operations Plan required pursuant to **Special Condition Two (2)**, submitted no later than two (2) weeks prior to the dredging event.

Special Condition Three (3) further requires that, in the event of a spill, release, or similar event that has the potential to result in contamination of sediments in the project area, the applicant shall submit a written report of the event to the Executive Director within 30 days of its occurrence, and shall commence sampling at least six (6) weeks prior to any subsequent dredging event.

In addition, **Special Condition Thirteen (13)** requires that, prior to dredging events, the applicant submit current evidence to the Executive Director that all State and Federal permits necessary for the proposed project including the U.S. Army Corps of Engineers, the California State Lands Commission, and the California Regional Water Quality Control Board have been obtained.

The dredged material must comply with all applicable federal and state beach replenishment or dredge spoils discharge requirements to be disposed at any of the proposed receiver sites. In addition, to EPA requirements, the California Regional Water Quality Control Board (RWQCB) regulates discharges to land and water. The most recent Waste Discharge Requirements provided by the Regional Water Quality Control Board for this project approved periodic maintenance dredging and deposition for beach replenishment, but provided that (Order No. R4-2012-0027):

“ [...] The Port may dispose of dredged material for beach replenishment purposes below the Mean Higher High Water level provided that it meets the following conditions:

a) The dredged material is composed of predominantly sand in which an average of 91% or greater of the material is retained on a Standard U.S. Sieve Size No. 200

b) The dredged material does not contain elevated concentrations of trace metals or trace organics

The Port may dispose of fine-grained or coarse-grained dredged material in a 4,000-foot zone of the nearshore area adjacent to McGrath State Beach. Just south of the mouth of the Santa Clara River, provided that it meets the following condition:

a) The dredged material does not contain elevated concentrations of trace metals or trace organics

The Port may dispose of dredged material below the mean high water line along the 2,500 feet of beach just west of the mouth of the Santa Clara River, with the actual discharge point being at least 300 feet away from the location at which the river flows into the ocean, provided that:

a) The river flow, as measured in the vicinity of the Victoria Bridge, is 100 cubic feet per second or greater

b) The dredged material is composed of predominantly fine-grained sediments, in which an average of 90% or less of the material is retained on a Standard U.S. Sieve Size No. 200

c) the dredged material does not contain elevation concentrations of trace metals or trace organics

The Port may dispose of material dredged from the inner harbor in any of the three identified deposition areas within the harbor provided that it meets the following conditions:

a) the dredged material is composed of predominantly fine-grained sediments, in which an average of 90% or less of the material is retained on a Standard U.S. Sieve Size No. 200

b) the dredged material does not contain elevated concentrations of trace metals or trace organics [...]"

Consistent with these requirements, **Special Condition Four (4)**, dredge spoil compatibility, cites the grain size criteria for each receiver site. Those materials that do not meet state and federal requirements for surf zone or nearshore deposition shall be disposed of as identified in the debris management plan, consistent with the requirements of **Special Condition Two (2)**, the

Dredging and Disposal Operation Plan, or in an alternate location licensed to accept such materials as described in **Special Condition Four (4)**.

In addition, fine grained material dredged from the mouth of Arundell Barranca and the Olivas Park storm drain with a shore-based clam shell must be disposed of at a location outside of the Coastal Zone. The Commission finds **Special Conditions Two (2)** and **Four (4)** are necessary to ensure proper disposal of solid debris and dredged material unsuitable for placement into the marine environment.

The proposed dredging program will serve to achieve and maintain identified ideal dredging depths and replenish local beaches which will accommodate the coastal-dependent uses that the project area provides. The proposed dredging to maintain design depths provide parameters under which dredging and deposition will occur, while the actual amount of material moved will vary annually depending on storm occurrence, natural sediment accumulation, funding, permitting, and permit restrictions on timing and location of the proposed operations.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30233 of the Coastal Act.

D. COASTAL ACCESS AND RECREATION

Coastal Act Section 30210 states that:

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.

Coastal Act Section 30211 states:

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

Coastal Act Section 30212(a) provides that in new shoreline development projects, access to the shoreline and along the coast shall be provided except in specified circumstances, where:

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.

(2) adequate access exists nearby, or,

(3) agriculture would be adversely affected. Dedicated access shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the access way.

Section 30220 of the Coastal states:

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

Section 30224 of the Coastal Act states:

Increased recreational boating uses of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launch 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 a ten-year annual dredging project which includes dredging of the Ventura Harbor, and disposal of the dredge material on nearby beaches to the north and south. The proposed project will maintain the harbor and beach areas for their associated boating and recreational uses, which will therefore continue to accommodate coastal-dependent and public recreational opportunities supported by the provisions of the Coastal Act.

The project sites includes the Ventura Harbor and six deposition sites including the Ventura Pier, Pierpont Community beaches, the interior of the Ventura Harbor, South Beach, the mouth of the Santa Clara River, and McGrath State Beach.

The project involves dredging and disposal of dredged sediment, and establishment of staging areas for such operations, on beaches that are popular recreation areas as well as ocean access points for swimming, kayaking, surfing and other uses of coastal waters.

1. Water Oriented Recreation

Sections 30220 and 30224 of the Coastal Act mandate that coastal areas suited for water-oriented recreational activities shall be protected and recreational boating uses of coastal waters shall be encouraged.

The Ventura Harbor and local area beaches provide a variety of coastal-dependent commercial and recreational resources including boating, fishing, sunbathing, kayaking, swimming, and surfing. Maintenance dredging of Ventura Harbor is an on-going activity required to maintain the entrance and navigational channels, provide safe navigation for maritime traffic, and minimize risks of hazardous shoaling conditions within the harbor. Dredged materials are used for beach replenishment to maintain nearby beaches for recreational use, shoreline protection for existing development, and reintroduction of sediment, which would otherwise remain trapped in the protected harbor, into the littoral current for replenishment of down coast beaches.

The proposed project involves dredging and disposal to achieve identified design depths to maintain the ideal harbor configuration. The Commission notes that dredging of the harbor is necessary to maintain safe navigation for commercial and recreational boating and therefore, the proposed project will serve to protect boating uses of coastal waters. The proposed project will also protect and maintain adjacent beaches for recreational use through beach nourishment. The Commission finds that the proposed project will serve to maintain and possibly enhance recreational boating use of the Ventura Harbor, and that the proposed project will maintain adjacent beaches for recreational access.

For the above reasons, the Commission finds that the proposed project will support water-oriented recreational opportunities and recreational boating uses of coastal waters, and is therefore consistent with Sections 30220 and 30224 of the Coastal Act.

2. Public Access and Recreation

Coastal Act Sections 30210, 30211, and 30212 mandate that maximum public access and recreational opportunities be provided to allow use of dry sand and rocky coastal beaches and that development not interfere with the public's right to access the sea, consistent with the need to protect public safety, private property and natural resources. All projects requiring a coastal development permit must be reviewed for compliance with the public access provisions of Chapter 3 of the Coastal Act.

The dredging operation may encompass up to a 30-foot wide corridor, $\frac{3}{4}$ -mile in length to the north (Pierpont Groin deposition site) and 2 miles in length to the south (McGrath State Beach deposition site), as a result of the placement of pipeline on the beach (see pipeline route in Exhibits 2 through 6). As proposed, the pipeline would be partially, and temporarily, buried during the dredging operation in order to allow continued access over the pipeline. However, in past instances, the pipeline has been unburied by storm and wave action. This may serve as a temporary impediment to access during the proposed operation. However, use of these areas is of a much more limited nature during these heavy weather episodes, and the obstacle created by the pipeline is generally surmountable in some areas. Furthermore, the pipeline is removed from the project site immediately at the conclusion of the dredging operation. Finally, the project is only undertaken in the off-peak beach use season.

To ensure that potential impacts to public access are avoided, thereby providing maximum access to these public beach areas, the Commission finds it necessary to require **Special Condition Nine (9)** which makes it the applicant's responsibility to assure that no pipes or any other equipment are stored on the beach from the Friday before Memorial Day through Labor Day of each year, and as constrained by other sensitive resources timing restrictions described in **Special Condition One (1)**. In addition, **Special Condition Nine (9)** requires the applicant to ensure that the beach is graded and groomed to natural beach contours to facilitate recreational use, at the completion of each year's dredging and deposition.

At a minimum, a portion of the Ventura Harbor is anticipated to be dredged annually. Sediment management operations will require a few weeks to months of dredging, sediment disposal, and beach grooming work annually. The operations will typically occur 24 hours per day, 7 days per

week to ensure the project is completed as quickly as possible. Based on the proposed annual maximum cubic yard limitations, dredging and disposal operations could involve up to three to four months of work in any given year, however the average time is estimated to be two months per year. Beach disposal is generally localized to approximately 500 linear feet on the beach at any one time.

Beach disposal and staging areas on beaches within the project site would temporarily displace beach area for public use, however, the remainder of beach areas surrounding the discharge and staging locations will be available for public access. The Commission finds that due to the extensive beaches in the project area open to the public, including San Buenaventura State Beach and McGrath State Beach, the displacement of beach users is minimal.

However, to ensure that maximum access is maintained for the public in the project area, **Special Condition One (1)** requires that all dredging operations, including operation of equipment, spoil disposal, placement or removal of disposal pipelines, or other construction, maintenance, material removal, or activities involving mechanized equipment be prohibited on any part of the beach and shorefront in the project area from the Friday before Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach. In this way, scheduling operations outside of peak recreational seasons will serve to minimize potential impacts on public access.

To ensure that public access is safe-guarded in the project area, the Commission has required **Special Condition Two (2)** which calls for the applicant to submit an operations plan for dredging and disposal, for the review and approval of the Executive Director within thirty (30) days, and no later than two (2) weeks prior to each dredging operation. The operations plan shall include a detailed description of the proposed dredging operation including the proposed schedule, the type of dredging operation, approximate volume of material to be removed, the volume of material to be deposited at each receiver site, and the capacity of the equipment. **Special Condition Two (2)** specifically requires that local agencies be advised of the proposed deposition location(s) and amounts of material meeting beach replenishment criteria, as described in **Special Condition Eleven (11)**, Agency Coordination. The Commission finds that coordination with agencies, including the cities of San Buenaventura and Oxnard, California Parks and Recreation, Army Corp of Engineers, Regional Water Quality Board, and BEACON will allow interested parties to be involved in the prioritization of disposal sites to receive material that could serve to enhance shoreline sand supply, and thus access and recreation within the project vicinity.

The Commission further finds that impacts to access may occur as a result of unanticipated impacts to shoreline and beach deposition activities. To address this issue, **Special Condition Six (6)** requires the implementation of a long-term Shoreline Monitoring Program to analyze changes to sand width and volume, in relation to the volume and location of deposition activities.

Should nearshore deposition take place, additional monitoring is necessary to assess the impacts of the nearshore method on shoreline sand supply. Under the previous coastal permitting for this project, the applicant amended the dredging project to permanently incorporate the nearshore

disposal sites, including a nearshore monitoring protocol. The Commission finds that a maintenance dredging monitoring plan for nearshore disposal, as provided in Exhibit 9, is necessary to measure and document the response of adjacent shorelines to the placed berm. This monitoring program would be applicable to all nearshore disposal sites. Therefore, the Commission is requiring the implementation of nearshore monitoring, as described in **Special Condition Five (5)**, including extensive pre- and post- dredge surveys to ensure that no adverse impacts to downcoast shoreline sand supply result from the method. Any modifications to the monitoring program specified in Exhibit 9 are subject to the review and approval of the Executive Director. The results of the survey shall be provided to the Executive Director for subsequent determination of the impact associated with this method of deposition to coastal resources.

The Commission notes that though ample beach area will remain available for public use during the proposed operations, establishing staging areas necessary to support the proposed operations in locations outside of heavily used beach areas will minimize interference with public access at the project site. Therefore, **Special Condition Ten (10)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit to ensure that the operations are in substantial conformance with the public access policies of the Coastal Act.

Furthermore, to ensure the safety of recreational users of the project site, particularly recreational users of adjacent beaches where disposal operations will be occurring, and to reduce potential conflicts between the sediment management operations and recreational use of the areas, the Commission finds it necessary to require **Special Condition Twelve (12)**, the Public Access Program, for the subject permit. **Special Condition Twelve (12)** requires the applicant to implement a program of monitoring and safety measures, including installation of signs, fencing, and posting of security guards, by which safe public access to or around beach deposition sites will be maintained.

The Commission finds that the proposed project, as conditioned, will not significantly impact recreational opportunities and public access at the project site, and therefore the project is consistent with Sections 30210, 30211, 30212, 30220, and 30224 of the Coastal Act.

E. ENVIRONMENTALLY SENSITIVE HABITAT AND MARINE RESOURCES

Section 30230 of the Coastal Act states:

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

Section 30231 of the Coastal Act states:

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

Section 30233 of the Coastal Act states in part:

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

Section 30240 of the Coastal Act states:

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

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

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and where feasible restored, protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. Section 30233 of the Coastal Act states that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries and for maintaining or restoring existing dredging depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

The proposed project involves dredging of open coastal waters and deposition of dredged sediment at nearby beaches. The habitat characteristics of the Ventura Harbor area are wetlands (salt and brackish marsh), deepwater marine and estuarine ecosystems (as defined by the U.S. Fish and Wildlife Service National Wetlands Inventory), and coastal strand habitat of sand beaches and dunes (as defined by Munz, 1974). The Commission notes that dredging and disposal in and near areas identified as providing habitat for sensitive wildlife species has the potential to adversely impact those species. Several sensitive species are present in the project area, some only seasonally, including the California brown pelican, western snowy plover,

California least tern, steelhead trout, tidewater goby and California grunion. Little or no vegetation is found on the beach disposal sites since these are sandy beach locations subject to wave action. The pipeline route avoids the South Beach and McGrath State Beach sand dune habitat.

1. Marine Organisms

Dredging and disposal results in increased turbidity at the dredge and disposal site. Temporary adverse impacts to marine organisms in the harbor are expected from the dredging operations. Temporary increases in turbidity and suspended solids at the dredging site would decrease light penetration, causing a decline in primary productivity due to decreased photosynthesis by phytoplankton. Any appreciable turbidity increase may also cause clogging of gills and feeding apparatuses of fish and filter feeders. Mobile organisms would likely relocate to an undisturbed area.

Turbidity impacts are expected to be within 500 meters (1,640 feet) of the area excavated, with the maximum concentrations generally restricted to the lower water column, and decreasing rapidly with distance due to settling and dilution (ACOE 2004 citing LaSalle 1991). The impacts from dredging (i.e., increased turbidity, sedimentation, dissolved oxygen reduction, and mechanical abrasion to fish and shellfish) are expected to be local. Following dredging activities, fish and shellfish are expected to recolonize previously disturbed areas. As such, impacts from sediment re-suspension caused by dredging are anticipated to be short-term (ACOE 2004). In addition, the proposed deposition sites are located in areas which have naturally high levels of turbidity due to high wave energy and river outfall particularly during the winter season when dredging takes place. Nonetheless, dredging locations and amounts change each year, causing varying amounts of turbidity and associated impacts. Thus some uncertainty remains regarding the impact of the proposed project on water quality.

The California Regional Water Quality Control Board (RWQCB) requires the applicant to monitor water quality during all dredging operations according to the provisions of Monitoring and Reporting Program No. 6300 for Ventura Port District (Maintenance Dredging) (File No. 76-59), which is attached to this report as Exhibit 11. This program entails weekly sampling of the entire water column within the area of dredged material disposal as well as at a control station, for the duration of each dredging operation. If the monitoring results indicate excess turbidity, the program requires further sampling and analysis to be conducted, and corrective action to be taken. The Commission finds that the monitoring program will provide the necessary data needed to evaluate the potential impacts of the proposed project on the nearshore and offshore marine environment.

Therefore, in order to ensure that increases in turbidity and suspended solids at the dredging and deposition sites do not significantly impact marine organisms, **Special Condition Fifteen (15)** requires a qualified biologist or resource specialist to monitor turbidity during all project construction activities consistent with the monitoring and reporting program required by the RWQCB (Exhibit 11). **Special Condition Fifteen (15)** further requires the applicant to submit, for the review of the Executive Director, all weekly monitoring reports that indicate non-compliance with the waste discharge requirements outlined in the Monitoring and Reporting

Program. In addition, the applicant shall submit, for the review of the Executive Director, a final report, summarizing the weekly monitoring, within 30 days of the completion of each dredging operation. If the monitoring reports indicate that sediment disposal into the intertidal zone causes a significant adverse impact on water quality or the marine environment, **Special Condition Fifteen (15)** requires the applicant to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to the permit or a new coastal permit shall be required.

2. Sensitive Species and Habitats

Several sensitive species are present in the project area, including the California brown pelican, western snowy plover, California least tern, steelhead trout, tidewater goby and California grunion. In addition, there are two sensitive habitats in the project area, the Santa Clara River estuary and sand dune habitats along South Beach and McGrath State Beach. Project activities, other than those discussed above under Section E(1): Marine Organisms, with the potential to adversely impact sensitive species or sensitive habitat, include (1) the installation, placement, and removal of the discharge pipeline; and (2) the post-dredging grading and grooming of the beach deposition site(s) to natural beach contours.

The discharge pipeline route extending south to the McGrath State Beach deposition area would cross beach areas identified as federally designated critical habitat of the western snowy plover, cross the beach near California least tern nesting sites, and traverse near sand dune habitat. The pipeline route avoids the dune systems at South Beach and McGrath State Beach, and no equipment or deposition activities are proposed in this sensitive habitat. As provided under **Special Condition Nine (9)**, it is the applicant's responsibility to ensure that the pipeline does not cross or disturb sand dunes.

The placement of the pipeline is accomplished by means of heavy equipment dragging each pipeline segment to its connection. The installation and removal of the pipeline therefore requires an adjacent access corridor sufficient to handle this type of traffic. The pipeline is placed on top of the natural contour of the beach but is covered with sand at various locations to facilitate continued access over the conduit. This process creates considerable disturbance along the pipeline corridor during the approximately four to five days required for pipeline installation and one to two days needed for removal. The re-contouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three or four months, however the average time is estimated to be two months per year. Project staging, including the location of the pipeline and access corridor, also has the potential to impact environmentally sensitive resources. To ensure that project staging is sited and designed to minimize impacts to environmentally sensitive resources, the Commission requires the applicant to submit an operation staging plan, pursuant to **Special Condition Ten (10)**, for review and approval of the Executive Director.

Post-dredging and deposition beach maintenance includes regrading the deposition site to natural beach contours. Furthermore, upon removal of the pipeline, the beach corridor may require regrading to remove any sand built up around the pipeline. In recognition of the potential of these project activities to impact sensitive biological resources in the project vicinity, **Special Condition Eight (8)** requires the applicant to retain a qualified biologist or environmental resource specialist to conduct a survey of the project site one day prior to the commencement of installation or removal of the discharge pipeline or any beach maintenance activities such as beach grading and grooming. The specialist shall also be present during these project activities.

Should the monitor determine that sensitive species are present and are exhibiting nesting or other reproductive behaviors, the environmental specialist shall require the applicant to cease work, and immediately notify the Executive Director and resource agencies. Project activities can resume only upon written approval of the Executive Director. The monitor shall also have the authority to cease operations should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental, program to adequately mitigate such impacts. Specific requirements for protection of the western snowy plover and California least tern are described below:

Western Snowy Plover

The Pacific Coast western snowy plovers (*Charadrius alexandrinus nivosus*) are small, sand colored shorebirds that use sandy beaches for nesting and roosting, from southern Washington to Baja California. The snowy plover forages on invertebrates in the wet sand; amongst surf-cast kelp; on dry sandy areas above the high tide; on salt pans; on spoil sites; and along the edges of salt marshes, salt ponds, and lagoons (USFWS 2007). Plovers breed primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years (USFWS 2007 citing Warriner et al. 1986). The breeding season for snowy plovers along the Pacific coast extends from early March to mid-September. Nests are typically depressions in the sand lined with beach debris (e.g., pebbles, shell fragments, plant material) constructed by the male in flat, open areas with low vegetative cover. Eggs of the first clutch are usually laid by early April. The plover's eggs are speckled and are camouflaged with surrounding terrain. The chicks are precocial, walking within a few hours and feeding themselves within a day or so of hatch. Chicks are difficult to avoid because of their small size and camouflaged coloring. Often chicks crouch in vehicle tracks or footprints, making them vulnerable to being stepped on or driven over. For these reasons, the birds, nests, eggs, and chicks are difficult to see and subject to destruction.

The majority of California's wintering plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches, which are rarely used for nesting (USFWS 2007). Roosting plovers usually sit in small depressions in the sand, or in the lee of kelp, other debris, or small dunes (USFWS 2007 citing Page et al 1995). While some plovers remain in their coastal breeding areas year-round, others migrate south or north for the winter (USFWS 2007 citing Warriner et al 1986, Page et al. 1995, Powell et al. 1997). For

instance, at Camp Pendleton in San Diego County, about 30% of nesting birds stayed during the winter (USFWS 2007 citing Powell et al. 1995, 1996, 1997).

The snowy plover was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in March 1993. Subsequently USFWS designated 180 miles of coastline in California, Oregon, and Washington as critical habitat in 1999. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. The USFWS has released a *Recovery Plan for the Pacific Coast Population of Western Snowy Plover* (2007). The Recovery Plan identifies a 4.9-mile stretch of beach at Mandalay Bay/Santa Clara River Mouth (Exhibit 10) and a 2.4-mile stretch along San Buenaventura State Beach, immediately north of the Ventura Harbor, (Exhibit 10) as two of six breeding and/or wintering sites located in Ventura County targeted for management. The Management Goal for the Mandalay Bay/Santa Clara River unit is 60 breeding adult plovers. The San Buenaventura State Beach unit is recognized as a site that supports primarily wintering and/or migrating snowy plovers. The Recovery Plan does not provide a Management Goal in this area.

The dredging operation and proposed surf zone deposition are not expected to directly impact the snowy plover. However, activities accessory to the project, such as pipeline installation, pipeline removal, and other beach grading and grooming activities, have the potential to adversely impact snowy plover. During prior dredging events, the pipeline installation process has taken four to five days to complete. Removal of the pipeline occurs at a more rapid pace, taking approximately two days to remove, depending on weather and river conditions. The re-contouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three to four months.

As identified in the Recovery Plan, dredging, disposal, and beach nourishment activities may have beneficial as well as detrimental effects to snowy plovers and habitat. Disturbances associated with dredging such as placement of pipes, disposal of dredged materials, or noise may affect wintering plovers. Alternately, the dredged material may provide important nesting habitat, or build up habitat as a result of beach nourishment. A recovery task that specifically addresses dredging states (USFWS, 2007, pg. 164-165):

2.2.2. Deposit dredged material to enhance and create nesting habitat. Near-shore (littoral drift) and on-shore disposal of dredged material seems to be beneficial for perpetuating high quality snowy plover nesting habitat in some instances and should be encouraged where appropriate. However, monitoring of habitat characteristics before, during, and after projects is needed, particularly in cases of large operations occurring on sites where snowy plovers nest or are deemed likely to nest following the disposal operation. On-shore disposal of dredged material should be scheduled outside the nesting season and, where possible, during seasons when birds are not present. In addition, dredged material must be clean sand or gravel of an appropriate grain size and must be graded to a natural slope.

The draft Recovery Plan goes on to consider beach nourishment (pg. 166):

2.2.3. Beach nourishment activities have the potential to enhance western snowy plover habitat, but should be carefully evaluated to weigh the probable adverse and beneficial effects on plovers and on other sensitive coastal dune species.

The Santa Clara River mouth and southward along McGrath Beach are known wintering and nesting areas for the western snowy plover. The Mandalay Bay/Santa Clara River Mouth unit is recognized to support 9 to 70 breeding adult birds (USFWS 2007, pg. B-14). San Buenaventura State Beach is not known to support nesting snowy plovers. The recognized breeding season for snowy plovers in Ventura County is mid-March to late-September (USFWS, pers. comm. January 25, 2002). The USFWS draft Recovery Plan states that (page 9):

The earliest nests on the California coast occur during the first week of March in some years and by the third week of March in most years (Page et al. 1995a). Peak initiation of nesting is from mid-April to mid-June (Warriner et al. 1986, Powell et al. 1997). Hatching lasts from early April through mid-August, with chicks reaching fledging age approximately 1 month after hatching (Powell et al. 1997).

Thus, although the proposed surf zone deposition is not expected to impact the snowy plover, pipeline placement, and associated project activities have the potential to adversely impact snowy plover. In order to avoid any adverse impacts to nesting snowy plovers, the Commission requires the applicant, as provided in **Special Condition One (1)**, to restrict all project activities within federally designated critical habitat during the snowy plover breeding season from March 1 through September 30. This includes the storage of pipes on the beach in the critical habitat area. The Commission finds that **Special Condition Nine (9)** is necessary to assign the applicant responsibility to ensure that no pipes or other equipment are stored in western snowy plover critical habitat areas during the breeding season.

Furthermore, **Special Condition Eight (8)** requires a biological survey to be conducted prior to commencement of pipeline movement, or other grading and grooming activities on the beach, and further requires a biological monitor to be present during the installation, removal, and other beach maintenance activities. If the surveyor or monitor finds that any snowy plover is exhibiting reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Work shall not re-commence except upon written approval of the Executive Director.

Snowy plovers are found year around in the sandy beach portions of the project area, both north and south of the Ventura Harbor entrance. During the winter the birds use the area to rest and feed to build up the fat reserves needed for reproduction and survivorship. A summary, provided by the applicant in June 2016, of bird monitoring over the course of the past ten (10) years states:

“Observed bird counts are generally low, and the contractor’s operations and beach access protocol to safeguard against adverse interaction have been successful. The biologist has reported that disturbances to birds have generally been caused by unleashed dogs, pedestrians on the beach, and State Parks vehicles. The biologist

indicates that communications with the contractor during dredging operations have been frequent resulting in no reports of incidental take.”

In order to ensure the continued protection of remaining snowy plovers, and minimize any potential future impacts, the Commission finds it necessary to require that the applicant monitor snowy plover abundance and distribution at wintering locations. **Special Condition Fourteen (14)** requires that monitoring activities commence at least two (2) weeks prior to any dredging event, continue throughout the dredging operation, and extend at least two (2) weeks after the final dredging activity has been completed. **Special Condition Fourteen (14)** also requires the applicant to submit a snowy plover monitoring report to the Executive Director for review and approval by July 1 of each year which addresses plover population and trends; incidents of plover disturbance; and conclusions regarding the impact of the dredging operations on the plover population and habitat. If the Executive Director determines that adverse impacts have occurred to the plover population or habitat, the applicant shall cease work, and shall immediately notify resource agencies. The applicant shall be required to submit a revised, or supplemental, program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

In addition, **Special Condition Nine (9)** requires the applicant to implement the specific measures, including limiting operation to within 50 feet of the pipeline route, requiring a monitor to walk ahead of any vehicles on the beach, and restoration of natural beach contours following pipeline removal, to avoid or minimize project impacts on the snowy plover.

Furthermore, the Commission finds that **Special Condition Ten (10)** is necessary to ensure that the staging areas are located in areas that minimize the interface of project activities with wintering snowy plovers. **Special Condition Ten (10)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit.

To ensure that the project is properly designed for the long-term protection of habitat, **Special Condition Four (4)** requires the dredged material to meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing as described in **Special Condition Three (3)**. Additionally, **Special Conditions Five (5) and Six (6)** require pre- and post-dredging operation monitoring of the nearshore and shoreline project areas, including beach width and sand volume changes. This information will be important to assess the project and its potential effects on plover habitat.

The beach replenishment sites are located in the nearshore just seaward of, or on-shore within snowy plover habitat areas. To ensure that the deposition of dredged material does not create detrimental impacts to beach slope, or subsequently to natural processes of erosion such as the network of dunes, **Special Condition Nine (9)** requires the applicant to rough grade the

deposition area to natural beach contours, immediately upon completion of the dredging operation, and prior to the timing restrictions described in **Special Condition One (1)**. Furthermore, dune habitat will not be directly impacted by the project. As proposed by the applicant, and described in **Special Condition (9)**, neither the disposal pipeline or equipment corridor shall cross or disturb sand dunes.

The project is limited term and will end on April 15, 2026, as described in **Special Condition Seventeen (17)**, which is effectively ten annual dredging seasons (2016-17, through 2025-26). Subsequent data from the monitoring program shall be used to assess the effectiveness of the program and will allow an adaptive management approach that preserves habitat for ensuing years.

California Least Tern

The California least tern (*Sterna antillarum browni*) are migratory shorebirds that spend the breeding season on beaches from central and southern California to Baja, Mexico. Winter areas for the U.S. breeding population are largely unknown but it is presumed that the birds spend their winters along the pacific coast of Central America. Though the timing of migration varies, terns typically begin to arrive along the California coast in mid-April with the fall migration from breeding colonies starting as early as June and extending as late as mid-October.¹ Least terns typically migrate in small, loose groups, feeding en route in shallow water near land and resting on sandbars, beaches, pilings, and docks. The least tern forages on small surface fish such as anchovies and topsmelts, captured from nearshore waters, estuaries, and river mouths near the breeding colonies.

Least terns nest in loose colonies in areas relatively free from human or predatory disturbance. Courtship may take place away from the nest colony, on a beach or exposed tidal flat. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years. Courtship period is usually 2 to 3 weeks in April and May with first eggs in California appearing in approximately mid-May. The breeding season for least terns along the California coast extends from April through August. California least terns are ground-nesting birds which nest in barren to sparsely vegetated sites near water, usually in association with river mouths or estuaries. Nests are shallow depressions in sand, soil, or pebble and are lined with beach debris (e.g., pebbles, shell fragments, plant material). The eggs are small, oval-shaped, and beige to olive in color, with spots or splotches from medium brown to black. Eggs are hatched after about 25 days. The chicks are semiprecocial, walking shortly after hatching but with the parents feeding chicks occasionally for up to several weeks after fledging. Chicks leave the nest at about 2 days of age, and fledge at approximately 20 days. The population of California least tern has experienced a decline due to the loss of suitable nesting habitat, which has been degraded by high levels of human disturbance along the beach as well as by the effects of urbanization of the shoreline.

¹ Thompson et. al., *Least Tern*, The Birds of North America, No. 290 (1997).

The California least tern was listed by the U.S. Fish and Wildlife Service as an endangered species in 1970 and by the California Department of Fish and Game in 1971. No critical habitat has been identified for this species, though a draft Recovery Plan was prepared in 1977 and revised in 1980 with a primary objective of increasing the population to a minimum of 1200 pairs distributed among colonies in at least 20 coastal wetland ecosystems. By 1992, their numbers had increased to approximately 2160 nesting pairs in 35 different colonies.

An established California least tern nesting colony is located on the north side of the mouth of the Santa Clara River, between the disposal sites at South Beach and McGrath State Beach. The designated nesting site is fenced annually by California Department of Fish and Wildlife to protect the nesting terns from predators and human intrusion, but some least terns nest outside the fenced area. The normal tern forage area is within an approximately two-mile radius of the nesting colony, including a majority of the proposed project area, however the proposed nearshore disposal area off of McGrath Beach (as shown in Exhibit 4) is not a preferred foraging area for the least tern. In addition, the proposed deposition in that area would be at a depth of approximately -15 to -30 feet, and thus would not cause surface turbidity that could affect the least tern's foraging ability.

The dredging operation and proposed surf zone deposition are not expected to directly impact the least tern. However, activities accessory to the project, such as pipeline installation, pipeline removal, and other beach grading activities, have the potential to adversely impact least tern habitat. During prior dredging events, the pipeline installation process has taken four to five days to complete. Removal of the pipeline occurs at a more rapid pace, taking approximately two days to remove, depending upon weather and river conditions. The re-contouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three to four months. To ensure that dredge disposal or other project activities do not take place during the least tern nesting season, the Commission finds it necessary to require that these activities do not occur within 100 yards of, and on the entire beach seaward of, the least tern nesting areas identified annually by the California Department of Fish and Game from March 15 through August 31 as required by **Special Condition One (1)**.

In addition, to ensure that the dredging does not impact any least terns that may arrive earlier than the recognized breeding season (March 15 through August 31), **Special Condition Eight (8)** requires a biological survey to be conducted prior to commencement of pipeline movement, or other grading and grooming activities on the beach, and further requires a biological monitor to be present during the installation, removal, and other beach maintenance activities. If the surveyor or monitor finds that any least tern is exhibiting reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Work shall not re-commence except upon written approval of the Executive Director.

Though no data has been supplied, the applicant has asserted, based on anecdotal information, that least terns may be present in the project area outside of the breeding season. The Commission finds that should there be any least terns utilizing the area as a migratory stop over,

outside of the breeding season, which are not exhibiting reproductive behaviors, the applicant shall avoid disturbance of the birds and record their presence, distribution, and behavior as part of the snowy plover surveys, as required by **Special Condition Fourteen (14)**. The results of the survey shall be submitted with the results of the snowy plover monitoring report to the Executive Director for review and approval by July 1 of each year. This report shall include conclusions regarding the impact of the dredging operations to least terns. If the Executive Director determines that adverse impacts have occurred to the least tern population or habitat, the applicant shall cease work, and shall immediately notify resource agencies. The applicant shall be required to submit a revised, or supplemental, program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

Furthermore, the Commission finds that **Special Condition Ten (10)** is necessary to ensure that the staging areas are located in areas that minimize the interface of project activities with least tern habitat. **Special Condition Ten (10)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit.

To ensure that the project is properly designed for the long-term protection of least tern breeding and foraging habitat, **Special Condition Four (4)** requires the dredged material to meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing as described in **Special Condition Three (3)**. Additionally, **Special Conditions Five (5) and Six (6)** require pre- and post-dredging operation monitoring of the nearshore and shoreline project areas, including beach width and sand volume changes. This information will be important to assess the project and its potential to affect habitat.

The beach replenishment site is located in the surf zone seaward of the least tern habitat areas. To ensure that the deposition of dredged material does not create detrimental impacts to beach slope, or subsequently to natural processes of erosion such as the network of dunes, **Special Condition Nine (9)** requires the applicant to regrade the deposition area to natural beach contours, immediately upon completion of the dredging operation, and prior to the timing restrictions described in **Special Condition One (1)**. **Special Condition Nine (9)** also requires the applicant to ensure that during the placement and removal of pipeline, and all other times, that at no time shall disposal or associated activities interfere with the breaching or retention of flow within the Santa Clara River estuary in such a way as to cause or threaten flooding on adjacent lands. Furthermore, as proposed by the applicant, and described in **Special Condition Nine (9)**, neither the disposal pipeline or equipment corridor shall cross or disturb sand dunes.

The project is limited term and will end on April 18, 2026, as described in **Special Condition Seventeen (17)**, effectively ten annual dredging seasons (2016-17, through 2025-26). Subsequent data from the monitoring program shall be used to assess the effectiveness of the

program and will allow an adaptive management approach that preserves habitat for ensuing years.

Steelhead Trout

Noise, vibration, and altered water quality resulting from deposition activities near the mouth of the Santa Clara River could potentially interfere with steelhead migration likely to occur winter through summer months. During one of the past Ventura Harbor dredging operations, an issue was raised concerning disposal of material adjacent to the mouth of the Santa Clara River, because disposal occurred too close to the river mouth, potentially affecting spawning and juvenile steelhead trout and other sensitive habitat within the Santa Clara River estuary. As shown in the applicant's deposition plan, no disposal activities would occur within 300 feet of the river channel. This will ensure that fisheries and estuarine habitat associated with the Santa Clara River will not be adversely affected by the disposal.

In addition, the discharge of dredged material into the surf zone near the mouth of the river would only occur when the river flow is 100 cubic feet per second or greater, and when the mouth of the Santa Clara River estuary is open. The California Department of Fish and Wildlife and the U.S. Army Corps of Engineers previously determined, as part of CDP No. 4-06-086, that 100 cubic feet per second is an adequate flow rate to ensure that the turbidity associated with the dredging operation will be masked by the background turbidity of the Santa Clara River. In other words, the goal is to ensure that a "masking" background effect exists before adding the additional turbidity of the dredging operation, thereby ensuring that no independent, significant effects occur that would not otherwise have been naturally present.

The Commission finds that the surf zone deposition near the mouth of the river, consistent with the aforementioned criteria, is protective of steelhead by ensuring that the mixing of sediment is discharged in a manner compatible with the natural discharge of the river. To ensure that this practice continues to be implemented to protect the resources in the Santa Clara River estuary including steelhead, **Special Condition Four (4)** stipulates that deposition may only occur in the surf zone near the mouth of the river 300 feet from the active river channel, when the river flow is 100 cubic feet per second or greater, and when the mouth of the estuary is open.

California Grunion

The California grunion is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawns on the sandy beaches in the project vicinity immediately following high tides from mid-March through August. The eggs are incubated in the sand until the following series of high tide conditions, when the eggs hatch and are washed into the sea.

California grunion is a species of concern due to its unique spawning behavior, and is carefully managed as a game species. Project activities within the intertidal zone may disturb adult grunion during the run period and/or may bury incubating grunion eggs. Therefore, the proposed

dredging and discharge operations have the potential to significantly impact California grunion by dredging or depositing sediment within the intertidal zone during the seasonally predicted protected grunion run period and egg incubation period of March through August.

In order to ensure that the proposed project will not have an adverse impact on California grunion, **Special Condition One (1)** states that no work shall be conducted on the beach and shorefront area while California grunion are present on the beach. **Special Condition One (1)** further stipulates that sediment shall not be placed on any beach below the high water line during the seasonally predicted run period and egg incubation period of California grunion, March 14 through August 31, unless specifically authorized by the Executive Director. Such authorization will be given only after the Executive Director has received evidence that a qualified resource specialist has conducted an appropriate survey for the presence of any adult grunion and/or live grunion eggs at the project site, as required by **Special Condition Eight (8)**.

Furthermore, to ensure that the Executive Director is notified of the impending commencement of dredging and discharge operations, and to ensure that all relevant monitoring information has been analyzed for potential impacts on sensitive wildlife species at the site, **Special Condition Two (2)** of the subject permit requires the applicant to submit a dredging and disposal operation plan describing the locations, staging areas, methods and timing of proposed operations, including all relevant monitoring reports, prior to commencement of any operations authorized by this coastal permit.

Tidewater Goby

The tidewater goby is a brackish water fish species adapted to both fresh and saltwater. This species has been recorded in both the Santa Clara and Ventura Rivers. The tidewater goby is not expected to be affected by the proposed project because disposal will not occur within or alter the sensitive riparian habitat or estuary area associated with the Santa Clara River. As proposed, dredging material would be deposited below the mean high water line along the 2,500 feet of beach near the mouth of the Santa Clara River, with the actual discharge point being at least 300 feet away from the location at which the river flows into the ocean. In addition, discharge of material would only occur within this area when the river flow is 100 cubic feet per second or greater, and when the mouth of the Santa Clara River estuary is open.

The Commission finds that the surf zone deposition at the mouth of the river, consistent with the aforementioned criteria, is protective of tidewater goby by ensuring that the mixing of sediment is discharged in a manner compatible with the natural discharge of the river. The California Department of Fish and Game and the U.S. Army Corps of Engineers previously determined, as part of CDP No. 4-06-086, that 100 cubic feet per second is an adequate flow rate to ensure that the turbidity associated with the dredging operation will be masked by the background turbidity of the Santa Clara River. In other words, the goal is to ensure that a “masking” background effect exists before adding the additional turbidity of the dredging operation, thereby ensure that no independent, significant effects occur that would not otherwise have been naturally present.

To ensure that this practice continues to be implemented to protect the resources in the Santa Clara River estuary including tidewater goby, **Special Condition Four (4)** stipulates that

deposition may only occur in the surf zone near the mouth of the river 300 feet from the active river channel and when the river flow is 100 cubic feet per second or greater.

California Brown Pelican

California brown pelicans are year-round “residents” of the harbor area. The pelicans are known to rest on structures in the Ventura Harbor and occasionally feed in the area to be dredged. However, sufficient additional resting and feeding areas are available in the vicinity. Therefore, potential project impacts on brown pelicans are minimal due to the temporary nature of project disturbance and the species’ tolerance of human activities.

Other Sensitive Species

The Commission notes that the proposed project, as conditioned, will minimize potential adverse impacts to known sensitive wildlife species known to occur at the project site. However, the proposed project may result in potential adverse impacts to previously unidentified sensitive species and the surrounding environment due to unintentional disturbance from the sediment management activities. Therefore, to ensure that all recommendations of the environmental consultant are properly implemented, and to ensure that any potential adverse effects to the beach and marine environment are minimized, **Special Condition Eight (8)** requires the applicant to submit, for review and approval of the Executive Director, evidence that the applicant has retained the services of a qualified environmental resource specialist to conduct a survey of the project site to determine whether any sensitive wildlife species are present and exhibiting reproductive or breeding behavior prior to commencement of dredging and discharge operations authorized by this coastal development permit.

In the event that sensitive species are present and exhibiting reproductive behavior at the project site during the proposed operations, **Special Condition Eight (8)** also requires the environmental resource specialist to require the applicant to cease work and notify the Executive Director and local resource agencies. Project activities can resume upon written approval of the Executive Director.

Eelgrass

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

Development contemplated in the proposed Harbor dredging project has the potential to directly impact sensitive resources, including eelgrass, which may be present in the project area. Dredging of the Harbor is proposed in a number of different locations in both the inner and outer areas of the harbor. These dredging activities have the potential to directly remove and disturb eelgrass. In addition, the temporary turbid conditions created when dredging can reduce the light available to eelgrass by shading portions of the ocean floor.

While there is potential for eelgrass habitat within in the project area, it has not been recently identified as existing in the Ventura Harbor. However, it is possible that eelgrass has established in portions of the project site since the last survey was conducted. Staff notes that the Commission has routinely required surveys for eelgrass to be carried out just prior to development activities in Harbor and Marina areas, as a condition of approval, in order to ensure that, if eelgrass is present, mitigation measures are incorporated into the project.

Therefore, **Special Condition Eighteen (18)** requires the applicant, within 60 days and no later than thirty (30) days prior to construction, to conduct a survey of the project area for eelgrass during the period of active growth of eelgrass (typically March through October). If the survey identifies any eelgrass within the project area which would be impacted by the proposed project, the Executive Director must be notified prior to construction. If any eelgrass is identified in the project area before dredging, the applicants shall conduct a second eelgrass survey within 30 days after the conclusion of dredging activities to determine if any eelgrass was adversely impacted. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.38:1. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

3. *Caulerpa*

Caulerpa taxifolia is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1999 *C. taxifolia* was designated a prohibited species in the United States under the Federal Noxious Weed Act because of its highly invasive nature, and the grave risk it poses to native habitats. However, its possession is still legal in California. In June 2000, *C. taxifolia* was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations are likely. Although a tropical species, *C. taxifolia* has been shown to tolerate water temperatures down to at least 50° F. Although warmer southern California habitats are most vulnerable, until better information is available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

In response to the threat that *Caulerpa taxifolia* poses to California's marine environment, the Southern California Caulerpa Action Team, SCCAT, was established to respond quickly and effectively to the discovery of *Caulerpa taxifolia* infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all *C. taxifolia* infestations.

If *Caulerpa taxifolia* is present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. In order to assure that the proposed project does not cause the dispersal of *Caulerpa taxifolia*, the Commission finds it necessary to require **Special Condition Seven (7)**. **Special Condition Seven (7)** requires the applicant, prior to commencement of development, to survey the project area and dredging equipment for the presence of *C. taxifolia*. If *C. taxifolia* is present in the project area, no work may commence and the applicant shall seek an amendment or a new permit to address impacts related to the presence of the *C. taxifolia*, unless the Executive Director determines that no amendment or new permit is required.

4. Wrack

Wrack is the tangles of kelp and sea grass that wash up onto beaches and settle in large clumps along the tide line. It is of particular importance to invertebrates, plants, and birds in the intertidal zone of the beach. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna made up an average of greater than 37% of species on ungroomed beaches and comprised 25% or more of the total abundance on half of those beaches². The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches.

The same study also showed reduced presence of western snowy plover and black-bellied plover at beaches in Ventura and Santa Barbara counties, where wrack used to be removed regularly as part of beach grooming activities. In addition, the presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%³.

The proposed project includes the placement of dredged sediment within the surf zone at McGrath Beach, South Beach, and beach areas near the Santa Clara River mouth, the installation of discharge pipelines across these beaches, temporary establishment of access routes for construction equipment, and maintenance/deconstruction.

These activities have the potential to impact the wrack zone. Therefore, in order to avoid potential adverse impacts to sensitive habitat, **Special Condition Nine (9)(e)** requires the applicant to retain wrack on the beach to the maximum extent feasible during project activities, including stockpiling of wrack during discharge operations and replacement of the wrack in the same location/configuration at the completion of project operations where possible.

² Dugan, Jenifer E., et. Al. The Response of Macrofauna Communities and Shorebirds to Macrophyte Wrack Subsidies on Exposed Sandy Beaches of Southern California. *Estuarine, Coastal and Shelf Science* 58S pp. 133-148. 2003

³ Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

5. Conclusion

As described in detail above, the proposed project, as conditioned, will avoid or minimize impacts to environmentally sensitive habitat and species within the project area. As such, the Commission finds that the project, as conditioned, is consistent with Sections 30230, 30231, 30233, and 30240 of the Coastal Act.

F. HAZARDS AND SHORELINE PROCESSES

Section 30253 of the Coastal Act states, in part:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

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

The proposed development is located in an area subject to tidal action. The tidal environment is dynamic and there are risks associated with development in such areas. For instance, erosion has occurred at the subject beaches where deposition is proposed, and erosion is one form of potential geologic hazard. However, the applicant will not increase erosion hazards by discharging sediment in the surf zone or nearshore waters. Therefore, the proposed project minimizes this hazard consistent with Section 30253.

In addition to sediment deposition, the project involves hydraulic and clamshell dredging of the Ventura Harbor and adjacent offshore areas. These areas have been dredged since the Harbor's construction in the mid-1960s. Nearby creeks and longshore currents transport sediment to these areas, filling in portions of the harbor. Maintenance dredging proposed by this project removes this accumulated sediment to design contours. It is unlikely, that dredging activities would significantly contribute to erosion, geologic instability, or substantially alter natural landforms along bluffs or cliffs.

However, because there remains an inherent risk to development along the shoreline, **Special Condition Sixteen (16)** requires the applicant, by acceptance of this permit, to assume the risk of development and to indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

G. LOCAL COASTAL PROGRAM

The proposed project area lies within the limits of the City of Ventura and City of Oxnard, but falls within the Commission's area of retained original permit jurisdiction because it is located in areas subject to tidal action. The Commission has certified Local Coastal Programs for the City of Ventura and the City of Oxnard (Land Use Plan and Implementation Ordinances) which contain policies for regulating development and protection of coastal resources, including the protection of environmentally sensitive habitats, recreational and visitor serving facilities, coastal hazards, and public access.

H. CEQA

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

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A

Substantive File Documents:

- Coastal Commission Staff Report for CDP No. 4-06-086**
- Western Snowy Plover Pacific Coast Population Recovery Plan: Volume 1 – prepared by U.S. Fish & Wildlife Service (2007)**
- Noble Consultants, GEC, Inc. – Memo Re: Summary of Shoreline Monitoring (2016)**

Exhibit 1
CDP 4-16-0333
Vicinity Map

Highway 101

Inner Harbor

Santa Clara River

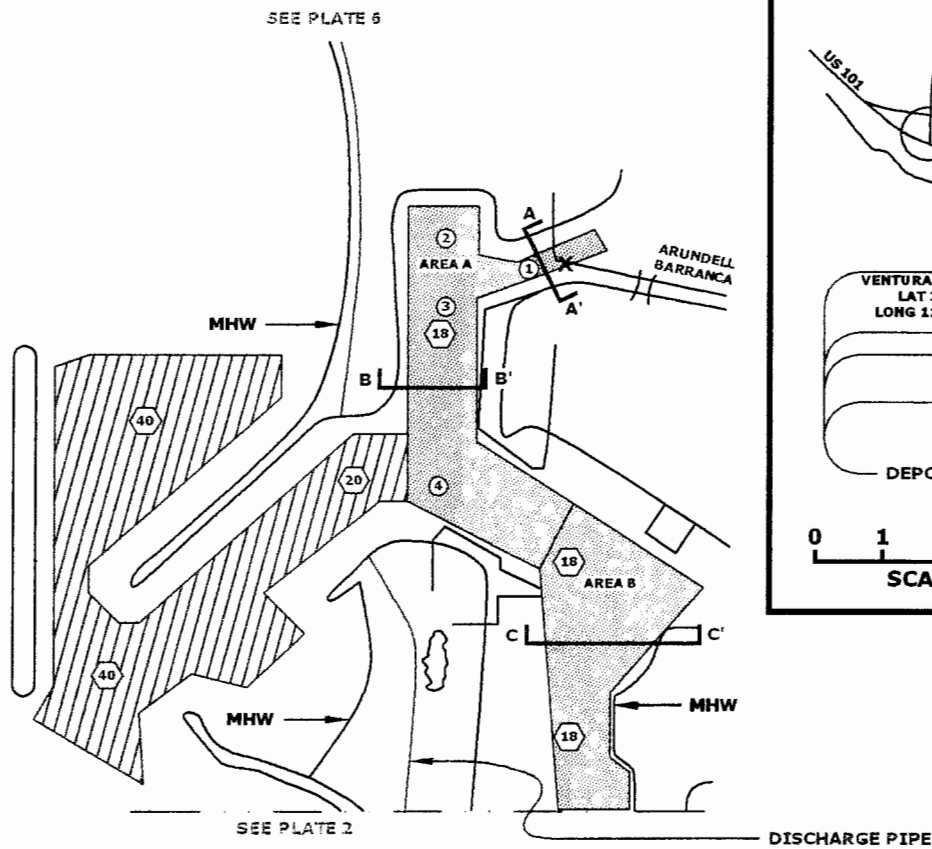
Deposition Sites

Outer Harbor

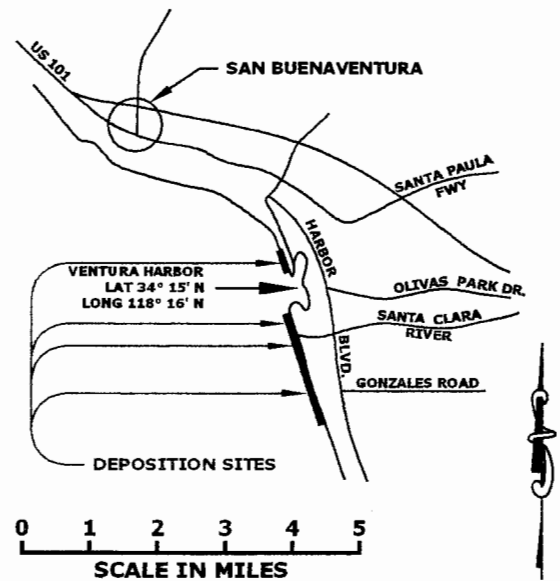
Deposition Sites

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Data CSUMB SFML, CA OPC





VICINITY MAP

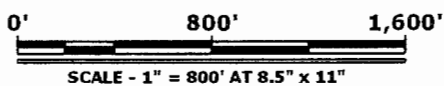


APPROVED

Ventura Port District

LEGEND

- OR DREDGING LIMITS
- PROJECT DEPTH (MLLW)
- SOIL SAMPLE LOCATION
- SAND DUNES
- FEDERAL PROJECT BOUNDARIES
- INNER HARBOR
- SHORE BASED CLAM SHELL DREDGING



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Technologies, Inc.**

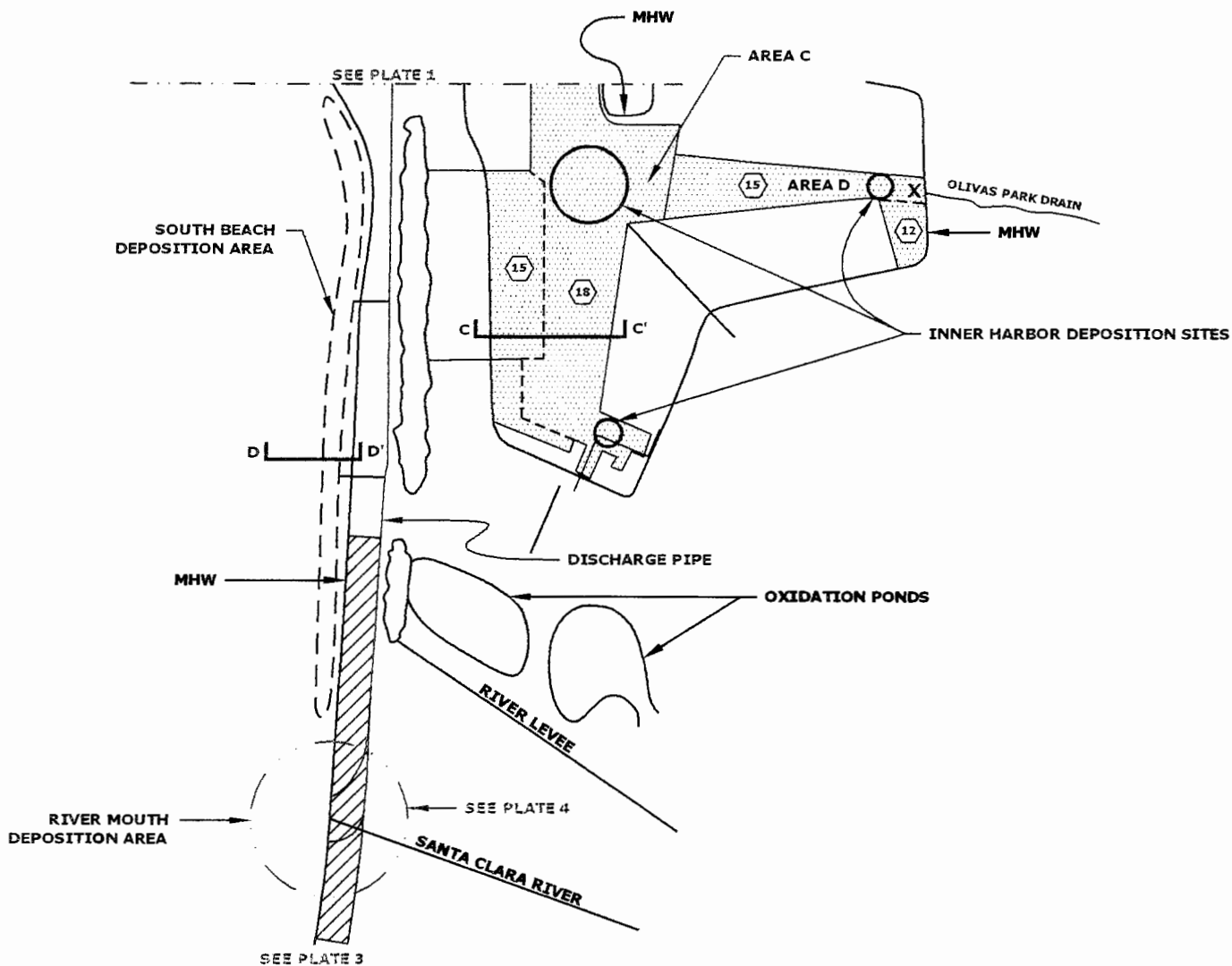
4561 Market Street, Suite B • Ventura, California 93003
Phone (805) 650-1400 Fax (805) 650-1576

**PROPOSED DREDGING AND
VENTURA PORT DIST
VENTURA, CALIFOR**

PLATE REFERENCE 00622101B

JULY 13, 2006

**Exhibit 2
CDP 4-16-0333
Proposed Dredging Area:
North Harbor**

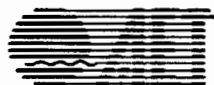


LEGEND

- INNER HARBOR DREDGING LIMITS
- PROJECT DEPTH (MLLW)
- SAND DUNES
- WESTERN SNOWY PLOVER CRITICAL HABITAT
- SHORE BASED CLAM SHELL DREDGING

0' 800' 1,600'

SCALE - 1" = 800' AT 8.5" x 11"



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PRO

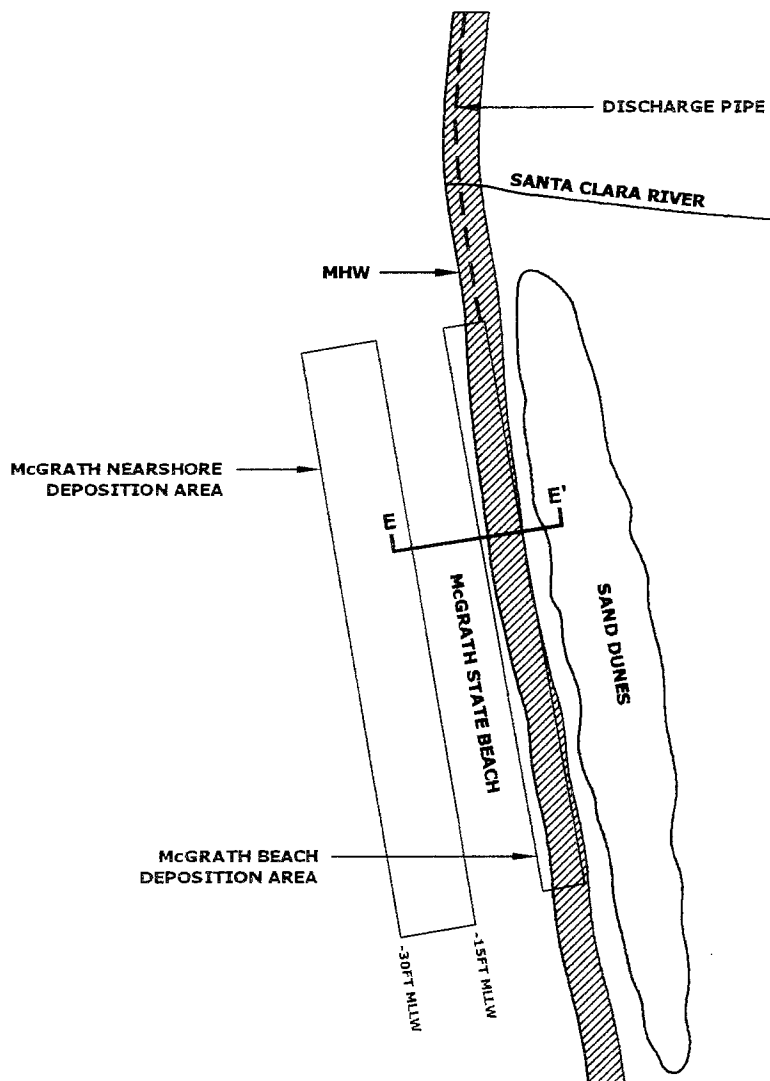
PLATE REF

Exhibit 3

CDP 4-16-0333

**Proposed Dredging and Deposition Areas: South
Harbor, South Beach, and Santa Clara River Mouth**

SEE PLATE 2



0' 1,600' 3,200'
SCALE - 1" = 1,600' AT 8.5" x 11"



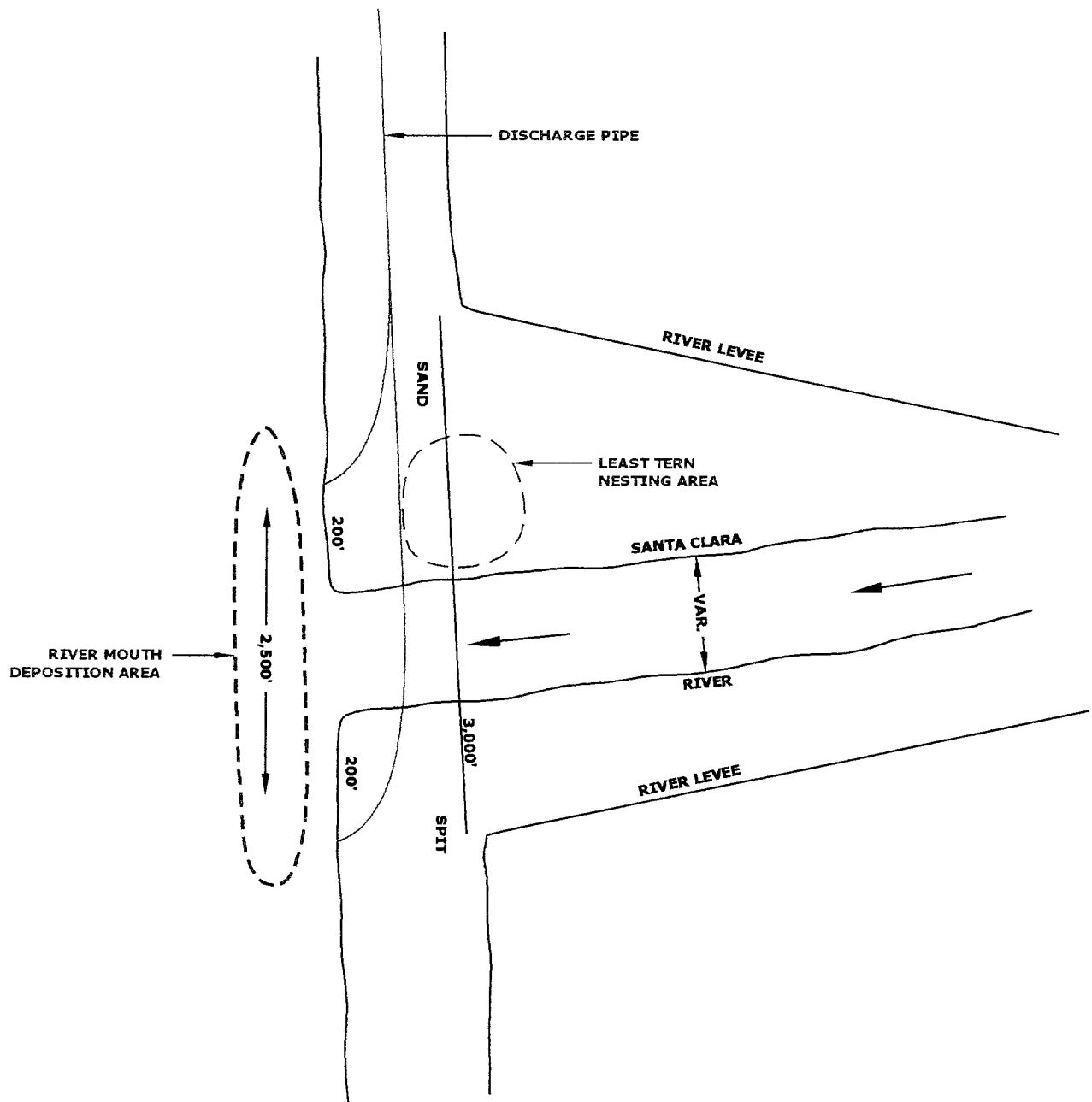
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Environmental
Technologies, Inc.**

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**PROPOSED DREDGE
VENTURA PORT
VENTURA,**

PLATE REFERENCE 00622101E JULY

**Exhibit 4
CDP 4-16-0333
Proposed Deposition Area:
McGrath State Beach**



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**PROPOSED DREDGE
VENTURA
VENTURA**

PLATE REFERENCE 00622101A

JU

**Exhibit 5
CDP 4-16-0333
Proposed Deposition Area:
Santa Clara River**

APPROVED
VENTURA PORT DISTRICT

By GP Date 5/30/01

GROIN NO. 4

GROIN NO. 3

GROIN NO. 2

GROIN NO. 1

PIERPONT BEACH
DEPOSITION AREA

DISCHARGE
PIPE

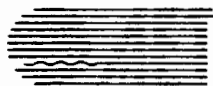
VENTURA HARBOR



TYPICAL SECTION

NO SCALE

600 300 0 600



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Technologies, Inc.

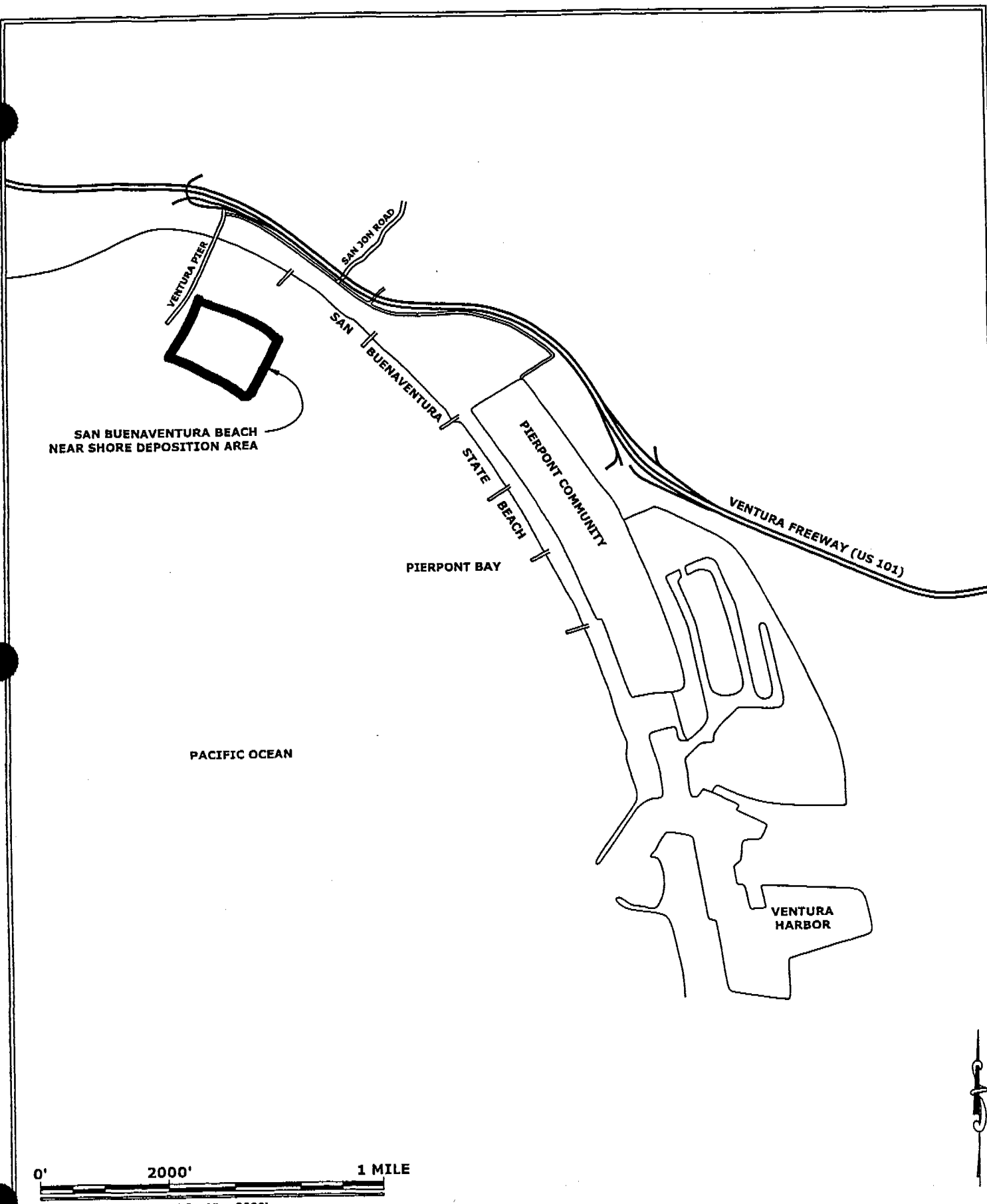
4840 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

PROPOSED DREDGE
VENTURA PORT
VENTURA, CA

PLATE REFERENCE 00622101F

MAY

Exhibit 6
CDP 4-16-0333
Proposed Deposition Area:
Pierpont Groin Fields



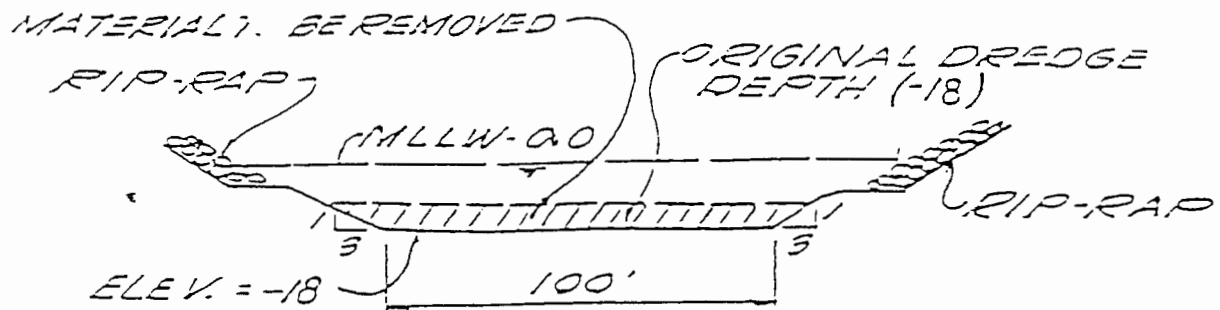
**Applied
Environmental
Technologies, Inc.**

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Phone (805)650-1400 Fax (805)650-1576

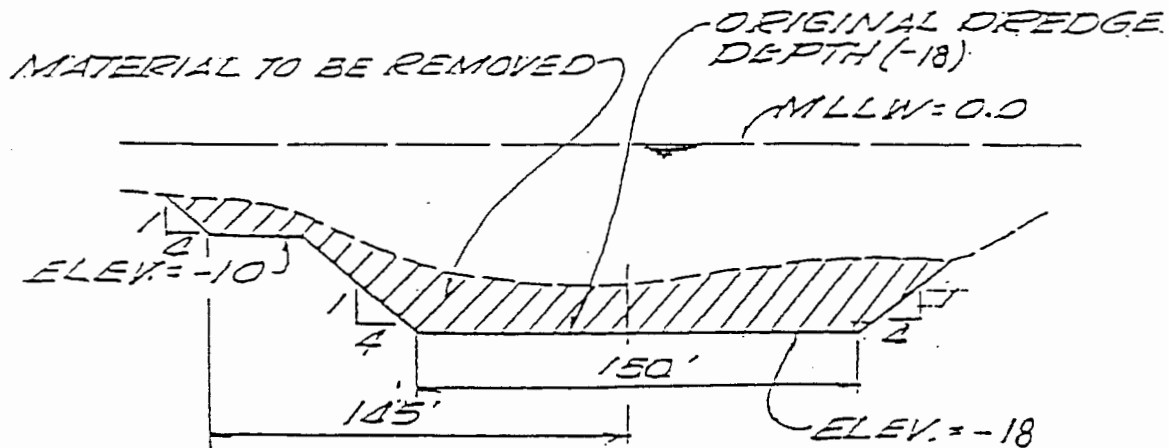
**PROPOSED DREDG
VENTURA
VENTURA**

PLATE REFERENCE 06610101G SEPTE

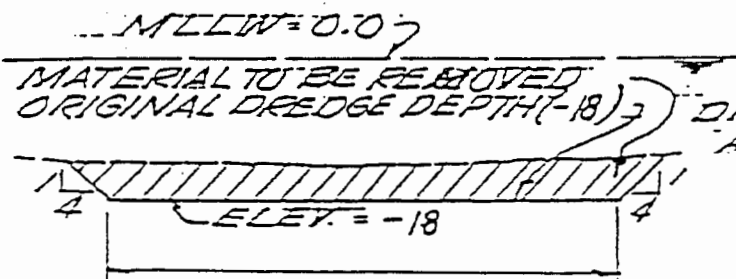
**Exhibit 7
CDP 4-16-0333
Proposed Deposition Area:
South of Ventura Pier**



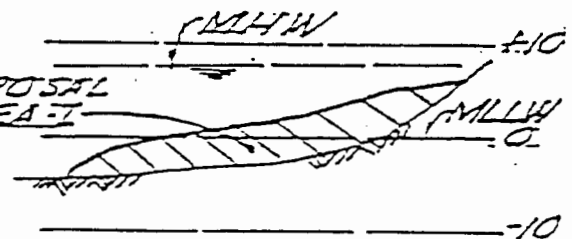
SECTION A-A
NO SCALE



SECTION B-B
NO SCALE



SECTION C-C
NO SCALE



SECTION D-D
NO SCALE



SECTION E-E
NO SCALE

APPROVED
VENTURA PORT DISTRICT
By *[Signature]* Date 5/30/01



Applied
Environmental
Technologies, Inc.

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PROPOSED DREDGING
VENTURA PORT
VENTURA, CA

PLATE REFERENCE 00622101D

MAY 2001

Exhibit 8
CDP 4-16-0333
Proposed Dredging Sections

DRAFT

VENTURA HARBOR 1991 MAINTENANCE DREDGING MONITORING PLAN FOR THE NEARSHORE DISPOSAL SITE AT MCGRATH STATE BEACH, VENTURA, CA

BACKGROUND

Harbor dredging at the Ventura Harbor will result an estimated 500,000 c.y. of sand and silty-sand materials. The option for nearshore disposal was elected for the two(2) years dredging maintenance period and the dredged material will be deposited in the nearshore site as indicated on the dredging plans. The nearshore disposal option resulted a government savings of about \$1.1 millions compared with beach disposal. The dredged material is compatible to beaches along the South Beach and McGrath Beach.

Construction of a nearshore berm in shallow water (between -15 ft. to -30 ft. MLLW) allows for economically disposing of materials while providing potential benefits for beaches. The nearshore berm forms a bar-like feature, that can dissipate incident wave energy by inducing wave breaking. As the berm disperses over time, it contributes quality sand to the nearshore system. The berm may also act as a partial block to the loss of beach materials to deeper water during storms. This concept has been successfully employed in connection with the dredging of the Mobile Harbor Navigation Project, the Fire Island Entrance Channel, and the San Diego Harbor Entrance Channel projects.

The proposed nearshore disposal site offshore the McGrath State Beach will have a shore parallel alignment, and is to be located as shown on the monitoring plan in water depths between -15 ft. and -30 ft (MLLW). The length of the berm parallel to the shoreline will be about 4300 ft. and its width about 900 ft. Its westernmost boundary is about 1500 ft. south of Santa Clara River.

PURPOSE

The monitoring program described below is intended to measure and document the response of adjacent shorelines to the placed berm and the prevailing environmental conditions, and to document the dispersion and migration of the berm itself. This response can be used to evaluate the appropriateness of nearshore disposal at Ventura Harbor, and of the effectiveness of the underwater berm as a method for beach nourishment. This program if approved will have a duration of (1) year and an option to continue for another year depending on the results of the first year monitoring and the availability of funds.

Exhibit 9
CDP 4-16-0333
Nearshore Monitoring Program

MONITORING PROGRAM

General. The monitoring program will consist of repetitive surveys and the measurement of environmental conditions.

Study Area. The study limits will extend parallel along the shoreline 0.8 mile beyond the limits of the placed underwater berm, and transversely to the shoreline and the nearshore zone to the -30 ft. (MLLW) depth contour.

Period of Performance. The field data will be collected over a period of one year with an option to continue for the second year if funds are available. The anticipated start of construction is January 1992. The prioritization of the data collection program that would be exercised as monitoring funds become available are indicated below

PRIORITY I:

Beach Profiles. Repetitive beach profiles will be taken at 36 range lines extending from the back of the Corps baseline to approximately to MLLW. The baseline will be reestablished and tied to existing Corps of Engineers monuments. Profiles will be spaced about 250 ft., 500 ft. and 1000 ft. as indicated on the monitoring plan and will repeated over the monitoring period in accordance with the schedule listed in Table 1. The required vertical accuracy for beach profile is 0.1 ft.

Bathymetric Surveys. Soundings along the 36 ranges used for beach profiles will be performed in accordance with the schedule listed in Table 1. Continuous depth soundings will be taken with a fathometer approximately perpendicular to the shoreline covering the study limits from about the -40 ft. (MLLW) contour to as near as practical to the shoreline. Soundings will be reduced to MLLW datum and have an accuracy of ± 0.5 ft. Horizontal control will be provided with an accurate electronic horizontal positioning system having a normal accuracy of ± 3 meters.

All reasonable efforts will be made to perform the measurements of particular range on the same day and overlap the beach profile and bathymetric surveys to ensure closure between the surveys and the measurement of a continuous profile from the landward limit to the -40 ft. contour. The total length of each profile is expected to be approximately 3,600 ft.

PRIORITY II:

Wave and Current Measurements. A combined wave and current meter will be located approximately offshore of the center of the placed underwater berm. The gage will be deployed at the time of pre-construction survey and is to be located approximately in the -40 ft. (MLLW) water depth. Wave data will be measured over a one year deployment period, with data typically collected four times per day. Wave data will be collected to include measurement of wave periods as short as 5 seconds, and wave direction will be collected and referenced to true north. Current speed and direction will be collected concurrently with wave data. The current meter will be located approximately two feet above the sea bed.

PRIORITY III:

Sediment Sampling. Grab sediment sampling are anticipated to occur immediately after completion of the underwater berm and then at intervals with the schedule as shown in Table 1. Grab samples will be collected along each of the eleven (11) survey lines as shown on the monitoring plan, and is expected to consist of taking sediment samples perpendicular to the shore from the beach approximately to the -30 ft. (MLLW) water depth. Bottom samples will be taken at various depths.

PRIORITY IV:

Aerial Photography. Vertical aerial photography will be taken of the study area during the monitoring program in accordance with the schedule listed in Table 1. The photography will cover approximately 2.5 miles of shoreline, and will be flown to produce 10-inch by 10-inch prints with a scale of 1:2400 and no less than 60 percent overlap between prints. Flight lines will be parallel to the shoreline.

Figure L - 114. San Buenaventura Beach (CA-95), Ventura County, California.



Legend



WSPL Breeding & Wintering Locations

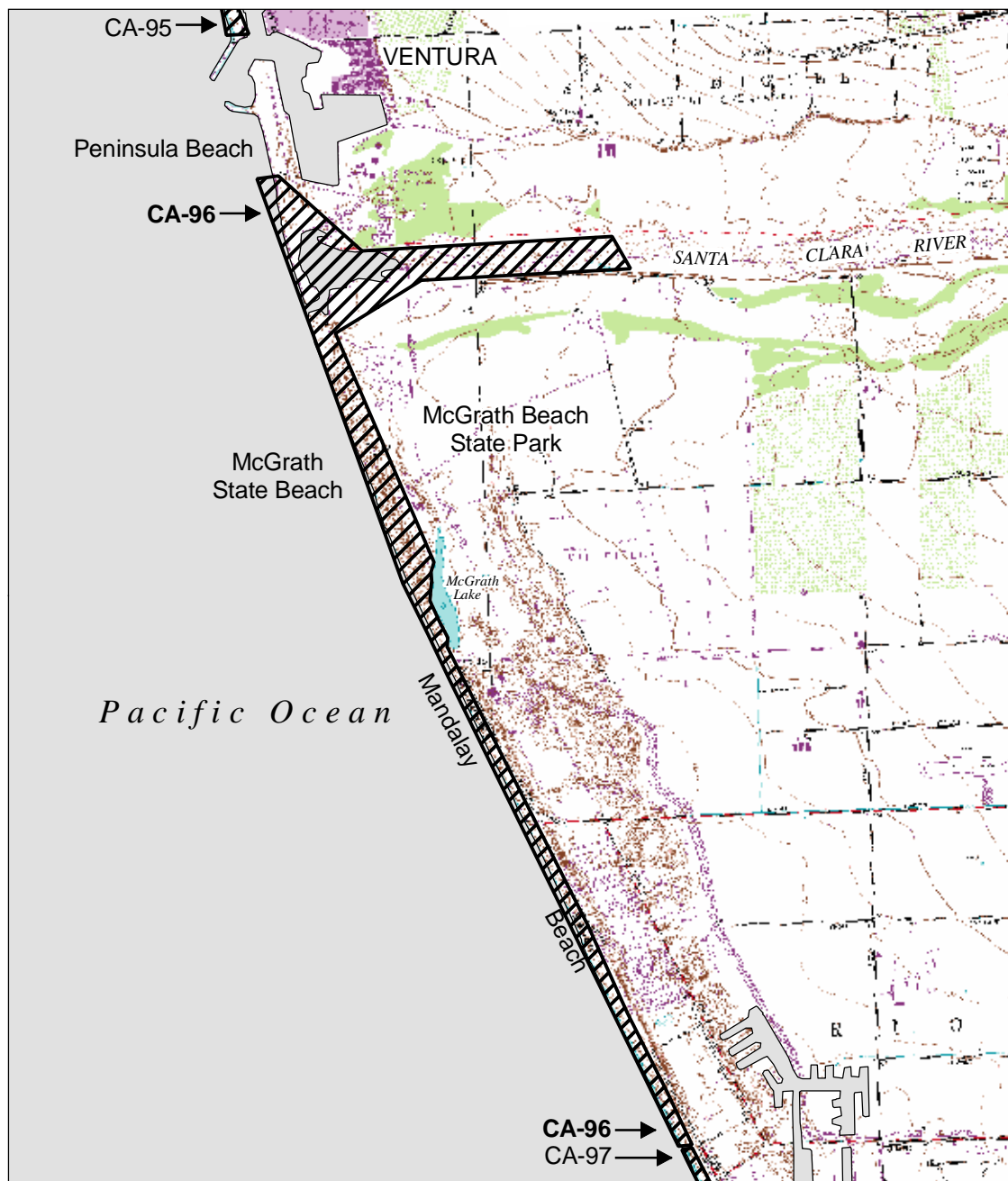
0.5 0 0.5 Miles

0.8 0 0.8 Kilometers


Scale 1: 30,000



Figure L - 115. Santa Clara River Mouth/Mandalay State Beach (CA-96),
Ventura County, California.



Legend

 WSPL Breeding & Wintering Locations

0.6 0 0.6 Miles

1 0 1 Kilometers

Scale 1: 50,000



STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6300
FOR
VENTURA PORT DISTRICT
(MAINTENANCE DREDGING)
(FILE NO. 76-59)

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the Ventura Port District (Port) during the proposed dredging project. Sampling for the receiving water monitoring shall commence at least one week prior to the start of the dredging and fill operations and continue at least one week following the completion of all such operations. Sampling shall be conducted a minimum of once a week during dredging operations. Sampling shall be conducted down current of the dredge sites at least one hour after the start of dredging operations. All receiving water monitoring data shall be obtained via grab samples or remote electronic detection equipment. Receiving water samples shall be taken at the following stations:

<u>Station</u>	<u>Description</u>
A	30.5 meters (100 feet) up current of the dredging operations, safety permitting.
B	30.5 meters (100 feet) down current of the dredging operations, safety permitting.
C	91.5 meters (300 feet) down current of the dredging operations.
D	Control site (area not affected by dredging operations).

The following shall constitute the receiving water monitoring program:

Water Column Monitoring

<u>Parameters</u>	<u>Units</u>	<u>Station</u>	<u>Frequency</u>
Dissolved oxygen ¹	mg/l	A-D	Weekly ²
Light transmittance ¹	% Transmittance	" "	"
pH ¹	pH units	" "	"
Suspended solids ³	mg/l	" "	"

¹Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).

²During the first two weeks of dredging, stations shall be sampled two times per week.

³Mid-depth shall be sampled.

Water column light transmittance values from Stations C and D shall be compared for the near surface (1 meter below the surface), for mid-water (averaged values throughout the water column, excluding the near surface and bottom) and for the bottom (1 meter above the bottom). If the difference in % light transmittance between stations C and D for the near surface or mid-water or bottom is 30% or greater, water samples shall be collected at mid-depth (or the depth at which the maximum turbidity occurs) and analyzed for trace metals, DDTs, PCBs and PAHs. At a minimum, one set of water samples shall be collected and analyzed for these chemical constituents during the maintenance dredging operation.

In the event that the water column light transmittance values from Stations C and D exceed the 30% trigger described above, the Port shall conduct the standard water quality monitoring described above for three consecutive days following the date of exceedance. The Port shall notify the Regional Board, the California Coastal Commission, the United States Environmental Protection Agency and the United States Army Corps of Engineers within 24 hours following observance of the transmissivity exceedance. The Port shall investigate whether the exceedance is due to obvious dredging operational problems and can be corrected easily and quickly. However, if the turbidity problem persists or recurs, the Port shall look for other causes of the problem and evaluate whether additional, more aggressive best management practices are required to eliminate the exceedances; this evaluation shall be performed in consultation with the four regulatory agencies listed above.

Color photographs shall be taken at the time of sampling to record the presence and extent of visible effects of dredging operations. These photographs shall be submitted with the receiving water monitoring reports.

The Port shall provide Regional Board staff with a receiving water monitoring program field schedule at least one week prior to initiating the program. Regional Board staff shall be notified of any changes in the field schedule at least 48 hours in advance.

2. Observations

The following receiving water observations shall be made and logged daily during dredging or excavating operations:

- a. Date and time;
- b. Direction and estimated speed of currents;
- c. General weather conditions and wind velocity;
- d. Tide stage;
- e. Appearance of trash, floatable material, grease, oil or oily slick, or other objectionable materials;
- f. Discoloration and/or turbidity;
- g. Odors;

- h. Depth of dredge operations during previous day;
- i. Amount of material dredged the previous day;
- j. Cumulative total amount of material dredged to date.

3. General Provisions

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by the United States Environmental Protection Agency.

All chemical analyses shall be conducted at a laboratory certified for such analysis by the State Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer.

The Port shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted by third parties under Port supervision.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

All samples shall be representative of the waste discharge under normal operating conditions.

4. Reporting

Monitoring reports shall be submitted within 10 days following each weekly sampling period. In reporting, the Port shall arrange the monitoring data in tabular form so that dates, time, parameters, test data, and observations are readily discernible. The data shall be summarized to demonstrate compliance with the waste discharge requirements. A final report, summarizing the results of the weekly monitoring and reporting the total volume discharged, shall be submitted within one month of completion of the project.

Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

Each monitoring report must affirm in writing that:

All analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current EPA guidelines or as specified in the Monitoring Program.

For any analysis performed for which no procedure is specified in the EPA guidelines or in the Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

5. General Provisions for Reporting

For every item where the requirements are not met, the Port shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.


Executed on the _____ day of _____, 20____,
at _____.

_____(Signature)

_____(Title)"

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:


SAMUEL UNGER, P.E.
Executive Officer

Date: February 2, 2012