

CONTRACT DOCUMENTS

Specification No. 2024-26

SAND REPLENISHMENT AT KELLOGG BEACH FY 2025 SAN DIEGO, CALIFORNIA



***Procurement Services Department
San Diego Unified Port District's General Services Building
1400 Tidelands Avenue
National City, California 91950***

All questions regarding this Specification or bidding requirements shall be submitted using the eBid system, as described in the Notice Inviting Bids.

The point of contact for administration of this Solicitation and resulting Contract Documents is as follows:

Janeatta Jones-perry, Assistant Procurement Analyst

Telephone: (619) 725-6007

Email: jperry@portofsandiego.org

KEY DATES

Issued:	March 12, 2025
Pre-Bid Conference:	March 19, 2025 @ 10:00 a.m.
Site Visit RSVP By:	March 21, 2025 @ 2:00 p.m.
Site Visit:	March 25, 2025 @ 10:30 a.m.
Questions Due By:	March 27, 2025 @ 1:00 p.m.
Bid Opening:	April 10, 2025 @ 2:00 p.m.
Original Documents Submitted By:	April 14, 2025 @ 4:00 p.m.
Proposed Board Approval:	May 6, 2025 @ 1:00 p.m.

PROJECT NO. SI-2024-02

TABLE OF CONTENTS**PAGE NO.**

SECTION 1.0 – NOTICE INVITING BIDS	1
NOTICE INVITING BIDS	1
SECTION 2.0 – BID FORMS (SEE BID PROPOSAL PACKAGE)	3
PROPOSAL	4
CONTRACTOR'S LICENSE INFORMATION/STATUS	6
NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID	7
BID SCHEDULE	8
SUBCONTRACTOR LISTING INFORMATION	9
BIDDER'S STATEMENT OF EXPERIENCE	10
QUESTIONNAIRE FOR BIDDER'S STATEMENT OF EXPERIENCE	11
BIDDER'S CERTIFICATE OF WORKER'S COMPENSATION	13
FALSE CLAIMS CERTIFICATION	14
RESPONDENT'S CERTIFICATE OF COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT	15
ACKNOWLEDGEMENT OF THE REQUIREMENTS OF IN-USE OFF-ROAD DIESEL-FUELED FLEETS AND CERTIFICATE OF REPORTED COMPLIANCE	16
SBE SUB-PARTICIPATION FORM	17
SBE SUB-PARTICIPATION ACKNOWLEDGEMENT FORM	17a
SECTION 3.0 – CONTRACT FORMS	18
CONTRACT	19
FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND	21
SECTION 4.0 – INSTRUCTIONS TO BIDDERS	23
ARTICLE 4.1 – PRE-BID OPENING INSTRUCTIONS	23
4.1.1 ELECTRONIC PLANS AND SPECIFICATIONS	23
4.1.2 EXAMINATION OF PLANS, SPECIFICATIONS AND WORK SITE	23
4.1.3 INTERPRETATION OF DRAWINGS AND DOCUMENTS	24
4.1.4 ADDENDA	24
4.1.5 BIDDERS INTERESTED IN MORE THAN ONE BID	24
4.1.6 ELECTRONIC BIDDING	24
4.1.7 PROPOSALS	24
ARTICLE 4.2 – BID OPENING	26
4.2.1 OPENING OF BIDS	26
4.2.2 AWARD OR REJECTION OF BIDS	26
4.2.3 BID PROTESTS	26
ARTICLE 4.3 – AWARD	26
4.3.1 THE CONTRACT	26
ARTICLE 4.4 – NOTICE TO BIDDERS	27
4.4.1 EMPLOYMENT OF APPRENTICES	27
4.4.2 EQUAL EMPLOYMENT OPPORTUNITY AND NON-DISCRIMINATION CLAUSE	27
4.4.3 PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM	27
4.4.4 CALIFORNIA AIR RESOURCES BOARD (CARB) REQUIREMENTS FOR IN-USE OFF-ROAD DIESEL-FUELED FLEETS	28
SECTION 5.0 – GENERAL CONDITIONS	29

TABLE OF CONTENTS

PAGE NO.

ARTICLE 5.1 – GENERAL PROVISIONS	29
5.1.1 THE CONTRACT	29
5.1.2 DEFINITION OF TERMS	29
5.1.3 INCORPORATION	30
5.1.4 DIVISIONS OF PLANS AND SPECIFICATIONS	30
5.1.5 EFFECT OF PLANS AND SPECIFICATIONS	31
5.1.6 PRECEDENCE OF DOCUMENTS	31
5.1.7 INTERPRETATION/NOTIFICATION REQUIREMENTS	31
5.1.8 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS	32
ARTICLE 5.2 – DISTRICT	32
5.2.1 DISTRICT'S RIGHT TO STOP WORK	32
5.2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK	32
5.2.3 NO WAIVER OF RIGHTS	32
5.2.4 DISTRICT'S ADMINISTRATION OF THE CONTRACT	32
5.2.5 AUTHORITY OF ENGINEER	33
5.2.6 DISTRICT'S OBSERVATION OF WORK	33
5.2.7 DEFECTIVE WORK – NOTICE TO CONTRACTOR	34
5.2.8 ACCEPTANCE OF NONCOMFORMING WORK	34
5.2.9 RECEIPT OF THIRD PARTY CLAIMS	34
ARTICLE 5.3 – CONTRACTOR	34
5.3.1 REVIEW OF CONTRACT AND FIELD CONDITIONS	34
5.3.2 SUPERVISION AND CONSTRUCTION PROCEDURES	35
5.3.3 LABOR AND PREVAILING WAGES	36
5.3.4 SUBMITTALS	37
5.3.5 MATERIALS AND SAMPLES	38
5.3.6 GUARANTEE	39
5.3.7 SCHEDULES	39
5.3.8 RECORD DRAWINGS AND TESTS	40
5.3.9 UTILITIES	41
5.3.10 RIGHT-OF-WAY	41
5.3.11 SANITATION	41
5.3.12 PRESERVATION OF MONUMENT	41
5.3.13 DATUM PLANE AND MEASUREMENTS	41
5.3.14 SETTING STAKES	41
5.3.15 TRENCHES OR OTHER EXCAVATION AND HAZARDOUS OR CONTAMINATED CONDITIONS	41
5.3.16 EXISTING UTILITIES, IMPROVEMENTS AND OBSTRUCTIONS	42
5.3.17 ROYALTIES AND PATENTS	43
5.3.18 INDEMNIFICATION	44
5.3.19 ASSIGNMENT OF CONTRACT	44
5.3.20 ANTITRUST CLAIMS	45
5.3.21 BANKRUPTCY OF CONTRACTOR	45
5.3.22 CONTACT WITH MEDIA	45
5.3.23 CLEANING UP	45
ARTICLE 5.4 – SUBCONTRACTORS	45
5.4.1 REQUIREMENTS AT BID	45
5.4.2 SUBCONTRACTUAL RELATIONS	46
ARTICLE 5.5 – PROTECTION OF PERSONS AND PROPERTY	46
5.5.1 SAFETY PRECAUTIONS AND PROGRAMS	46
5.5.2 ACCIDENT PREVENTION, BARRICADES, LIGHTS, SAFETY MEASURES AND DETOURS	47
5.5.3 EMERGENCIES	47
5.5.4 CARE AND CUSTODY OF WORK/LOSS AND DAMAGE	47

TABLE OF CONTENTS**PAGE NO.**

ARTICLE 5.6 – INSURANCE AND BONDS	48
5.6.1 CONTRACTOR'S INSURANCE.....	48
5.6.2 PERFORMANCE AND LABOR AND MATERIAL BONDS.....	50
ARTICLE 5.7 – CHANGES IN THE WORK	50
5.7.1 CHANGES AND EXTRA WORK.....	50
5.7.2 FORM OF CHANGES	51
5.7.3 BILATERAL CHANGES.....	51
5.7.4 UNILATERAL CHANGE ORDERS.....	52
5.7.5 PRICING FOR ALL TYPES OF CHANGES	52
5.7.6 AUDIT	54
ARTICLE 5.8 – TIME.....	55
5.8.1 PROGRESS AND COMPLETION.....	55
5.8.2 LIQUIDATED DAMAGES	56
5.8.3 DELAYS AND EXTENSIONS OF TIME	57
ARTICLE 5.9 – PAYMENTS AND COMPLETION.....	59
5.9.1 PERIODIC PAYMENTS.....	59
5.9.2 APPLICATIONS FOR PAYMENT (PROGRESS ESTIMATES).....	60
5.9.3 ACCEPTANCE AND PAYMENT.....	61
5.9.4 PARTIAL UTILIZATION AND BENEFICIAL OCCUPANCY	61
5.9.5 QUANTITY UNITS, PAYMENTS AND MEASUREMENTS	62
ARTICLE 5.10 – CLAIMS AND DISPUTES.....	63
5.10.1 CLAIMS AND DISPUTES	63
5.10.2 CONSTRUCTION CLAIMS LESS THAN \$375,000	65
ARTICLE 5.11 – TERMINATION OR SUSPENSION OF THE CONTRACT.....	66
5.11.1 TERMINATION OR SUSPENSION OF CAUSE.....	66
5.11.2 TERMINATION OR SUSPENSION FOR CONVENIENCE	67
5.11.3 EFFECT OF SUSPENSION, INTERRUPTION OR TERMINATION.....	67
SECTION 6.0 – TECHNICAL SPECIFICATIONS	
SECTION 7.0 – APPENDICES / EXHIBITS	

SECTION 1.0 – NOTICE INVITING BIDS

Notice is hereby given that the Procurement Services Department, General Services Building, First Floor, of the San Diego Unified Port District will receive electronic bids at 1400 Tidelands Avenue, National City, California, until **2:00 P.M. on the 10th day of APRIL 2025 for:**

Specification No. 2024-26 - Drawing No. SI-2024-02

Scope of Work:

1. Furnish all labor, materials, equipment, supplies, transportation, and disposal as necessary to complete the construction of Sand Replenishment at Kellogg Beach FY 2025 as shown on the Drawings and described in these Specifications.
2. The work shall include, but not limited to the following as shown on the Plans and described in these Specifications
 - a. Furnishing and placing of approximately 2,200 cubic yards of sand fill material (natural washed sand fill) on the Kellogg Beach as shown on the drawings and specified.
 - b. Contractor's access to the site, including temporarily removal of chain, removal and disposal of galvanized post, sawcut and remove portion of concrete wall as necessary for equipment access. After sand placement restore wall to match existing including painting and install new removable galvanized post. Protect existing concrete sidewalk, curb, gutter, storm drain, fence, landscaping, and other existing structures.
 - c. Placement of sand fill shall be performed by a land-based equipment.
 - d. Implementation and maintenance of Best Management Practices including the use of silt curtain during sand placement.
 - e. Installation of pole mounted live streaming Webcam that shall be accessible to the public and the District. Contractor shall collect and disseminate a daily video recording of the construction work in the field to document construction progress. Contractor to submit the video as part of the daily report. The contractor shall submit the video in MP4, AVI, or WMV format.
 - f. All other work as shown on the drawings and as specified.
 - g. Work shall be performed in conformance with the City of San Diego Right-of-Way Permit requirements. APPENDIX D - CITY OF SAN DIEGO RIGHT-OF-WAY PERMIT includes a permit from a previous project for reference.
 - h. Work shall be performed in conformance with Army Corp of Engineers Permit requirements. The Port of San Diego, the permittee is responsible for compliance with the requirements of the permit such as pre-and post-project monitoring, pre-construction survey for *Caulerpa taxifolia*, placement of silt curtain, and turbidity monitoring during the placement of sand and other requirements of the permit. See APPENDIX C - ARMY CORP OF ENGINEERS PERMIT of the specifications for the current permit that expires in April 2025. A new permit issuance is expected in April 2025.
 - i. It is intended that the Work be completed in every respect under the Contract Document, and such items or details not mentioned above or not included in the Bid Schedule that are required by the Contract Documents

shall be furnished, performed, placed, constructed, or installed by the Contractor.

The total contract duration is 60 calendar days. The Engineer's Construction estimate for this work is \$335,500.00.

The bidder must possess a valid California State Contractors License, **Classification A** – General Engineering Contractor OR **C-12** Earthquake and Paving Contractor at the time the contract is submitted.

In accordance with the provisions of the California State Labor Code, the Port has obtained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension and similar purposes) applicable to the work to be done, for straight time, overtime, Saturday, Sunday and holiday work. All labor employed on this project shall be paid no less than such minimum rates of wages. These wage rates are available for inspection at the office of the Procurement Services Department of the Port of San Diego.

It is the policy of the Port of San Diego that certified Small Business Enterprises (SBEs) shall have the maximum opportunity to participate in the performance of District Contracts. Certified SBEs with qualifying experience are encouraged to respond to the request for bids

A Notification Regarding Environmental Conditions has been included as Exhibit A in the project specifications. This notification will serve as the District's disclosure regarding potential hazardous materials that may be encountered during grading, excavation, trenching, and/or other ground penetration.

Bidders must register as a vendor at the following website, <https://pbsystem.planetbids.com/portal/13982/portal-home>, in order to download specification, Bid Proposal Package, plans, and prospective bidders list, and to receive addendea and notifications when issued.

Plans and specifications are available for download on the Port of San Diego website, <https://pbsystem.planetbids.com/portal/13982/bo/bo-search>. For assistance in downloading these documents feel free to contact the Procurement Services Department at 619-686-6392.

A pre-bid conference will be conducted at **10:00 a.m. on March 19, 2025 VIRTUALLY ONLY**. This meeting can be accessed by **dialing (619) 535-7686 and using Conference ID: 425 675 346# or by using the following link: [Join the meeting now](#)** The Port's representative will be present at the pre-bid conference. At the end of the conference, interested parties may visit the job site or, if indicated in the Supplementary Requirements, make an appointment to visit the site. Submission of a Bid Proposal Package shall be evidence that the bidder has visited the jobsite and is satisfied with the conditions to be encountered if awarded the contract.

Site Visit. The District will conduct an optional site visit on **March 25, 2025 at 10:30 a.m.** The Site visit is anticipated to take up to thirty (30) minutes. The meeting location for the site visit is **353 San Antonio Avenue, San Diego CA 92106**. If you plan on attending, please RSVP using the following link: https://forms.office.com/Pages/ResponsePage.aspx?id=a3_Osz-950m7JGO-1n0qKMU3UUP8RaFNt1CJPQUVUAxUNFQwOTZKNTQzUkpZQTIYUEdRNTM3MUdXVC4u. For security protocol purposes we ask that you bring a valid government issued identification. We ask that your company RSVPs for **no more than (2) representatives**. The Site Visit is **not mandatory**, however, all prospective Bidders are encouraged to attend.

Questions or comments regarding this specification must be submitted electronically to our eBid system where the specification was downloaded and must be received by the Port no later than **March 27, 2025, at 2:00 p.m.** Questions received after the date stated here will not be accepted. Emails and faxes will not be accepted. Responses from the Port will be communicated via the electronic eBid system to all recipients of this specification.

Bidder shall submit their original Bid Proposal Package to the Procurement Services Department, 1400 Tidelands Avenue, National City, California 91950 within the date stated on the Contract Documents page after electronic bidding (See Section 4.0, Instruction to Bidders).

Bids will be opened in public at or about that hour at 1400 Tidelands Avenue, National City, California, all as more particularly contained in **Document No. 78233** on file in the Office of the District Clerk of the Port. No Bidder may withdraw a bid after the date set for bid opening.

Award of the contract, if made, will be within 120 calendar days after bid opening date. A bid guarantee in accordance with Subsection 5.6.2 of the General Condition is required with submission of a bid. No Bidder may withdraw a bid after the date set for bid opening.

Bidder shall file the bonds as required by the Contract and Civil Code section 9554. The provisions of Public Contract Code section 22300 apply to this Contract.

Bidders are hereby notified that the successful Bidder will be required to provide insurance in accordance with Subsection 5.6.1, "Contractor's Insurance," of the Section 5.0, General Condition.

In the public interest, the District reserves the right to reject any or all bids, or to waive any informality in a bid.

DATE: March 11, 2025

Spec. No. 2024-26

Advertised: March 12, 2025

SECTION 2

OF THESE SPECIFICATIONS

CAN BE FOUND IN THE

BID PROPOSAL PACKAGE

SECTION 3.0 – CONTRACT FORMS

- 1. Contract**
- 2. Faithful Performance Bond and Labor and Materialmen's Bond***

***The Principal and Surety signatures on the Faithful Performance Bond and Labor and Materialmen's Bond MUST be notarized. An "All Purpose Acknowledgement Form for both signature must accompany the contract.**

Return ALL Contract Forms To:

**Procurement Services Department
1400 Tidelands Avenue
National City, CA 91950
619-686-6392**

PLEASE NOTE:

It is not necessary to complete these forms to bid on this project. But in the event Bidders is awarded the Contract he/she shall be required to execute all Contract Forms.

CONTRACT

At San Diego, California, this _____ day of _____, 20____, the SAN DIEGO UNIFIED PORT DISTRICT, a public corporation in the County of San Diego, State of California ("District") and _____ ("Contractor") hereby agree:

1. This Contract includes the attached Notice Inviting Bids, Bid Proposal Package, Bid Schedule (Base Bid and Additive Bid Schedule ____ plus ____ only), Bonds, Instructions to Bidders, General Conditions, Technical Specifications, Drawings and Addenda, if any, and the Plans, Specifications, Technical Specifications and drawings filed with the District Clerk as Document No. _____, and such other incorporated writings, all of which are by this reference incorporated herein and made a part hereof.

2. Contractor shall perform and be bound by all of the terms and conditions of this Contract, shall perform the work in strict conformity with the Contract and shall perform and complete the work in a good and workmanlike manner.

3. In the absence of damages incurred by the District, the District's legal inability to pay based on legally asserted claims of third parties, and/or the District's exercise of its rights of offset, District shall pay to Contractor the prices set forth in the attached Bid Schedule at the times and in the manner and with such additions or deductions as are provided for in this Contract and Contractor shall accept such payment in full satisfaction of all claims incident to such performance.

4. No Board Member, officer or employee of the District shall be liable for any portion of the Contract price or for any of the work performed by Contractor under this Contract and it is further understood and agreed that the District's liability is limited and confined as imposed by law.

5. This Contract is executed and entered into in the County of San Diego, State of California, and the obligations under this Contract are incurred and shall be performed and executed in said County.

6. Contractor shall commence work as required by the Contract, shall prosecute the work diligently, and shall complete it within the time limit fixed in the specifications. Time is of the essence of this Contract.

SAN DIEGO UNIFIED PORT DISTRICT

By: _____
 Director's Name
 Director's Title

CONTRACTOR'S NAME
 Contractor

Or

By: _____
 Executive's Name
 Executive Director/VP/Assistant VP

License No.: _____

Approved as to form and legality:
 DEPUTY GENERAL COUNSEL

By: _____
 Signature

Its _____
 (Type or print Signatory's
 name and title)

 By: Assistant/Deputy

Contractors are required by law to be licensed and regulated by the Contractor's State License Board which has jurisdiction to investigate complaints against Contractors if a complaint regarding a patent act or omission is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a Contractor may be referred to the Registrar, Contractor's State License Board, P.O. Box 26000, Sacramento, California 95826.

This document may be signed by the District electronically, including but not limited to via DocuSign. Manually and/or electronically signed counterparts shall together be deemed one complete document.

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND

as Principal, and _____, a corporation authorized to do business in the State of California and organized and existing under and by virtue of the laws of the State of _____, and presently possessed of authority under Title 31 of the United States Code to do business under Sections 9304 to 9308 thereof and authorized to transact business as a surety in California, as Surety, are held and firmly bound unto the San Diego Unified Port District, a public corporation in the County of San Diego, State of California, in the sum of _____ Dollars (\$ _____), for the faithful performance of a certain Contract hereinafter referred to, and in the like sum of _____ Dollars (\$ _____), for the benefit of laborers and materialmen hereinafter designated, to be paid to the San Diego Unified Port District, for the payment of which well and truly to be made, the said Principal and the said Surety, hereby bind themselves and all singularly, their heirs, administrators, executors, successors and assigns, jointly and severally.

Any payment made hereunder shall be made in the County of San Diego, State of California.

Said Principal has entered into the annexed Contract with the San Diego Unified Port District to perform and complete said Contract in strict conformity therewith in a good and workmanlike manner.

The conditions of the above and foregoing obligations are such that:

If the said Principal shall faithfully perform the said Contract, then the above obligation with respect to the faithful performance of said Contract shall be void, otherwise to remain in full force and effect; and

If said Principal or his subcontractors, their heirs, executors, administrators, successors and assigns shall fail to pay for any materials or other supplies used in, upon, for or about the performance of the work Contracted to be done, or for any work or labor thereon of any kind or for amounts due under the Unemployment Insurance Code with respect to such work or labor, or for any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Contractor and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then said Surety will pay the same in or to an amount not exceeding the amount hereinabove specified to be for the benefit of laborers and materialmen and also will pay, in case suit is brought upon this bond, such reasonable attorney's fee as shall be fixed by the Court, awarded and taxed as provided by law.

This bond, to the extent of the obligation herewith with respect to laborers and materialmen, shall inure to the benefit of any and all persons, companies and corporations

entitled to file claims on a public works contract under Division Third, Part 4, Title 15, of the Civil Code of the State of California, so as to give a right of action to them or their assigns in any suit brought upon this bond.

And that said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications. Said Surety agrees to be fully bound by and participate in any dispute resolution requirements of this Contract. Surety will act within fifteen (15) days after receipt of a written demand pursuant to the Labor and Material Bond and/or Performance Bond by Obligee herein.

DATED: _____, 20____.

Principal

By: _____

Surety

By: _____

Attorney in Fact

Mailing Address

City State Zip

APPROVED AS TO FORM AND LEGALITY

Deputy General Counsel

(NOTE: BOTH SIGNATURES (PRINCIPAL AND ATTORNEY IN FACT) ON THIS PAGE MUST BE NOTARIZED WITH AN ALL PURPOSE ACKNOWLEDGEMENT FORM)

This document may be signed by the District electronically, including but not limited to via DocuSign. Manually and/or electronically signed counterparts shall together be deemed one complete document.

SECTION 4.0 – INSTRUCTION TO BIDDERS

ARTICLE 4.1 – PRE-BID OPENING INSTRUCTIONS

4.1.1 ELECTRONIC PLANS AND SPECIFICATIONS. Plans and specifications may be obtained by visiting the District's website at <https://pbsystem.planetbids.com/portal/13982/bo-bo-search>. Prime Bidders are advised that proposed subcontractors should obtain their own sets of plans and specifications from the District website, so that they will be placed on the District's email list for addenda. The District will not be responsible for sending addenda to any person not listed on prospective bidder list.

4.1.2 EXAMINATION OF PLANS, SPECIFICATIONS AND WORK SITE

4.1.2.1 The Bidder is required to examine carefully the site of the work, the proposal, all plans and specifications. The Bidder shall fully satisfy itself as to the character, quality and quantities of work to be performed, materials to be furnished and as to the requirements of the Contract, including the General and Supplementary Requirements and Technical Specifications. The Bidder shall familiarize itself with all local laws, ordinances, rules and requests that may affect the work or the performance of the work.

4.1.2.2 Any information shown on the plans as to the soil or material borings or tests or existing materials is solely for the purpose of design. The information is not guaranteed, and no claims for extra work or damages will be considered if it is found during construction that the actual soil or material conditions vary from those indicated. The Contract documents show subsurface conditions or otherwise hidden conditions as they are supposed or believed by the District and/or its agents to exist; but it is not intended or to be inferred that the conditions shown thereon constitute a representation that such conditions are actually existent. Except as otherwise specifically provided in the Contract documents or as agreed, the District and its agents shall not be liable for any loss sustained by the Contractor or its agents or subcontractors as a result of any variance of such conditions as shown on the plans and the actual conditions revealed during the progress of the work or otherwise.

4.1.2.3 Where the District or its agents have made investigations of subsurface conditions in

areas where the work is to be performed, such investigations were made only for the purpose of study and design. The conditions indicated by such investigations apply only at the specific location of each boring or excavation at the time the borings or excavations were made. Where such investigations have been made, bidders, or Contractors may inspect the records at the Engineer's office as to such investigations subject to and upon the conditions set forth below.

4.1.2.3.1 The records of such investigations are not a part of the Contract and are shown solely for the convenience of the bidder or contractor. It is expressly understood and agreed that (a) the District and its agents assume no responsibility whatsoever with respect to the sufficiency or accuracy of the investigations or records or the accuracy of the interpretations set forth therein or made by the District or its agents in their use; (b) represents only the opinion of the District or its agents as to the character of the materials encountered by them in the test borings; and (c) there is no warranty or guarantee, either express or implied, that (1) the conditions indicated by such investigations or records are representative of those existing throughout such areas, or any part, or (2) that unlooked-for developments may not occur, or (3) that materials other than, or in proportions, densities, or other characteristics different from, those indicated may not be encountered.

4.1.2.3.2 The availability or use of information described in this provision is not to be construed in any way as a waiver of the bidder's responsibility to examine the site and the Contract documents and a bidder is cautioned to make such independent investigations and examination as it deems necessary to satisfy itself as to conditions to be encountered in the performance of the work.

4.1.2.3.3 No information derived from such inspection of records of investigations or compilation thereof made by the District or its agents will in any way relieve the bidder from any risk or from properly fulfilling the terms of the Contract nor entitle the Contractor to any additional compensation.

4.1.2.4 The Bidder represents it has studied all surveys and investigation reports about subsurface and latent physical conditions pertaining to the job site, that it has performed such additional surveys and investigations as it

deems necessary to complete the work at the bid price and that it has correlated the results of all such data with the requirements of the Contract documents. The submission of the Bid Proposal Package shall be prima facie evidence that the Bidder has made such an examination and is satisfied as to the conditions encountered, including locality, uncertainty of weather and all other contingencies and as to the character, quality, quantity and scope of the work. No allowance shall subsequently be made on behalf of the Contractor on account of an error on its part, its negligence, or its failure to acquaint itself with the conditions of the work site.

4.1.3 INTERPRETATION OF DRAWINGS AND DOCUMENTS

4.1.3.1 If any Bidder, prior to submitting bids, should find discrepancies in, or omission from the drawings, specifications or other proposed Contract documents, or if it should be in doubt as to the true meaning of any part of the proposed Contract documents, it SHALL at once make a written request to the Engineer for correction, clarification or interpretation of the point or points in question. The person submitting such request shall be responsible for its prompt delivery. A Contractor waives its right, if any, for additional compensation if it fails to seek correction, clarification or interpretation prior to submittal of a Bidder's bid.

4.1.3.2 In the event that the Engineer receives such a request, and it should be found that certain essential information is not clearly and fully set forth, or if the Engineer discovers or is informed of errors, omission or points requiring clarification in the drawings or documents, a written addendum will be emailed to each person to whom downloads a set of Contract documents has been delivered. The District will not be responsible for any instructions, explanations or interpretations of the documents presented to Bidders in any manner other than by written addendum.

4.1.3.3 To the extent there is a lack of detail or information or conflict, the best or most for the District shall be required to be installed, and the Engineer shall be guided accordingly.

4.1.4 ADDENDA. The effect of all addenda to the Contract documents shall be considered in the bid, and said addenda shall be made a part of the Contract documents and shall be returned with them at time of award. Before submitting its bid, each Bidder shall inform itself as to whether

or not any addenda have been issued and failure to cover in this bid any such addenda issued, may render its bid informal and result in its rejection.

4.1.5 BIDDERS INTERESTED IN MORE THAN ONE BID. No person, firm or corporation shall be allowed to make, file or be interested in more than one bid for the same work unless alternate bids are called for. A person, firm or corporation who has submitted subproposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a subproposal or quoting prices to other Bidders or from submitting a bid in its own behalf.

4.1.6 ELECTRONIC BIDDING

4.1.6.1 All Bidders are required to submit their bids electronically. The electronic bid system will close exactly at the date and time set forth in the Notice Inviting Bids or as changed by addenda. An electronic copy of the Bid Proposal Package and bid security (See 4.1.7.1.7) must accompany the electronic bid for the bid to be valid. Bidder shall be required to submit their Bid Schedule and Subcontractors List electronically.

4.1.6.2 Bidders are responsible for submitting and having their bids accepted before the closing time set forth in the Notice Inviting Bids or as changed by addenda. NOTE: Pushing the submit button on the electronic bid system may not be instantaneous; it may take time for the Bidder's documents to upload and transmit before the bid is accepted. It is the Bidder's sole responsibility to ensure their documents are uploaded, transmitted, and arrive in time electronically. The District will have no responsibility for bids that do not arrive in a timely manner, no matter what the reason.

4.1.6.3 The top three bidders will be required to submit their original Bid Proposal Package within the time stated on the Contract Documents cover page. Failure to do so may result in forfeiture of the Bidder's bid security and/or rejection of bid. The District reserves the right to request any other original Bid Proposal Packages.

4.1.6.4 In the case of a discrepancy between the electronic bid and the original Bid Proposal Package, the electronic bid will be the accepted bid.

4.1.7 PROPOSALS

4.1.7.1 Bids to receive consideration shall be made in accordance with the following instructions:

4.1.7.1.1 Bidder will download: (a) a bound Bid Proposal Package, (b) the bound specifications, and (c) plans. The Bid Proposal Package submitted by the Bidder may sometimes be referred to herein as the “bid(s)” and/or the “proposal(s).”

4.1.7.1.2 Bids shall be made electronically and only upon the forms included in the Bid Proposal Package, which form a part of the Contract documents. Bid Proposal Package forms cannot be altered or modified. All bid items in the Bid Proposal Package shall be properly and completely filled in electronically with a unit price or lump sum and totals. The signature of all persons signing shall be in longhand. Any document which is detached from the bound Bid Proposal Package documents or altered or modified or not properly completed, may render the bid non-responsive and may result in rejection of the bid. In addition to the documents contained in the Bid Proposal Package, no Contract documents shall be altered or modified.

4.1.7.1.3 All notations in the bid must be in ink or typewritten. No erasures will be permitted. Mistakes may be crossed out and corrections typed or written in with ink adjacent thereto, and must be initialed in ink by the person or persons signing the bid.

4.1.7.1.4 Bids shall not contain any recapitulation of the work to be done. Alternate or alternative proposals will not be considered unless called for. No oral, telegraphic or telephone proposals or modifications will be considered.

4.1.7.1.5 The District reserves the right to consider the financial responsibility and general competency of each bidder, as well as its reputation within the industry, to determine if the apparent low bidder has the apparent ability to meet and complete successfully the requirements of the Contract. Upon request, the apparent low bidder shall provide a financial statement, audited if necessary, in addition to any other requested information.

4.1.7.1.6 Each Bidder shall list its proposed subcontractors which are required to be listed by Public Contract Code section 4100, et seq. by name, Contractor's state license number, location and portion of work on the Subcontractor

tab in the electronic system. (See also Subsection 5.4.1)

4.1.7.1.7 Each Bidder must accompany its bid by a cashier's check of the Bidder drawn upon some responsible bank, or a check of the Bidder drawn upon such bank properly certified, or an approved corporate surety bid bond payable to the San Diego Unified Port District, for a sum not less than ten (10) percent of the aggregate sum of the bid, which said check or bid bond and the moneys represented thereby shall be held by the District as security that the Bidder, if awarded the Contract, will in good faith enter into such Contract and furnish the required labor and materialmen's bond and a faithful performance bond. Said corporate surety bid bond shall be from an admitted surety, as defined in Code of Civil Procedure Section 995.210, authorized to do business as such in the State of California, possess an AM Best Rating of VII or better, and be listed on the Federal Registry Circular 570. The Bidder, upon its failure or refusal to execute said Contract and give said labor and materialmen's bond and a faithful performance bond required within fourteen (14) days as required by these documents, shall forfeit to the District as liquidated damages for such failure or refusal, such security deposited with its bid. Bidder will be required to submit a copy of their bid bond or acknowledge a cashier's check or certified check when submitting their electronic bid. The original cashier's check, certified check or approved bid bond must accompany the original Bid Proposal Package. An electronic bid or bid received and not accompanied by such cashier's check, certified check or approved bid bond, may be rejected.

4.1.7.1.8 A copy of the Bid Proposal Package shall be attached to the electronic bid on or before the day and hour set for the opening of bids. The original Bid Proposal Package shall be delivered to the District office as specified in the “Notice Inviting Bids,” and on the date and time indicated on the Contract Documents cover page. Failure to provide the original Bid Proposal Package may result in forfeiture of the Bidder's bid security and/or rejection of bid.

4.1.7.1.9 A Bidder may withdraw its bid personally or by a written request by an authorized representative prior to the Bid Opening. A Bidder may not withdraw its bid for 120 calendar days after the Bid Opening. A Bidder considering withdrawing their bid should be familiar with the provisions of the Public Contract Code Sections 5100 to 5107 regarding

relief of bidders. Bid bonds shall be returned within 60 days after award of this Contract.

ARTICLE 4.2 – BID OPENING

4.2.1 OPENING OF BIDS

4.2.1.1 Bids will be opened electronically at the time and place set in the "Notice Inviting Bids" in the General Services & Procurement Building, National City, California. Bidders or their representatives, and other interested persons, are invited to be present at the opening of bids.

4.2.2 AWARD OR REJECTION OF BIDS. The Contract may be awarded to the lowest responsive and responsible Bidder under the schedule or schedules complying with these and with all other Contract documents. The District reserves the right to reject any or all bids, and to waive any informality or technicality in bids received and any requirements of these specifications as to bidding procedures.

4.2.3 BID PROTESTS

4.2.3.1 Time for filing. Any protest must be submitted in writing to the Director/Chief, Procurement Services Department, Port of San Diego, 1400 Tidelands Avenue, National City, California 91950 before 5:00 p.m. of the 10th business day following bid opening.

4.2.3.2 Form of protest:

4.2.3.2.1 The initial protest document shall contain a complete statement of the basis for the protest.

4.2.3.2.2 The protest shall refer to the specific portion of the document that forms the basis for the protest.

4.2.3.2.3 The protest shall include the name, address and telephone number of the person representing the protesting party.

4.2.3.2.4 The party filing the protest shall concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties include all other Bidders or proposers who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

4.2.3.3 The Board of Port Commissioners will issue a decision on the protest. If the Board of Port Commissioners determines that a protest is frivolous, the party originating the protest may be determined to be irresponsible and that party may be determined to be ineligible for future Contract awards.

4.2.3.3.1 In the situation that the Contract does not require Board action, decision on the protest shall be issued by authorized Port designee.

4.2.3.4 The procedure and time limits set forth in this section are mandatory and are the Bidder's sole remedy in the event of bid protest and failure to comply with these procedures shall constitute a waiver of any rights to further pursue the bid protest, including filing a Government Code claim or legal proceeding.

ARTICLE 4.3 – AWARD

4.3.1 THE CONTRACT

4.3.1.1 The Bidder to whom award is made shall execute a written Contract with the San Diego Unified Port District and shall furnish the required Faithful Performance and Labor and Material bonds within fourteen (14) days after receipt of a form of Contract for execution, unless an extension of time is granted to the Bidder in writing. The Contract shall be made in the form adopted by the District. If the Bidder to whom the award is made fails to furnish said bonds and execute the Contract as required, the award may be annulled, and an award may be made to the next lowest responsible Bidder and such Bidder shall fulfill every Contract stipulation as if it were the party to whom the first award was made. A corporation to which an award is made shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bonds for the corporation is duly authorized to do so. After the District's receipt of the executed Contract form and the bonds, and the Contractor's original, executed Bid Proposal Package will be bound together with the remainder of the documents which form the Contract and documented with the District clerk, excluding the plans which will be documented with the District clerk but will not bound together with the remainder of the Contract documents.

4.3.1.2 The surety supplying the surety bonds must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of

California, have an AM Best Rating of VII or more, and be listed on Federal Registry Circular 570.

ARTICLE 4.4 – NOTICE TO BIDDERS

4.4.1 EMPLOYMENT OF APPRENTICES

4.4.1.1 Bidder is directed to the provisions in Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code concerning the employment of apprentices by a Contractor and any subcontractor performing a public works Contract.

4.4.1.1.1 Labor Code section 1777.5 requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee in the area of the site of the public works project and which administers the apprenticeship program for a certificate of approval. Contractor or subcontractor shall not be required to submit individual applications for approval to local joint apprenticeship committees provided they are already covered by the local apprenticeship standards. The ratio of apprentices to journeymen and contributions to funds to administer apprenticeship programs shall be determined by Section 1777.5 and the responsibility for compliance with that section for all apprenticeable occupations shall be with the General Contractor.

4.4.1.1.2 Labor Code section 1777.5 does not apply to Contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or Prime Contractor, when the contracts of general contractors or those specialty contractors, involve less than Thirty Thousand Dollars (\$30,000.00) or twenty (20) working days. A contractor who willfully violates Labor Code section 1777.5 shall be denied the right to bid on or receive a public works contract for a period of up to one (1) year for the first violation, and for a period up to three (3) years for the second and subsequent violations, from the date the determination of noncompliance made by the Administrator of Apprenticeship becomes an order of the California Apprenticeship Council. Contractor shall also be subject to the payment of the civil penalty as provided in Labor Code section 1777.7. Interpretation and enforcement of said Sections 1777.5 and 1777.7 shall be in accordance with the rules and procedures of the California Apprenticeship Council.

4.4.2 EQUAL EMPLOYMENT OPPORTUNITY AND NON-DISCRIMINATION CLAUSE. It is the policy of the District that all contractors and lessees interested in conducting business with the District shall not discriminate against any employee or applicant for employment because of age (over 40), ancestry, color, disability (mental or physical), gender, marital status, medical condition, national origin, pregnancy, race, religion, sexual orientation, or veteran status, and shall take action to assure applicants are employed, and that employees are treated during employment, without regard to age (over 40), ancestry, color, disability (mental or physical), gender, marital status, medical condition, national origin, pregnancy, race, religion, sexual orientation, or veteran status.

4.4.3 PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM In accordance with the provisions of Labor Code section 1771.1. (a) A contractor or subcontractor shall not be qualified to bid on; be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

4.4.3.1 No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

4.4.3.2 No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

4.4.3.3 This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

4.4.3.4 The Bidder and its Subcontractors, upon failure to comply with Section 4.4.3 above may be deemed non-responsive and bid may be rejected.

4.4.4 CALIFORNIA AIR RESOURCES BOARD (CARB) REQUIREMENTS FOR IN-USE OFF-ROAD DIESEL-FUELED FLEETS

4.4.4.1 The California Air Resources Board approved amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) on November 17, 2022, aimed at further reducing emissions from the off-road sector including the addition of new contracting requirements.

4.4.4.2 Bidders are directed to the provisions of California Code of Regulations Title 13, §2449. Beginning January 1, 2024, prime contractors and public works awarding bodies are subject to the requirements in Section 2449(i)(1) – (4).

4.4.4.3 In accordance with Section 2449, for a project involving the use of vehicles subject to this regulation, Bidders must submit valid Certificate(s) of Reported Compliance at time of bid opening and include as part of the Bid Proposal Package.

4.4.4.4 The Bidder and its Subcontractors, upon failure to comply with section 4.4.4.3 above may be deemed non-responsive and bid may be rejected.

*****END OF SECTION*****

SECTION 5.0 – GENERAL CONDITIONS

ARTICLE 5.1 – GENERAL PROVISIONS

5.1.1 THE CONTRACT

5.1.1.1 The Contract documents as defined form the Contract between the District and the Contractor. The Contract represents the entire integrated agreement between the parties and supersedes all prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only as set forth in the Contract documents. The Contract documents shall not be construed to create a contractual relationship of any kind between the District and any other contractor or subcontractor or supplier of any tier other than the District and Contractor.

5.1.1.2 The Contractor's signing of the Contract signifies its acceptance of the time of completion as being sufficient for completion of the Work, as well as acceptance of all of the other terms and conditions of the Contract documents.

5.1.1.3 Contractor acknowledges that it has read every clause in the Agreement, these conditions and the specifications; has examined the location where the Work is to be done; and has made all inquiries and investigations necessary to enable it to understand thoroughly the intent of all parts of the Contract documents, and the nature of the Work; and agrees that it will not make any claim for compensation, extension of time or other allowance of any sort, based upon or arising out of any alleged misunderstanding by it of any part of the Contract documents.

5.1.2 DEFINITION OF TERMS

5.1.2.1 Whenever in these Contract documents the following terms are used, their intent and meaning are as follows:

5.1.2.1.1 The word "allowance" means the allocation of funds for items in the bid schedule for the purpose of identification and budgeting of work where quantities and/or cost are unknown at the time of bidding. If the allowance is either greater or less than the allowance, the contract price shall be increased or decreased accordingly upon proof of the amount expended by the Contractor. Allowances shall include all of the costs of materials, fixtures, or equipment and all costs of delivery, handling, and installations.

Contractor shall make no claim for additional compensation because of any increase, decrease or elimination of any allowance item.

5.1.2.1.2 The term "beneficial occupancy" shall mean the point in progress of the Work when the Project is Substantially Complete and the District, after notice, takes control of the entire Work as provided for herein.

5.1.2.1.3 The word "Board" means the Board of Port Commissioners specified in the San Diego Unified Port District Act.

5.1.2.1.4 The term "Change Order Request" is a written request for either a cost or time adjustment.

5.1.2.1.5 The term "completion" shall mean the formal written acceptance of the Work by the District and the recordation of a Notice of Completion with the county recorder or, in the event formal acceptance does not occur, the recordation of a Notice of Cessation with the county recorder.

5.1.2.1.6 The words "Contract" and "Contract document" mean everything contained in this bound volume and any and all other written instruments and drawings of every kind and nature which are attached to or made a part hereof by reference or by operation of law; such as, but not limited to, Notice Inviting Bids, Instructions to Bidders, Proposal, submitted Bid Proposal Package, Bonds, Addenda, Specifications (General), General Conditions, Supplementary Requirements, Technical Specifications, Drawings, the Agreement which is prepared for execution by the District and the Contractor, any and all supplemental written agreements, orders or addenda amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner. The Contract documents shall not include any other documents or agreements not listed in this section. However, the Contractor may be subject to standards and/or requirements set forth in other documents or agreements to which the Contractor is not a party. When such standards and/or requirements are referenced in the Contract documents and specifically made applicable to the Contractor, the same are hereby incorporated by reference as though fully set forth herein.

5.1.2.1.7 The term “Contract Change Order” shall mean a written document prepared by the District (See Form 9, Appendix A) and signed by the District and/or the Contractor stating the agreement on one or all of the following: a significant change in the Work; an adjustment in the Contract sum, if any; and an adjustment in the Contract time, if any. All changes in the Work involving price and or time must be authorized by a Contract Change Order.

5.1.2.1.8 The term “Contract Completion Date” shall mean the date for completion of the Work as determined by the Contract time and the Notice to Proceed Date.

5.1.2.1.9 The word “Contractor” means the person, firm or corporation with whom the Contract is made by the District.

5.1.2.1.10 The term “Contract Time” shall mean the Contract duration for the performance of the Work as specified by the Contract terms or as modified by a Contract Change Order.

5.1.2.1.11 The word “District”, “Port” and “Port District” mean the San Diego Unified Port District, a public corporation of the State of California.

5.1.2.1.12 The word “Engineer” means the designated employee of the San Diego Unified Port District, who shall be in charge of the work and who may be represented on the Work by engineers, assistants and inspectors who are authorized to act for him within the scope of the particular entrusted duties.

5.1.2.1.13 The term “Executive Director” means the Executive Director of the San Diego Unified Port District, the chief administrative officer of the District.

5.1.2.1.14 The word “Modification” shall mean any written Contract Change Order or supplemental written agreements or any other written and District approved modification to the Contract documents.

5.1.2.1.15 The word “Plans” shall mean the drawings, profiles, cross-sections, working drawings and supplemental drawings, or reproductions thereof, approved by the Engineer, which show the location, character, dimensions or details of the Work and incorporate into the Contract.

5.1.2.1.16 The terms “Request for Information” or “RFI” are written requests on the form provided by the District (see Form 2, “Request for Information,” Appendix A) from the Contractor to the District requesting information or clarification of the plans, specifications, drawings or Work which requires a written response from the District.

5.1.2.1.17 The term “Request for Proposal” is a written request from the District to the Contractor describing a proposed change in the Work desired by the District and which requires a written response from the Contractor. The Contractor shall respond in the form of a Change Order Request.

5.1.2.1.18 The term “Substantially Complete” shall mean when the Work is completed to a sufficient degree and quality, and in strict accordance with the Contract, so as to allow the total and complete use of the Work for all intended purposes. If the District is not able to use the Work for one or more of its intended purposes, no matter how small the purpose may be, the Work is not Substantially Complete.

5.1.2.1.19 The words “Work” or “Project” mean everything required to be furnished or performed under the Contract documents as defined.

5.1.2.1.20 The term “Work Site” shall mean the physical location of the Work as particularly identified in the Technical Specifications.

5.1.2.1.21 The term “written direction” is a written direction from the Engineer or its authorized representative which may be in response to a Request for Information, bulletin (See Form 4, “Bulletin,” Appendix A) or any other written form from the District to the Contractor.

5.1.3 INCORPORATION. Whenever a reference is made to any portion of this Contract or any other applicable law or ordinance, the reference applies to all existing and future amendments and additions.

5.1.4 DIVISIONS OF PLANS AND SPECIFICATIONS

5.1.4.1 All sections of the specification shall be read and interpreted as constituting a whole and not as an aggregation of individualized parts, and whatever is specified in one section shall be construed as applying to all sections.

5.1.4.2 The division of the specifications into a number of sections, articles or specifications is for convenience only, and no other construction or interpretations shall be made. In this respect, no section of the specifications is written for an individualized trade, occupation or profession.

5.1.4.3 The specifications may consist, in part, of abbreviated or "streamlined" type and include incomplete sentences. Omissions of words or phrases such as "the Contractor shall," "in conformity therewith," "shall be," "as noted on the drawings," "according to the plans," "a," "an," "the," and "all" are intentional. Omitted words and phrases shall be supplied by inference in the same manner as they are when a "Note" occurs on drawings. Words "shall be," or "shall" will be supplied by inference where colon (:) is used within sentences or phrases.

5.1.5 EFFECT OF PLANS AND SPECIFICATIONS

5.1.5.1 The plans, together with the attached specifications, will govern the Work to be done. Anything mentioned in these specifications and not shown on the plans and detailed drawings, or shown on the plans and detail drawings and not mentioned in these specifications, shall be of like effect as though shown or mentioned in both. The Contractor shall perform all activities at no extra cost to the District that are reasonably inferable from the Contract documents as being necessary to produce and/or achieve the intended results.

5.1.5.2 The Engineer may furnish from time to time such detail drawings, plans, profiles and information as may be considered necessary for the Contractor's guidance or clarification, unless otherwise provided in the proposal, agreement or detail specifications. In cases where the Contract Work or any portion thereof is to be performed in accordance with drawings, specifications or lists of data submitted by the Contractor and approved by the Engineer, such approved drawings, submittals, etc., shall become portions of the plans and specifications regarding the specific matters to which such approval applies. The Contractor shall be solely responsible for the correctness of the measurements and other essential information submitted by it and for the correlation of the various portions and features of the Work which are or may be affected by such measurements and information.

5.1.5.3 Any change required by the Engineer in the drawings, submittals, etc., submitted for approval by the Contractor, shall be considered as necessary in order to comply with the requirements of the plans and specifications, and shall not be the basis of any claim for extra compensation over and above the bid price for the Work, except where changes involving extra work are expressly authorized and ordered in accordance with the section of these specifications relating to changes and extra work.

5.1.5.4 A copy of the plans and specifications shall be kept upon the Work Site at all times during its progress and access shall at all times be accorded the Engineer.

5.1.5.5 The Contractor shall, for the price bid, furnish all supervision, labor, materials, transportation and equipment necessary to execute the Work in every respect in a thorough, skillful, workmanlike manner in accordance with the Contract documents and to the satisfaction of the Engineer. All work shall, during its progress and until its completion, conform to the lines, elevations and grades shown on said plans and profiles.

5.1.6 PRECEDENCE OF DOCUMENTS. In case of any conflict, the order of precedence of the following documents in controlling the Work shall be: (1) Permits from outside agencies required by law and applicable codes or laws, (2) Change Orders, (3) Addenda, (4) Supplementary Requirements (5) Technical Specifications, (6) Plan Details, (7) Plans, (8) General Conditions, (9) Specifically referenced Standard Specifications and Drawings, e.g., Greenbook.

5.1.7 INTERPRETATION/NOTIFICATION REQUIREMENTS

5.1.7.1 Interpretation of Plans and Specifications. Should it appear that the Work to be performed or that the Contract documents are not sufficiently detailed or explained, or should any questions or doubts arise as to the true meaning of any part of the Contract documents, or shall an error, conflict, ambiguity or mistake be apparent or discovered in the Contract documents, including the quantity estimates, the Contractor shall make a written request to the Engineer immediately upon discovery for correction, clarification or interpretation of the point(s) in question. Upon receipt of such

request, the Engineer shall provide the Contractor a written interpretation correcting, clarifying or interpreting the point(s) in question, which interpretation shall be final and become a part of the Contract. Should any interpretation, in the opinion of the Contractor, exceed the scope of the Contract documents, written notice shall be given to the District within seven (7) calendar days of the receipt of the Engineer's interpretation and prior to proceeding with the Work in question unless directed otherwise by the District. The Engineer may amend its original interpretation, authorize extra work as a Contract Change Order and authorize an extension of time, if applicable, in accordance with the provisions of Article 5.7 (Change in the Work) or the Engineer may direct the Contractor to proceed with the original interpretation. The Contractor's failure to provide such notice or the installation of any such Work without authorization or written direction shall relieve the District of any claim for added costs or for extensions of time.

5.1.7.2 Interpretation of Contract documents. Tenses – The present tense includes the past and future tenses and the future the past. Gender – The masculine gender includes the feminine and neuter. The neutral gender includes the masculine and feminine. Number – The singular number includes the plural and the plural includes the singular.

5.1.8 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS. The Contract documents, including Contractor shop drawings and submittals, were prepared for use for the Work of this Contract only and are the sole property of the District. No part of the Contract documents shall be used by the Contractor for any other construction or for any other purpose except with the written consent of the District. Any unauthorized use of the Contract documents is at the sole risk and liability of the user.

ARTICLE 5.2 – DISTRICT

5.2.1 DISTRICT'S RIGHT TO STOP WORK. If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract documents or fails to carry out Work in accordance with the Contract documents or for any cause whatsoever, the Engineer may order the Contractor to stop the Work, or any portion of the Work, until the cause for such order has been eliminated; however, the Engineer's right to

exercise this provision shall not be for the benefit of the Contractor or any other person or entity. If the Engineer stops the Work because of conduct by the Contractor, its agents, representatives or subcontractors, no compensation in time or money shall be owed to the Contractor for such stoppage.

5.2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK. If the Contractor defaults or neglects to carry out Work in accordance with the Contract documents and fails within ten (10) days or within the time specified, whichever is less, after receipt of written notice from the District to commence and continue correction of such default or neglect with diligence and promptness, the District may by any means acceptable to it, without prejudice to other remedies the District may have, correct such deficiencies. In such case an appropriate Contract Change Order shall be issued deducting from payments then or thereafter due the Contractor the cost or estimated cost of correcting such deficiencies, including compensation for additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor and/or its surety shall pay the difference to the District.

5.2.3 NO WAIVER OF RIGHTS

5.2.3.1 Observation or Inspection by the District or its authorized agents or representatives, any order or certificate for payment of money, any payment for, acceptance of the whole or any part of the Work by the District, any extension of time, any position taken by the District or its authorized agents or representatives shall not operate as a waiver of any provision of this Contract, or of any power herein reserved by the District or any right to damages. No waiver of any breach of Contract shall be held to be a waiver of any other or subsequent breach, and payment shall not be deemed to be the equivalent of acceptance.

5.2.3.2 All remedies provided in this Contract shall be taken and construed as cumulative; that is, in addition to each and every remedy provided herein, the District shall have any and all equitable and legal remedies that it would otherwise have.

5.2.4 DISTRICT'S ADMINISTRATION OF THE CONTRACT

5.2.4.1 The District will administer the Contract as described in the Contract documents, unless notice is given to the Contractor that a Construction Manager or like entity has been retained to administer the Contract.

5.2.4.2 The Work will be performed under the jurisdiction of the Engineer, who may execute general control over the conduct of the Work as may be necessary to safeguard the interest of the District. The Contractor shall promptly comply with any and all orders and instructions given by the Engineer in accordance with the terms of this Contract. The Contractor assumes all risks and consequences of performing the Contract in accordance with any order, including but not limited to, instruction, direction, interpretation or determination, of anyone not authorized to issue such order.

5.2.5 AUTHORITY OF ENGINEER

5.2.5.1 The Engineer will decide all questions which may arise as to acceptability of:

5.2.5.1.1 Materials furnished.

5.2.5.1.2 Quality of workmanship.

5.2.5.1.3 Manner of work performed.

5.2.5.1.4 Rate of work progress.

5.2.5.1.5 Equipment used in work performance.

5.2.5.1.6 Labor furnished, including acceptability of subcontractors.

5.2.5.1.7 Arrangements for public access.

5.2.5.1.8 Traffic control devices furnished.

5.2.5.1.9 Pay estimates.

5.2.5.1.10 Work hours.

5.2.5.2 The Engineer will decide questions arising under the Contract, including but not limited to:

5.2.5.2.1 Interpretation of Contract documents, including plans and specifications.

5.2.5.2.2 Interpretation of applicable codes.

5.2.5.2.3 Quantity of work performed.

5.2.5.2.4 Acceptable fulfillment of the Contract on the part of the Contractor.

5.2.5.3 Except as otherwise provided herein or by law, the decision of the Engineer will be final. The Engineer has authority to enforce and make effective such decisions that the Contractor fails to promptly carry out.

5.2.6 DISTRICT'S OBSERVATION OF WORK

5.2.6.1 Inspectors employed by or on behalf of the District shall be authorized to observe all work done and all materials furnished. Such observation may extend to all or any part of the Work and to the preparation, fabrication or manufacture of the materials to be used. The inspector is not authorized to revoke, alter or waive any requirements of the specifications or Contract documents. The inspector is authorized to call to the attention of the Contractor any failure of the Work or materials to conform to the specifications and Contract. He shall have the authority to reject materials or suspend the Work until any questions at issue can be referred to and decided by the Engineer.

5.2.6.2 The inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the management of the Work by the latter. Any advice that the inspector may give the Contractor shall not be construed as binding to the Engineer in any way or as releasing the Contractor from fulfilling all the terms of the Contract.

5.2.6.3 If the Contractor refuses to suspend operations on verbal order, the inspector shall issue a written Notice to Stop Work giving the reason for shutting down the Work. (See Form 8, "Notice to Stop Work," Appendix A) After placing the order in the hands of the Contractor or its agent, the inspector shall immediately leave the job. Work done during the absence of the inspector will not be accepted nor paid for, and any associated expense shall be the sole responsibility of the Contractor.

5.2.6.4 Observation of a method of procedure, process or system of operations of the Contractor, or failure of the Engineer to warn the Contractor that the method or methods of construction adopted by it are hazardous to persons or to property, shall not relieve the Contractor of its obligations hereunder, including the obligations of indemnification of the District,

nor give rise to any claims against the District.

5.2.6.5 If the project is wholly or partially federally funded, the Work Site may be inspected at any time by a representative of the funding federal agency.

5.2.7 DEFECTIVE WORK – NOTICE TO CONTRACTOR

5.2.7.1 If, in the opinion of the Engineer, Work is not being done in accordance with any applicable codes or laws or the plans and specifications, written notice as provided in Subsection 5.2.2 shall be given to the Contractor or its authorized agent. (See Form 6, "Nonconformance Report," Appendix A) Written notice to any foreman or agent in charge of any portion of the Work in the absence of the Contractor shall be considered as notice to the Contractor.

5.2.7.2 Work which is defective in its construction or deficient in any of the requirements of these specifications, will not be considered as accepted in consequence of the failure of any employee of the District or inspector connected with the Work to point out said defects or deficiency during construction. The Contractor shall at its sole expense correct any imperfect work whenever discovered. If Contractor refuses or neglects to replace defective work, such work may be replaced by the District in accordance with 5.2.2, after notice to the Contractor and its sureties, at the expense of the Contractor, and the Contractor and its sureties shall be liable therefor. If directed by the District, the Contractor shall at its sole cost uncover and/or expose work for its inspection by the District.

5.2.8 ACCEPTANCE OF NONCONFORMING WORK. If in the judgment of the District, it is undesirable or impracticable to replace any defective or nonconforming Work, the compensation to be paid to the Contractor shall be reduced by Contract Change Order by such amount as in the judgment of the District shall deem equitable.

5.2.9 RECEIPT OF THIRD PARTY CLAIMS. Upon receipt of any third party claim related to this contract, the District shall notify the contractor of the receipt of any third party claim relating to the contract. The District shall be entitled to recover its reasonable costs providing such notification.

ARTICLE 5.3 – CONTRACTOR

5.3.1 REVIEW OF CONTRACT AND FIELD CONDITIONS

5.3.1.1 The Contract documents are not complete in every detail but show the purpose and intent only and the Contractor shall comply with the Contract documents true intent and meaning, taken as a whole, and shall not avail itself of any manifest error, omission, discrepancy or ambiguity which appears in the Contract documents, instructions or Work performed by others.

5.3.1.2 The Contract documents are complementary and what is called for by any one shall be binding as if called for by all. This provision does not negate the precedence of documents outlined in Subsection 5.1.6.

5.3.1.3 Before ordering any materials or doing any work, the Contractor shall verify all measurements, dimensions, elevations and quantities. No extra charge or compensation over and above payment for the actual quantities of the various items of work at the respective bid prices will be allowed on account of differences between actual measurements, dimensions, elevations and quantities and those indicated on the drawings and in the specifications; any difference therein shall be submitted to the Engineer in accordance with Subparagraph 5.1.7.1 for consideration before proceeding with the Work. The quantities noted in the schedules of the proposal are estimates for comparing bids only.

5.3.1.4 The Contractor shall notify the District in writing immediately or no later than five (5) calendar days upon the discovery of errors, omissions, discrepancies or ambiguities in the Contract documents as provided in Article 5.1, at Subsection 5.1.7.

5.3.1.5 If the Contractor proceeds with the work without receiving an interpretation as provided in Article 5.1, at Subsection 5.1.7, the District shall be relieved of any liability and Contractor shall be responsible for all resulting damage and defects.

5.3.1.6 As required to maintain the progress of the Work, the Contractor shall review the appropriate portions of the Contract documents a minimum of thirty (30) days prior to the commencement of the related Work for the

express purposes of checking for any manifest errors, omissions, discrepancies or ambiguities and shall notify the District of any as required by Subparagraph 5.3.1.4, above. The Contractor shall not be entitled to any compensation for delays, disruptions, inefficiencies or additional administrative effort caused by the Contractor's untimely review of the Contract documents.

5.3.1.7 The Contractor shall be responsible for its costs to implement and administer a Request for Information (RFI) system throughout the Contract Time. Regardless of the number of RFIs (or written directions) issued, the Contractor will not be entitled to additional compensation or additional Contract time unless the cause and impacts of each RFI are identified and attributable to parties other than the Contractor. The Contractor shall be responsible for the District's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract documents; such costs may be deducted from progress payments. If the RFIs alter the design of the Work without altering its intent, the Contractor shall be responsible for the District's administrative costs including engineering costs for such alteration, revision or substitution.

5.3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

5.3.2.1 The Contractor shall supervise and direct the Work, using its best skill and attention, and shall determine, subject to applicable law, the means and methods to be implemented. The Contractor is at all times responsible for the Work Site until acceptance of the project as defined in Article 5.9. The Contractor shall at all times during the performance of the Contract prosecute the Work with such forces and equipment as, in the opinion of the Engineer, are appropriate to complete the different portions of the Work in the order required and within the specified time, and to secure a satisfactory quality of Work. Whenever requested by the Engineer, Contractor shall submit a Daily Activity Report to the Engineer for each Work day including weekends and holidays, which shall include the information addressed as required in the pre-construction conference and on the form provided by the District. Failure to submit daily the required report shall be a material default and justify withholding Progress Payments and, following reasonable notice of not less than seventy-two (72) hours, termination for default. The delivery of Daily

Activity Report to the District shall not be deemed the acceptance of the accuracy of the information contained therein. The District shall have no obligation to correct any discovered discrepancies or errors therein, but may, at its discretion, notify the Contractor of any such error or discrepancy.

5.3.2.2 Supervision:

5.3.2.2.1 General: The Contractor shall at all times, while the Work is in progress, be represented on the Work in person, or by superintendents, foremen, managers, or other duly designated and authorized representatives or agents. The work of such representatives shall be limited to supervisory duties only. The Contractor shall not designate a subcontractor as its representative. In the event the Contractor's representative's authority is limited in any way, the Contractor shall notify the District within ten (10) days after entering into the Contract of such limitation.

5.3.2.2.2 Contractor's Residence: The Contractor or its authorized representative shall reside in San Diego County from the start of the Work to final acceptance of the Work and its residence in San Diego County shall have an active telephone.

5.3.2.2.3 Contractor's Headquarters: Before starting Work, the Contractor shall give the Engineer a written statement of the address and telephone number of the Contractor's headquarters in San Diego County for the duration of the Work.

5.3.2.2.4 Contractor's Representative: When a Contractor cannot be in person on the Work site during its progress, it shall designate in writing to the Engineer the name of its authorized representative in charge of the Work. When a Contractor consists of a multiple entity such as, but not limited to, two or more persons, partnerships, corporations, firms or other entities, such Contractor shall designate in writing to the Engineer the name of the authorized representative in charge of the Work.

5.3.2.2.5 Contractor's Representative – Responsibility of: In the absence of the Contractor, its authorized representative shall be empowered in writing to act for the Contractor. Any order given by the Engineer to the Contractor's authorized representative shall be

construed to have been given to the Contractor.

5.3.2.2.6 Contractor – Availability of: The Contractor or its authorized representative shall be available day and night for all the calendar days during the Contract Time. The Contractor or its authorized representative shall provide the District with a prioritized list of personnel to be contacted during emergency situations who can respond to emergencies and/or have the authority to direct other employees to respond to such emergencies. This list shall contain the names and local telephone numbers of these individuals and shall be submitted on or before commencement of construction of the Work. The listed personnel shall be subject to call by the Engineer at any time (24 hours a day) during the Contract Time, when, in the opinion of the Engineer, its presence is required on the Work Site or for any other purpose related to the Work.

5.3.2.3 The Contractor shall conduct the Work in compliance with all laws and regulations of the United States Government, the State of California, the County of San Diego, the District and the appropriate municipal jurisdiction, limiting or controlling the Work in any manner. Unless otherwise provided by the Contract, the Contractor shall at its own expense obtain all necessary permits, including but not limited to building permits, licenses and pay all fees and taxes required by law. The District will provide at its own cost all required permits and licenses to construct works within the respective rights-of-way and properties owned by the United States Government, the State of California, the County of San Diego, cities comprising the District, the District, and railroads or other public utilities.

5.3.3 LABOR AND PREVAILING WAGES

5.3.3.1 Labor: None but skilled personnel shall be employed on Work requiring special qualifications, and when required by the Engineer, the Contractor shall take the necessary action to remove from the Work any person who is, in the opinion of the Engineer, disorderly, dangerous, insubordinate, incompetent or otherwise objectionable. Such removal shall not be the basis of any claim for compensation or damages against the District or any of its officers.

5.3.3.1.1 Eight Hour Day: Unless as otherwise excepted by law, neither Contractor nor any subcontractor doing work pursuant to the terms of this Contract shall require or permit any worker

to work more than eight (8) hours per day and forty (40) hours in any one week, provided, however, work performed in excess of eight (8) hours per day shall be compensated at the rate of no less than one and one-half times the basic rate of pay.

5.3.3.1.1.1 Contractor shall, as a penalty to District, forfeit twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in one calendar day and forty (40) hours in any one calendar week unless compensation for all hours worked in excess of eight (8) hours per day and forty (40) hours per week is not less than as required by law.

5.3.3.1.1.2 Contractor and each subcontractor shall keep an accurate record showing the name, labor classification and actual hours worked each calendar day and each calendar week by each worker employed by it in connection with the Work performed pursuant to this Contract, and shall make such records available for inspection at all reasonable hours by the District and the Division of Labor Standards Enforcement. Neglecting to comply with this section is a misdemeanor.

5.3.3.1.2 A Contractor or subcontractor who has been debarred pursuant to Labor Code section 1777, et seq. shall not bid, work on or be awarded any District Contracts.

5.3.3.2 Wage Rates (Prevailing Wages):

5.3.3.2.1 In accordance with the provisions of Labor Code section 1773, the District has ascertained from the Department of Industrial Relations the general prevailing rate of per diem wages (which rates include employer payments for health and welfare, vacation, pension and similar purposes) and the general prevailing rate for holiday and overtime work in the locality in which the Work is to be performed under this Contract for each craft, classification or type of worker needed to perform the Contract, which rates are on file and available for inspection at District offices at 1400 Tidelands Avenue, National City, California. A copy of the wage rates shall be posted on the Work Site by the Contractor.

5.3.3.2.2 Contractor and each subcontractor shall

pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Contract. As allowed by law, the Contractor shall, as penalty to District, forfeit not more than Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing rates for such Work or craft in which such worker is employed for any Work done under this Contract, including Work for any subcontractor. The amount of said forfeiture shall be determined by the Labor Commissioner in accordance with Labor Code section 1775. The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor pursuant to the provisions of Labor Code section 1775. The District shall not be liable or responsible in any manner to any subcontractor or worker who is paid less than the prevailing rate.

5.3.3.2.3 The District shall not recognize or be responsible for any claim for additional compensation because of payment by the Contractor for any wage rate in excess of the wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining its bid.

5.3.3.2.4 Any Contractor who is awarded a public works Contract and who intends to use a craft or classification not shown on the general prevailing wage determinations shall pay the wage rate of that craft or classification most closely related to it as shown in the general wage determinations effective on the bid date of the project.

5.3.3.2.5 The Contractor shall comply with Labor Code section 1775, (b).

5.3.3.3 Payroll records:

5.3.3.3.1 Contractor and each subcontractor shall keep an accurate, certified payroll record of the name, address, social security number, work classification, occupation, straight time and overtime hours worked each day and week, and actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by it in connection with Work performed under this Contract. The Contractor shall submit, on a weekly basis, a certified copy of each payroll via

LCPtracker to the District. In accordance with Section of the Submittal Procedures, the Contractor shall submit, on a weekly basis, a certified copy of each payroll electronically via the software LCPtracker. Electronic submission is a web-based system, accessed on the World Wide Web by a web browser. Each contractor will be given a Log-On identification and password to access the San Diego Unified Port District's reporting system. Use of the system will entail data entry of weekly payroll information including; employee identification, labor classification, total hours worked and hours worked on this project, wage and benefit rates paid etc. The Contractor's payroll and accounting software might be capable of generating a 'comma delimited file' that will interface with the software. Contractor must require all lower-tier subcontractors the mandatory requirement to use LCPtracker to provide required labor compliance documentation. Lower-tier subcontractors will be given a Log-On identification and password from the Contractor. Training options will be provided to the Contractor. The use of LCPtracker by the Contractor is mandatory. Access to LCPtracker will be provided at no cost to the contractor. In order to utilize LCPtracker, the contractor needs a computer and internet access. A digital camera and a scanner may be useful. For more information, go to www.lcptracker.com. To Login, go to www.lcptracker.net and from the homepage, select LOGIN and enter the Username and Password that will be provided to you by the District. Certified copies of all such records and the U.S. Department of Justice Form I-9 (or its equivalent) shall be made available for inspection or furnished upon request to the District, the Division of Apprenticeship Standards and the Division of Labor Standards Enforcement in accordance with the provisions of Labor Code section 1776. Certified copies of such record shall be made available to the public as provided in Section 1776. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or its representative on request. Contractor shall be responsible for compliance with these provisions and with the requirements of Labor Code section 1776.

5.3.4 SUBMITTALS

5.3.4.1 The term "submittals" includes shop drawings, drawings, diagrams, layouts, schematics, description literature, illustrations, schedules, samples, product, performance and

test data, and similar materials furnished by the Contractor to explain in detail specific portions of the Work required by the Contract.

5.3.4.2 If this Contract requires submittals or if requested by the Engineer, the Contractor shall submit such submittals as required to maintain the progress of the Work or as specified by the Contract documents. The Contractor shall coordinate all such submittals, and review them for accuracy, completeness and compliance with the Contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Submittals provided to the Engineer without evidence of the Contractor's approval will be returned for re-submission. The Engineer will indicate its approval or disapproval of the submittals as specified in Subparagraph 5.3.4.4 below and if not approved as submitted shall indicate its reasons. No work shall be performed without an approved submittal for such specific work, and any Work done prior to such approval shall be at the Contractor's risk. Approval by the Engineer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this Contract, nor shall said review relieve the Contractor of any obligation thereunder, including without limitation the removal and replacement of defective Work, materials and equipment which may be rejected by the Engineer notwithstanding such review, except with respect to variations described and approved in accordance with Subparagraph 5.3.4.3 below. Submittals are part of the Contract Work.

5.3.4.3 Submittal Variations: If the submittals show any variations from the Contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Engineer approves any submittals with unidentified variation(s), the Contractor's failure to specifically identify each variation as set forth above, shall waive any implied or express approval obtained by the District.

5.3.4.4 The Contractor shall submit to the Engineer for approval six (6) sets (unless otherwise indicated) of all submittals as called for under the various headings of these specifications. Four (4) sets (unless otherwise indicated) of all submittals will be retained by the Engineer and two sets will be returned to the Contractor. Submittals will be reviewed by the

Engineer and returned to the Contractor within 21 working days and will be: (1) returned marked "Approved," (2) returned marked "Approved With Corrections Noted," or (3) returned marked "Disapproved, Revise and Resubmit as Noted."

5.3.4.5 Submittals marked "Disapproved, Revise and Resubmit as Noted" and returned to the Contractor shall be corrected by the Contractor to indicate compliance with design requirements and resubmitted for review before proceeding with fabrication. Drawings marked "Approved with Corrections Noted" shall be corrected, and may be issued by the Contractor for fabrication without further review and the Work shall be performed pursuant to the noted corrections.

5.3.4.6 Full compensation for furnishing and revising all submittals shall be considered as included in the prices paid for the Contract items of Work to which such submittals relate and no additional compensation will be allowed.

5.3.4.7 Trade Names and Alternatives: Certain materials, products, things or services to be incorporated in the Work may be designated in the specifications by specific brand or trade name of comparable quality or utility followed by the words "or equal" so that the Contractor may furnish any equal material, product, thing or service. The District shall, if aware of an equal product manufactured in California, name such product in the specifications. Only one such "or equal" item will be permitted per submitted item. The Contractor may submit a request for a substitution of "an equal" item; provided, however, said data need not be submitted less than thirty-five (35) days after the award of the Contract. Any such submission after said thirty-five (35) day period shall be provided in ample time so as not to delay progress of the Work. If the District rejects the substitution of an "or equal" item, the Contractor shall provide the specified material, product, thing or service without extra cost to the District.

5.3.5 MATERIALS AND SAMPLES

5.3.5.1 All materials shall be new and of the specified quality and fully equal to samples, where samples are required or requested. The Contractor shall furnish to the Engineer for review or test, whenever requested and free of charge, samples of all materials proposed to be used in the Work. It shall also submit any required detailed drawings of articles or equipment for

District approval. Rejected materials must be immediately removed from the Work Site and shall not be brought again upon the Work or used in the Work.

5.3.5.2 Materials furnished by the District:

5.3.5.2.1 In cases where the District furnishes all or a portion of the equipment or materials to be used in the Work ("materials"), the Contractor shall accept delivery of such materials as may be provided. If the Contractor is required to haul such materials under this Contract to the Work Site, it shall pick them up promptly after notification by the Engineer, and shall pay at its own cost any demurrage or other charges which have accrued due to its failure to pick up the materials promptly.

5.3.5.2.2 Contractor shall be responsible for the materials including proper storage and handling from the time it receives them until final acceptance of the Work and it shall replace or repair, at its own cost in a manner satisfactory to Engineer, any of the materials which are lost or damaged after the Contractor's receipt of same.

5.3.5.2.3 Any District furnished materials which remain unused at the completion of the Work shall be delivered by the Contractor to the District's storage yard designated by the Engineer.

5.3.5.2.4 All compensation to be received by the Contractor for handling and protecting District furnished material is included in the Contract price, and no extra compensation will be paid to the Contractor for complying with the provisions of this section.

5.3.6 GUARANTEE. In addition to, but not in limitation of, the provisions of California Code of Civil Procedure sections 337.1 and 337.15, all work shall be guaranteed by the Contractor for a period of one (1) year unless otherwise specified from the date of acceptance of the Work or part thereof (see Section 5.9.4) against defective workmanship and materials furnished by the Contractor. The Contractor shall promptly replace or repair, in a manner satisfactory to the Engineer, any such defective work after notice to do so from the Engineer, and upon the Contractor's failure to make such replacement or repairs promptly, the District may perform this Work and the Contractor and its sureties shall be liable for the cost thereof. For any Work which is

replaced or repaired pursuant to this provision, a new one (1) year guarantee period shall begin after acceptance by the District of the repaired or replaced Work.

5.3.7 SCHEDULES

5.3.7.1 Schedule of Values: Within ten (10) days after the award of the Contract, Contractor shall furnish a schedule of values (cost itemization), which after being approved by the Engineer, will become the basis for computing periodic payments. Failure to timely provide a schedule of values shall be grounds for withholding payment to the Contractor.

5.3.7.2 Before the preparation of the Contractor's Progress Schedule, Contractor shall inspect the project Work Site in order to familiarize itself with the condition of the existing area where it will perform the Work.

5.3.7.3 Contractor shall submit a practicable Progress Schedule, in quadruplicate, to the Engineer at the pre-construction conference and be prepared to discuss the Progress schedule, events and construction procedures at the time. No Work shall be allowed to proceed unless and until a Progress Schedule is submitted. In the event a Notice to Proceed has issued, no time extension or compensation will be allowed to Contractor for failure to comply with this provision.

5.3.7.4 The Contractor may furnish the Progress Schedule on a form of its choice or, if requested, the Engineer will furnish a form for the Contractor's use. However, the form shall clearly show the order in which the Contractor proposes to carry out the Work, the dates on which it will start the salient features of the Work (including procurement of materials, plant and equipment), production rates and the proposed dates for completing said salient features. The Progress Schedule submitted shall be consistent in all respects with the time constraints and sequencing requirements of the Contract.

5.3.7.5 An updated Progress Schedule shall be submitted monthly, or as requested by the Engineer, to show the progress of the Work. In any event, if the Contractor fails to submit said updated Progress Schedule within ten (10) calendar days after a written request by the Engineer, the Engineer shall have the right to withhold progress payments for any work until a

satisfactory Progress Schedule is submitted to the Engineer.

5.3.7.6 The capacity of the construction plant, sequence of operations and methods of operations shall be such as to ensure the completion of the Work within the time specified in the Progress Schedule.

5.3.7.7 When the Contractor is to furnish major items of equipment or materials, the Progress Schedule shall include the proposed dates of manufacture and shipment of these items and the names and locations of factories or other sources from which said items are to be obtained.

5.3.7.8 Total Float is the number of days by which a part of the Work in the schedule may be delayed from its early dates without necessarily extending the Contract Time. Contract Float is the number of days between the Contractor's anticipated date for early completion of the Work, or specified part, and the corresponding Contract Time. Total Float and Contract Float belong to the project and are not for the exclusive benefit of any party. They shall be available to the District, its agents, or the Contractor to accommodate changes in the Work or to mitigate the effect of events which may delay performance or completion. Each party will monitor and optimize the use of float for the benefit of the project.

5.3.7.9 An early completion schedule is one which anticipates completion of all or specified part of the Work ahead of the corresponding Contract Completion Date. Because Contract Float belongs to the Project, the Contractor shall not be entitled to any extension in Contract Time, or recovery for any delay incurred because of extensions in an early completion date, until all Contract Float is used or consumed and performance or completion of the Work extends beyond the Contract Completion Date. The Contractor shall adjust or remove any float suppression techniques, e.g., preferential sequencing (crew movements, equipment use, form reuse, etc.) extended durations, imposed dates, scheduling of Work not required for a Contract Time as required Work, and others, as prerequisite to a request for an increase in Contract price or Contract Time.

5.3.8 RECORD DRAWINGS AND TESTS

5.3.8.1 The Contractor shall maintain at the Work Site a record set of full-size project

drawings upon which all field changes are recorded on a daily basis. The Contractor shall provide and maintain in good order, in the field office at the initial cap work site, one complete set of blue-line prints recording the exact location, by dimensions, and the exact depth, by elevation, of all underground or otherwise concealed utilities. It shall record, by dimension and/or scale drawings, all such concealed work as actually installed. All information necessary to maintain and/or service any concealed work shall be noted on these record drawings. This data shall be legibly recorded on blue-line prints (furnished by the Engineer) to the satisfaction of the Engineer. Records shall be kept up to date with all entries checked by the Engineer before the work is buried or otherwise concealed. In the event the Contractor fails to maintain record drawings up to date (see Form 3, "As Built Drawing Certification," Appendix A), Engineer may withhold progress payments, or any part thereof, until satisfactory, up to date record drawings are produced by the Contractor.

5.3.8.2 Upon completion of the Work and as a condition precedent to acceptance and the issuance of final payment, the Contractor shall deliver to the Engineer a complete set of corrected prints, in good condition and with complete installation and every change in the Work indicated thereon whether concealed or visible.

5.3.8.3 Any work showing faults under test, and any Work not in accordance with the specifications and the accompanying drawings, shall be made good by the Contractor at its own expense.

5.3.8.4 Should the Contractor refuse or neglect to make any tests necessary to satisfy the Engineer or its representative that it has carried out the true intent and meaning of the specifications, the District may make such tests and charge the expense to the Contractor, to be retained out of a progress or final payment as provided in these General Conditions.

5.3.8.5 The District may require the testing of materials by a competent testing laboratory of its selection or by other means. The cost of the material to be tested, delivered to the point of testing, shall be borne by the Contractor and the cost of the initial tests will be borne by the District. The Contractor shall pay all costs for subsequent tests where work or material fails to pass initial

tests. Any Work or material showing faults under test shall be corrected by the Contractor at its own expense.

5.3.9 UTILITIES. Contractor shall provide at its own cost all utilities, including water, which are necessary for performance of Work. Said utilities, including water, shall be from sources approved by the Engineer.

5.3.10 RIGHT-OF-WAY. The right-of-way for Work to be constructed under this Contract will be provided by the District. Right-of-way Agreements may be inspected at the office of the Engineer.

5.3.11 SANITATION. The Engineer may establish sanitary and police rules and regulations for all forces employed under this Contract and the Contractor shall be responsible for compliance therewith, and in the event of noncompliance, the Engineer may enforce them at the expense of the Contractor. The Contractor shall provide its own sanitary facilities unless permission to use District facilities is granted by the District in the Supplementary Requirements.

5.3.12 PRESERVATION OF MONUMENTS. The Contractor shall not disturb any monuments or stakes without permission of the Engineer, and Contractor shall bear the expense of resetting any monuments or stakes which may be disturbed without permission.

5.3.13 DATUM PLANE AND MEASUREMENTS. All distances shown on the plans, profiles or other drawings are in feet and decimals of the foot or in feet and inches. Depth or elevations are in feet and decimals of a foot, and are above (plus) or below (minus) the U.S. Coast and Geodetic Survey zero or mean lower low water as established for the Bay of San Diego, unless another datum plane is indicated on the drawings.

5.3.14 SETTING STAKES. The Contractor shall lay out its work from District established base lines and bench marks indicated on the drawings and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. The Contractor shall be responsible for executing the Work to the lines and grades that may be established or indicated by the District. The Contractor shall be responsible for

maintaining and preserving all stakes and other marks established by the District until authorized to remove them. If such marks are destroyed by the Contractor or its agents before their removal is authorized, the District may replace them and deduct the expense of the replacement from any amount due or to become due to the Contractor.

5.3.15 TRENCHES OR OTHER EXCAVATIONS AND HAZARDOUS OR CONTAMINATED CONDITIONS

5.3.15.1 In Contracts exceeding \$25,000.00, the Contractor shall comply with Labor Code section 6705. In the event an excavation is five (5) or more feet in depth, the Contractor shall cause a competent person to be placed at the site of the Work for the purposes of observing backfilling operations in those cases where the backfill operator is unable to see into the excavation. The Contractor shall make sufficient excavation to construct all of the Work shown on the drawings or specified herein and shall abide by the Construction Safety Orders issued by the Division of Industrial Safety of the State of California. The Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection. If such plan varies from the shoring system standards established by the Division of Industrial Safety, the plan shall be prepared by a registered civil engineer or structural engineer. No shoring, sloping or protective system less effective than that required by the Division of Industrial Safety shall be used. All permits for excavating in excess of five (5) feet shall be obtained by the Contractor and shall be the Contractor's sole responsibility.

5.3.15.2 If this Contract involves digging trenches or other excavations below the surface no matter the depth, the Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing of any:

5.3.15.2.1 Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law.

5.3.15.2.2 Subsurface or latent physical conditions at the site differing from those indicated.

5.3.15.2.3 Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

5.3.15.3 The District shall promptly investigate the conditions, and if it finds that the conditions materially differ, or involve hazardous waste and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work, may issue a Contract Change Order under the procedures described in this Contract.

5.3.15.4 In the event that a dispute arises between the District and the Contractor whether the conditions materially differ, involve hazardous waste, or cause a decrease or increase in the Contractor's cost of or time required for performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests.

5.3.15.5 In the event conditions involve hazardous waste or contaminated material or other materials which may require remediation or special handling, the Contractor shall not move or disturb the materials or objects and shall immediately notify the Engineer both verbally and in writing. The District may take all action necessary to remediate or handle such materials, including, but not limited to, hiring a third party Contractor to perform the remediation or other work or issue a Contract Change Order to the Contractor.

5.3.16 EXISTING UTILITIES, IMPROVEMENTS AND OBSTRUCTIONS

5.3.16.1 Whenever any pole, structure, culvert, conduit, cable or other obstruction, either above or below ground surface within the area to be utilized by the Contractor in the performance of the Work is, or may be affected by the Contractor's operations, the Contractor shall preserve the same intact or it shall make such arrangements with the owner of same for its protection, support, alteration or removal and reinstallation, as may be required by the conditions encountered.

5.3.16.2 The Contractor shall notify in advance and cooperate with each owner of poles, structures, pipes, culverts, conduits, cables or other improvements that may be encountered or affected in any way by the Work under this Contract. It shall be the responsibility of the Contractor to verify the existence and exact location of existing utilities prior to construction.

5.3.16.3 Where water mains or services are altered or removed and reinstalled either to avoid interference with the Work under this Contract or for the convenience of the Contractor, such alteration, removal and reinstallation shall be performed in accordance with the rules and regulations of the owner, and the cost shall be borne as outlined in the following paragraphs.

5.3.16.4 It shall be the Contractor's responsibility at its sole expense to verify the existence and the exact location of existing underground utilities prior to excavation. Contractor shall pothole to determine depths and exact location of utilities prior to excavation in the area. The Contractor shall uncover sewer laterals, telephone and electric conduits, water mains and gas mains or any other major utility crossing and other high-risk underground facilities in advance of trenching operations sufficient to permit grade changes, should such changes be required. The cost of such work shall be included in the Bid for items of work necessitating such location.

5.3.16.5 Unless otherwise specifically provided in these Contract documents, all costs of protecting, potholing, supporting, altering, obliterating, removing, salvaging, reconstructing and reinstalling pipes, poles, structures, trees and other obstructions, shall be borne by the Contractor, including facilities which are altered or removed and reinstalled for the Contractor's convenience, except:

5.3.16.5.1 Unless otherwise provided, where a subsurface obstruction is encountered which is not shown on the Contract drawings or mentioned in the specifications.

5.3.16.5.2 Where it is necessary to remove or alter obstructions which are maintained under a District franchise, ordinance, Contract, permit or other agreement by the terms of which the obstruction is required to be moved or adjusted.

5.3.16.5.3 The District shall not be required to

indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Work Site can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the construction; provided, however, nothing herein shall relieve the District from identifying main or trunklines in the plans and specifications. The District shall compensate the Contractor for the costs of locating, repairing damage not due to the failure of the contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the plans and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work.

5.3.16.6 Except as otherwise expressly provided herein, the Contractor shall not be entitled to any additional compensation due to the presence of, or interference, delays or expense caused by obstructions, or the removal and/or replacement of obstructions where such obstructions could have been reasonably anticipated and such removal and/or replacement is required for proper completion of the Work. The Contractor shall not be assessed liquidated damages as provided by Subsection 5.8.3 for delay in the completion of the Work, when such delay was caused by the failure of the District or the owner of the utility facilities as provided by Government Code section 4215.

5.3.16.7 Where the Work requires the removal of or damage to existing pavement, sidewalks, curbs, lawns, shrubbery, trees, hedges, gardens, drives, walls, fences, buildings or other improvements, the Contractor shall take precautions to limit the removal or damage to the least practicable amount; and it shall at its own cost replace or restore said improvements to as near its original location and condition as is reasonably possible, except as otherwise provided. Great care shall be exercised in placing and compacting backfill in areas where improvements are to be placed upon said backfill.

5.3.16.8 Trees shall not be removed without the express permission of the Engineer or as shown in the Contract documents. Damage to or excessive trimming of trees in the street or right-of-way shall be avoided. If directed by the District, the Contractor shall replace with like kind any tree removed and/or overly trimmed in violation of this provision.

5.3.17 ROYALTIES AND PATENTS. The Contractor shall hold and save the District, its officers, agents, servants and employees harmless from liability of any nature or kind, or any damages, claims for damages, costs or expenses in law or equity, including attorneys' fees therefor, for or on account of any infringement of the patent rights, copyright or trademark of any person of any patented invention, article or appliance included in the material or supplies furnished under this Contract, and should the Contractor, its agents, servants, employees, or any of them, be enjoined from furnishing or using any invention, article, material or appliance supplied or required to be supplied or used under this Contract, the Contractor shall promptly substitute other articles, materials or appliances in lieu thereof, of equal efficiency, quality, finish, suitability and market value and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitutions, to have supplied and to retain and use any such invention, article, material or appliance as may by this Contract be required to be supplied, then the Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary to enable the District, its officer, agents, servants and employees, or any of them, to use such invention, article, material or appliance without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should the Contractor neglect or refuse promptly to make the substitution hereinbefore required, or to pay such royalties and secure such licenses as may be necessary and requisite for the purpose aforesaid, then in that event, the Engineer shall have the right to make such substitution, or the District, its agents, officers, servants and employees, may pay such royalties and secure such licenses and charge the cost thereof against any money due the Contractor from the District or recover the amount thereof from its sureties, notwithstanding final payment under this Contract may have been made. The provisions of this paragraph do not apply to articles which the Contractor is required to manufacture or furnish in accordance with detail drawings furnished by the District, its officers, agents, servants, employees or any of them included in this Contract. The provisions of this paragraph shall apply, however, where such drawings and the specifications cover only the type of device without restrictions as to details.

5.3.18 INDEMNIFICATION

5.3.18.1 To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the District, its agents, officers and employees, from and against any and all claims, damages, liability, judgments, demands, losses and expenses, including, but not limited to, attorneys' fees and costs including consultants' fees, for damage to property of any kind whatsoever including the loss of use thereof, and to whomever belonging, including Contractor, and/or for injury to or death of any person or persons, including employees for Contractor or subcontractor of any tier. Such indemnity shall apply to any conduct arising out of or in any way connected with the acts or omissions, willful misconduct or negligent conduct, whether active or passive, of Contractor, Contractor's agents or employees including subcontractors and their agents and employees, arising and/or relating directly or indirectly out of the obligations undertaken in this Contract, including the performance of Work under the Contract by Contractor, Contractor's agents or employees. This indemnity shall further apply to including subcontractors and their agents or employees, products installed and/or furnished on the Project by Contractor, Contractor's agents or employees including subcontractors and their agents, or arising from the use of the premises, facilities or services of the District, its agents, officers or employees, save and except claims or liability arising through the sole negligence, willful misconduct or active negligence (as provided by California Civil Code section 2782) of District, its agents, officers or employees, and Contractor shall reimburse District for any expenditures, including reasonable attorneys' fees and costs, which District may incur by reason of such indemnified matters and, if requested by District, Contractor shall defend any such lawsuit, matter or proceeding at the sole cost and expense of the Contractor. Failure to defend immediately may, at the sole discretion of the District, be grounds for termination or suspension by the District of the Contract as provided herein. Such indemnity shall also extend to claims, damages, liabilities, judgments, demands, losses and expenses or injuries occurring after completion of the Project as well as during the Work's progress.

5.3.18.2 In addition to the foregoing, the Contractor shall defend, indemnify and hold harmless the District, its agents, officers and employees, from and against any and all claims,

damages, liability, judgments, demands, losses and expenses, including but not limited to, attorneys' fees and costs (including consultants' fees), to which the District may be subject as a result of the non-completion of the Contract which negatively affects separate contractors on adjoining or overlapping work. The obligations set forth in this subparagraph and subparagraph 5.3.18.1, above, are not limited by, but are in addition to, the performance bonds required by this Contract.

5.3.18.3 In the event Contractor or Contractor's insurance carrier fails or refuses to accept the tender of defense of a claim by the District or any other such claim exceeds the limits of the Contractor's insurance limits, District shall have the right to estimate the amount of damage to third parties to which the District may be liable and any estimated amounts for attorneys' fees and costs to defend itself, and to cause the Contractor to pay same, and the amount due the Contractor under this Contract, or the whole or so much of the money due or to become due to the Contractor under this Contract as may be considered necessary by the District, shall be retained by the District until such suit or claim for damages, or other remedy shall have been settled or otherwise disposed of and satisfactory evidence to that effect is furnished the District. The District's election to exercise or not exercise rights pursuant to this provision shall be in addition to any common law rights which the District may possess.

5.3.19 ASSIGNMENT OF CONTRACT

5.3.19.1 The Contractor shall not assign this Contract or any rights or duties herein without the prior written consent of both the District and the surety in each instance; provided, however, that the Contractor may, with the consent of District and surety, make an assignment of any sums of money due or to become due under this Contract as collateral for financial purposes in connection with the Contract.

5.3.19.2 Any such assignment shall contain a clause in the instrument of assignment to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to all liens or claims of any kind whatsoever authorized by law, whether prior or subsequent, for services rendered or materials supplied for the performance of the Work called for in the Contract in favor of all persons, firms or corporations

rendering such services or supplying such materials.

5.3.20 ANTITRUST CLAIMS

5.3.20.1 These provisions are included in this Contract as required by California law:

5.3.20.1.1 In entering into a public works Contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the District all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgement by the parties.

5.3.20.1.2 In submitting a bid to the District, the Bidder offers and agrees that if the bid is accepted, it will assign to the District all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials or services by the Bidder for sale to the District pursuant to the bid. Such assignment shall be made and become effective at the time the District tenders final payment to the Bidders, without further acknowledgement by the parties.

5.3.21 BANKRUPTCY OF CONTRACTOR. The Contractor shall immediately notify the District of its own or of any of its subcontractor's filing for bankruptcy protection and provide the District with a copy of the Bankruptcy Case Number and title of the Court in which the petition for bankruptcy was filed. Filing for bankruptcy protection shall be a default of this Contract and grounds for termination as provided by Article 5.11.

5.3.22 CONTACT WITH MEDIA. Contractor shall refer all media inquiries to the District's Department of Public Relations at (619) 686-6222 and shall not speak to media personnel about

District projects without written permission from the District. No media personnel shall be allowed on the Work Site without written permission of the District.

5.3.23 CLEANING UP

5.3.23.1 At all times, maintain the Work Site in a neat and orderly condition. Daily, and more often if necessary, inspect the site and pick up all scrap, debris and waste material. Remove items to the place designated for their storage. Combustible waste shall be removed from the site. Flammable waste shall be kept in sealed metal containers until removed from the site. Weekly, and more often if necessary, remove from the site and dispose of all collected scrap, debris, and waste material.

5.3.23.2 Abate nuisance dust by cleaning, sweeping, and sprinkling with water or other means as necessary.

5.3.23.3 Weekly, and more often if necessary, inspect arrangements of materials stored on the site, restack, tidy, or otherwise service arrangements to meet the requirements specified above.

5.3.23.4 Keep the streets in and adjacent to the construction area clean at all times. When required by the plans or specifications, the contractor shall operate a self-loading motor sweeper at least once each day for the purpose of keeping paved areas acceptably clean.

5.3.23.4 Contractor shall be responsible for Health and Welfare of employees, trades, and the public as relates to maintaining a clean and orderly site.

ARTICLE 5.4 – SUBCONTRACTORS

5.4.1 REQUIREMENTS AT BID

5.4.1.1 List of subcontractors:

5.4.1.1.1 Every Bidder shall comply with the Subletting and Subcontracting Fair Practice Act, Public Contract Code sections 4100, et seq., and shall set forth in its bid:

5.4.1.1.1.1 The name, Contractor's state license number, and location (city and state) of the place of business for each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the

Work or improvement to be performed hereunder or who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings in the plans and specifications, in an amount in excess of one-half of one percent (1%) of the Contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1%) of the Contractor's total bid or Ten Thousand Dollars (\$10,000.00), whichever is greater.

5.4.1.1.1.2 A description of the Work to be performed by each subcontractor. The Contractor shall list only one subcontractor for each portion of the Work as is defined by the Contractor in its bid.

5.4.1.1.2 If Contractor fails to specify a subcontractor or specifies more than one subcontractor for the same portion of Work to be performed under this Contract, Contractor agrees that it is fully qualified to perform that portion itself and that Contractor shall perform that portion itself.

5.4.2 SUBCONTRACTUAL RELATIONS

5.4.2.1 The Contractor shall require each subcontractor, to the extent of the Work to be performed by the subcontractor, to be bound to the Contractor by terms of the Contract documents and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Contract documents, assume toward the District. Each subcontract agreement shall preserve and protect the rights of the District under the Contract documents with respect to the Work to be performed by the subcontractor so that subcontracting will not prejudice such rights. Where appropriate, the Contractor shall require each subcontractor to enter into similar agreements with sub-subcontractors. Prior to the execution of the subcontract agreement, the Contractor shall make available to each proposed subcontractor, copies of the Contract documents to which the subcontractor will be bound, and, upon written request of the subcontractor, identify the terms and conditions of the proposed subcontract agreement which may be at variance with the Contract documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective sub-subcontractors.

5.4.2.2 Contractor may be required to furnish the District with information as to the technical experience, financial status, location of shop, factory or plant and adequacy of the shop, factory, plant or equipment of each subcontractor identified in its proposal. The Contractor, upon the written request of the District, shall provide a copy of any subcontract entered into by the Contractor to the District for its review. The Contractor shall not begin Work until the information required herein has been provided to the District.

5.4.2.3 The District will promptly notify the Contractor in writing if the District, after due investigation, has a reasonable objection to any such proposed subcontractor.

5.4.2.4 The Contractor shall not Contract with a proposed person or entity to whom the District has made a reasonable and timely objection. If the District has a reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the District has no reasonable objection, such substitution shall be at no cost to District.

5.4.2.5 Contractor shall include in all subcontracts and in all purchase orders a clause specifically binding the respective subcontractor and supplier to the dispute resolution provisions of these Contract documents.

ARTICLE 5.5 – PROTECTION OF PERSONS AND PROPERTY

5.5.1 SAFETY PRECAUTIONS AND PROGRAMS

5.5.1.1 The Contractor alone shall be responsible for the safety, efficiency and adequacy of its plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work.

5.5.1.2 The Contractor shall give notices and comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety

and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utilities when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.

5.5.1.3 Material usage shall be accomplished with strict adherence to California Division of Industrial Safety, or other governing regulations, and all manufacturer's warning and application instructions listed on the Material Safety Data Sheet and on the product container label.

5.5.1.4 Payment for performing all work necessary to provide safety measures shall be included in the prices bid for other items of work except where separate bid items for excavation safety are provided.

5.5.1.5 The Contractor shall be required to perform any Work relating to the hazardous materials if so directed by the District.

5.5.2 ACCIDENT PREVENTION, BARRICADES, LIGHTS, SAFETY MEASURES AND DETOURS

5.5.2.1 Contractor shall provide for the protection of persons, employees, the Work and materials and equipment to be incorporated into the Work, and other property at the Work Site and adjacent thereto and shall observe the safety provisions of applicable laws, building and construction codes and safety regulations. When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

5.5.2.2 The Contractor shall take all necessary measures to protect the Work and prevent accidents during the construction. It shall provide and maintain sufficient night-lights, barricades, guards, temporary sidewalks, temporary bridges, danger signals, watchmen and necessary appliances and safeguards to properly safeguard life and property. It shall also protect all excavation, equipment and materials with barricades and danger signals so that the public will not be endangered. It shall maintain temporary detours, if required by the Engineer, and keep same in usable condition. The Contractor shall be particularly careful in providing barricades and signalmen on any of the

Work that is constructed along or in highways or streets.

5.5.2.3 The Contractor shall designate a responsible member of the Contractor's organization as the Safety Representative whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the District.

5.5.2.4 The Contractor will be required to conduct its work so as to cause a minimum of inconvenience to District tenants holding valid permits or lease agreements. Safe entrances and exists shall be constructed and maintained for the use of such tenants at all times during construction and until final acceptance of the Work. The Contractor shall promptly provide necessary bridges across excavations for ingress and egress to places of business or residences and shall promptly remove surplus materials from the immediate vicinity of places of business.

5.5.2.5 Other portions of District property may be closed to traffic with the approval of the Engineer. Alternate cross streets shall be kept open at all times. Free access shall be provided at all times to all fire hydrants unless otherwise authorized by the Engineer.

5.5.3 EMERGENCIES. In an emergency affecting safety or protection of persons or property or the Work, the District may act without notice to the Contractor and the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss, and shall promptly as conditions permit notify the insurance carrier and the District of the nature of the emergency and related circumstances. Immediately thereafter, the Contractor shall prepare a written report setting forth in detail the action taken and describing in detail all circumstances and conditions which are related to such action.

5.5.4 CARE AND CUSTODY OF WORK/ LOSS AND DAMAGE

5.5.4.1 The Contractor shall be held responsible for, and be required to make good at its own expense, all damage to persons or property caused by Contractor or its subcontractors, agents or the employees of either of them, during the progress of the Work and until its final acceptance.

5.5.4.2 All loss or damage to the Work arising from any unforeseen difficulties which may be encountered in the progress of the Work or from any action of the elements, fire or acts of God, or from any act or omission by the Contractor or any agent or person employed by it, shall be sustained by the Contractor. There shall be no apportionment of any such loss or damage between the District and Contractor and the fact that periodic or other type payments may be made shall not make this Contract divisible and severable, the intent of the parties being that the Contract is entire, unqualified and absolute and must be performed no matter what the cost to the Contractor. Notwithstanding the foregoing, in the event any such loss or damage is proximately caused by an act of God as defined in Public Contract Code section 7105, Contractor shall repair or restore said loss or damage at its sole cost and expense to the extent of five percent (5%) of the full original Contract amount and perform and complete the entire Contract, provided, however, in the event such loss or damage from said cause exceeds said five percent (5%), District shall have the option to require Contractor to perform and complete the entire Contract and require the Contractor to pay at Contractor's sole cost and expense for all said loss or damage to the extent of five percent (5%) of the full Contract amount (the District to pay for the remainder of such loss or damage in accordance with Article 5.7), or the District may terminate the entire Contract. If the District exercises the option to terminate the entire Contract, Contractor shall be paid under the terms of the Contract for work actually performed prior to said loss or damage, less payments previously made, which shall constitute payment in full. Furthermore, in the event of such termination, Contractor shall be relieved from the obligation to repair or restore the loss or damage to the extent of five percent (5%) of said Contract amount and from the further obligation to perform and complete the Work.

5.5.4.3 The Contractor shall maintain the work during construction and until acceptance. This maintenance shall constitute continuous and effective work prosecuted as required with adequate equipment and forces to the end that all parts of the work be kept in satisfactory condition at all times. All costs of maintenance during construction and before final acceptance shall be included in the price bid and the Contractor will

not be paid additional amounts for such work, unless otherwise noted.

5.5.4.4 Particular attention shall be given to drainage, both permanent and temporary. The Contractor shall use all reasonable precautionary measures to avoid damage or loss that might result from accumulations and concentrations of drainage water, and material carried by such water and such drainage shall be diverted or removed when necessary to prevent damage to excavation, embankments, surfacing, structures, or property. Suitable measures shall be taken by the Contractor to prevent the erosion of soil in all construction areas where the existing ground cover has been removed. Contractor shall prevent storm and wastewater and storm debris from reaching the Work Site from any source to avoid damage to the Work. Contractor shall be responsible for any damage to person or property on or off the Work Site due to its operations, interrupting or diverting such storm or wastewater.

5.5.4.5 In the event the Contractor fails to maintain the Work Site as required by this Contract, the Engineer shall notify the Contractor of such failure. If the Contractor fails to remedy the unsatisfactory maintenance within 24 hours of receipt of the notice, the Engineer may immediately proceed with adequate forces and equipment to maintain the Project and the entire cost of such maintenance will be deducted from any monies due the Contractor.

ARTICLE 5.6 – INSURANCE AND BONDS

5.6.1 CONTRACTOR'S INSURANCE

5.6.1.1 No work shall be done under this Contract unless there is in effect insurance required under this section and the Supplementary Requirements and approved by the District; nor shall the Contractor allow any subcontractor to commence Work until all its insurance has been obtained and approved.

5.6.1.2 Types of Insurance: The Contractor shall maintain in full force and effect, for the period covered by the Contract, the following insurance:

5.6.1.2.1 The Contractor shall maintain or cause to be maintained adequate workers' compensation insurance in accordance with California Labor Code section 3700 to secure the payment of compensation to its employees and

employees of any subcontractor under it who may come within the protection of such workers' compensation laws of the State of California, and shall provide or cause to be provided employer's liability insurance for the benefit of its employees and the employees of any subcontractor under it not protected by such compensation laws.

5.6.1.2.2 The Contractor shall take out and shall furnish satisfactory proof, by certificate or otherwise, as may be required, that it has taken out "OCCURRENCE FORM" Commercial General Liability insurance, including completed operations and Contractual liability coverage, with coverage at least as broad as Insurance Services Office Commercial General Liability Form CG 0001, to protect said Contractor against loss from liability imposed by law from damages on account of bodily injury, including death resulting therefrom, suffered or alleged to have been suffered by any person or persons, other than employees, resulting directly or indirectly from the performance or execution of this Contract or any subcontract thereunder, and also to protect said Contractor against loss from liability imposed by law for damage to any property, caused directly or indirectly by the performance or execution of this Contract or any subcontract thereunder.

5.6.1.2.3 Contractor shall take out and furnish satisfactory proof, by certificate or otherwise, as may be required, that it has taken out Commercial Automobile Liability insurance covering accidents arising out of the use and operation of all owned, non-owned and hired automobiles and trucks at least as broad as Insurance Services Office Form CA 0001.

5.6.1.2.4 Where the Work includes a new structure or new structures and is not construction on an existing structure subject to loss or damage, the Contractor shall maintain or cause to be maintained Builder's Risk insurance on a complete value form sufficient to protect against such loss or damage in full until the Work is accepted by the District. Coverage shall be all risk of loss including coverage for theft or vandalism; the District shall be included as a named insured; the policy shall stipulate that losses will be adjusted with, and payable to, the District; and any deductible will be borne by Contractor.

5.6.1.3 All liability and property damage insurance shall be maintained by the Contractor

in full force and effect during the Contract Time unless otherwise set forth in the Supplementary Requirements. The amount of coverage of said insurance shall be not less than the following:

5.6.1.3.1 Commercial General Liability covering bodily injury and property damage with combined single limits of \$2,000,000.00 per occurrence and \$2,000,000 Project Specific Aggregate.

5.6.1.3.2 Business Auto Liability covering owned, non-owned and hired autos and trucks bodily injury and property damage with combined single limits of \$2,000,000.00.

5.6.1.4 All said commercial general liability insurance policies shall: (1) name, or be endorsed to name, the District, its officers, officials and employees as additional insureds and protect the District against all liabilities, costs, damages, expenses and provide for the legal defense of claims and attorneys' fees and the cost thereof, (2) state, or be endorsed to state that Contractor's insurance is primary and not excess or contributing to any insurance issued in the name of the District, and (3) contain a severability of interest or cross-liability clause. The required Workers' Compensation policy shall be endorsed with a waiver of subrogation clause for the Work under this contract.

5.6.1.5 All said policies of insurance shall have a non-cancellation clause providing that thirty (30) days' written notice shall be given to the District prior to such cancellation except for notice of cancellation for non-payment of premium which shall have a ten (10) day notice of cancellation. All such notices shall be delivered to the District's Construction Administration Department and all insurance companies must be satisfactory to the District.

5.6.1.6 The procuring of such required policies of insurance shall not be construed to limit Contractor's liability hereunder, nor Contractor's obligations under the indemnification provisions and requirements of this Contract.

5.6.1.7 Nothing herein contained shall be construed as limiting in any way the extent to which the Contractor may be held responsible for the payment of damage to persons or property resulting from its operations or the operations of any subcontractor under it.

5.6.1.8 Certificates evidencing all required

insurance and endorsements effecting coverage required by this clause shall be delivered to the Construction Administration Department prior to the signing of the Contract by the District and shall be in a form acceptable to the District.

5.6.1.9 The District reserves the right to require complete, certified copies of all required insurance policies at any time.

5.6.2 PERFORMANCE AND LABOR AND MATERIAL BONDS

5.6.2.1 The Contractor shall furnish within fourteen (14) calendar days after the Notice of Award of Contract along with an executed Contract the following bonds:

5.6.2.1.1 The Contractor shall furnish a labor and material bond in an amount not less than one hundred percent (100%) of the estimated Contract price, to be paid to the San Diego Unified Port District, conditioned upon the payment by the Contractor for all materials, services, supplies and transportation furnished in the performance of the Work contracted to be done by the terms of said Contract, and for any work or labor of any kind done thereon by an admitted surety, as defined in Code of Civil Procedure Section 995.210, authorized to do business as such in the State of California, possess an AM Best Rating of VII or better, be listed on the Federal Registry Circular 570. Bonds shall cover the Contractor's obligations during the guarantee and/or warranty periods as well as the construction period. Bonds shall comply with California Civil Code section 3248, subdivisions (b), (c) and (d), and shall be enforceable pursuant to California Civil Code sections 3249, 3250, 3251 and 3252. California Civil Code section 3248(a) shall not apply.

5.6.2.1.2 The Contractor shall also concurrently furnish a faithful performance bond in an amount not less than one hundred percent (100%) of the estimated Contract price, to be paid to the District, conditioned upon the faithful performance by the Contractor of all covenants and stipulations in the Contract by a surety acceptable to the District which is an admitted surety, as defined in Code of Civil Procedure Section 995.210, authorized to do business as such in the State of California, possess an AM Best Rating of VII or better, be listed on the Federal Registry Circular 570. Bonds shall cover the Contractor's obligations during the guarantee

and/or warranty periods as well as the construction period.

5.6.2.2 If, during the continuance of the Contract, any of the sureties, in the opinion of the Board, evidenced by resolution, are or become irresponsible, the Board may require additional sufficient sureties, which the Contractor shall furnish to the satisfaction of said Board, within ten (10) days after notice, and in default thereof, the Contract may be suspended by the Board evidenced by resolution, and the materials may be purchased or the Work completed as elsewhere provided in these specifications.

5.6.2.3 If the Contract sum is increased, the Contractor shall advise the surety of the increased amount and the performance bond and labor and materialmen's bond shall be increased accordingly.

ARTICLE 5.7 – CHANGES IN THE WORK

5.7.1 CHANGES AND EXTRA WORK

5.7.1.1 Changes are alterations made to the Contract after the bids are opened, which modify the character or increase or decrease the limits of the Work, such as but not limited to, those affecting design, materials, installation, construction, shapes, dimensions, quantities, locations or schedules. The District, before the final acceptance of the Work, may order changes in the Work and may order extra materials and extra work in connection with the performance of the Contract, and the Contractor shall promptly comply and diligently carry out such orders in accordance with the Contract documents. The District reserves the right to make changes which may increase, decrease or have no effect on the amount of Work to be done or the time duration in which the work is to be performed

5.7.1.2 A variation between estimated quantities in the bid schedule and actual quantities of work or material required to construct the Work as it is shown on the Contract documents as they exist at the time the bids are opened does not constitute a change or extra Work and does not require additional authorization and all quantities shall be paid for at the unit or lump sum prices established in the bid.

5.7.1.3 Changes in the Work and extensions of Contract Time by reason of the change shall not in any way release any guarantees/warranties

given by the Contractor pursuant to the provisions of the Contract, nor shall such changes in the Work relieve or release the sureties of bonds issued for the Work. The sureties in executing such bonds shall be deemed to have expressly agreed to any such change in the Work or increase in the Contract amount and to any extension of Contract Time.

5.7.2 FORM OF CHANGES. The Engineer shall have the authority to order changes in the work involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract documents. Such changes may be affected by written direction from the Engineer and shall be binding on the District and Contractor. The Contractor shall carry out such written orders promptly. Such written directions may be in the form of a response to a RFI, a written direction, a CCO, or in any other written form determined by the District. In the event the Contractor contends that a written direction will increase the Contract sum, it shall commence the noted Work and submit a Change Order Request, as provided in Section 5.7.3.2.4. If such Change Order Request (COR) is denied, the Contractor will not be entitled to additional compensation for Work performed pursuant to the written direction. A CCO can be of two types: A Bilateral Change that is agreed upon and signed by the District and the Contractor or a Unilateral Change that is not signed by the Contractor. All changes in the Work involving price and/or time must be authorized by CCO. Until such time as a bilateral change order is entered into concerning the District's written direction, the Contractor shall conduct the Work as Force Account Work as outlined in 5.7.3.3 and shall be subject to the same requirements found therein.

5.7.3 BILATERAL CHANGES

5.7.3.1 There are two types of Bilateral Changes: fixed price and force account.

5.7.3.2 Fixed Price Changes: If changes in design, workmanship, materials or time duration are of such a nature as to increase or decrease the cost of the Work, the price fixed in the Contract shall be increased or decreased by the amount as the Contractor and the District may agree upon as reasonable. Proper allowance for the increase or decrease in the cost of the Work shall be computed at the Contract rate, so far as possible. If the change involves an increase or

decrease in a unit price item, the increase or decrease shall be the changed quantity multiplied by the unit price.

5.7.3.2.1 No order for alteration, modification or extra work which shall increase or decrease the cost of the Work shall be invoiced or payable unless the resulting increase or decrease in price or Contract Time shall have been agreed upon in writing and the CCO signed by the Contractor and the District, or their agents and authorized representatives or, in the event of a Unilateral Change Order, signed by the District.

5.7.3.2.2 The Contractor, in its price proposals for changes in the Work that will increase the Contract amount, shall individually and specifically list its costs and use percentage markups as described hereinafter. The Contractor shall require its subcontractors to do the same, and the subcontractors' price proposals shall accompany the Contractor's price proposals.

5.7.3.2.3 The Contractor shall upon request of the District permit inspection of the original unaltered bid estimate, subcontract agreements and purchase orders relating to the change and documents substantiating all costs associated with the cost proposal.

5.7.3.2.4 The Contractor shall submit a Change Order Request ("COR") on Form 9, Appendix A, within fifteen (15) calendar days, or sooner if so requested based on schedule restrictions, upon receipt of a Request for Proposal ("RFP") or a written direction from the District. Any COR by the Contractor shall include a complete breakdown of costs of both credits and extras itemizing materials, labor, taxes, overhead and profit on a form approved by the District. Subcontract Work shall be so indicated and written proposals for subcontractors shall be included with similar breakdowns furnished. Following submissions of cost breakdowns, the Contractor shall meet with the District if requested to discuss all aspects of the scope, costs, scheduling and construction methods, to ensure agreement.

5.7.3.2.5 If the Contractor fails to timely submit the COR, the District has the right to order the Contractor in writing to commence the Work immediately on a Force Account Change Order basis or a Unilateral Change Order to the Contract price in accordance with the District's

estimate of cost. If the change is issued based on the District's estimate, the Contractor waives its right to dispute the action unless within fifteen (15) calendar days following completion of the specified added or deleted Work, the Contractor presents written proof that the District's estimate was in error.

5.7.3.3 Force Account Change Order

5.7.3.3.1 In the discretion of the District for any reason, a Force Account Change Order may fix a maximum price which shall not be exceeded unless authorized by the District in writing, and subject to such limitation, such alteration, modification or extra shall be paid for at the actual necessary cost as determined by the sum of the following items in Subparagraphs 5.7.3.3.1.1 through 5.7.3.3.1.6, inclusive, and as further defined as Subsection 5.7.5:

5.7.3.3.1.1 Prevailing wage or actual rate paid to workers.

5.7.3.3.1.2 Markup for labor burden, including premium on compensation insurance and charges for social security taxes and other taxes pertaining to labor and the proportionate cost of premiums of public liability, property damage and other insurance applicable to the extra work involved and required by the Contract for off site work and auto only.

5.7.3.3.1.3 Materials, including sales tax and other applicable taxes pertaining to materials.

5.7.3.3.1.4 Plant and equipment rental, at rates previously agreed to or required by the Contract. No charge for the cost of repair to plant or equipment will be allowed and equipment items having a capital cost of under Five Hundred Dollars (\$500.00) are considered small tools and are included in the stipulated markup percentages for overhead and profit.

5.7.3.3.1.5 Markup for overhead and profit is limited in these General Conditions. Special attention is directed to 5.7.5.1.1, in these General Conditions.

5.7.3.3.1.6 The proportionate actual costs for bonds required in accordance with these General Conditions.

5.7.3.3.2 The District reserves the right to furnish such materials as it may deem expedient and no

allowance will be made for profit thereon.

5.7.3.3.3 Whenever any Force Account Change Order Work is in progress, the amount, but not the price, of all extra Work performed shall be entered by the Contractor upon report sheets furnished by the Engineer (see Form 1, "Time and Materials Report," Appendix A) and signed by both parties on the date the particular Work is performed, which daily reports shall be the true record of extra Work done. No claim for compensation for such extra Work will be allowed unless such report shall have been made by the Contractor daily and countersigned by the District's representative. It is the Contractor's responsibility to obtain the District representative's countersignature.

5.7.3.3.4 In the event the Contractor and the District reach a negotiated, signed agreement while the work is proceeding under a Force Account, the Contractor's signed written daily reports shall be discontinued and all previously signed daily reports shall become invalid for purposes of payment.

5.7.3.3.5 The Contractor shall bear all of its costs of administering Force Account Change Orders. These costs are considered included within the markup for overhead and profit referenced above.

5.7.3.3.6 The Contractor shall at all times during the performance of the contract prosecute the Force Account Change Order work with such forces and equipment as, in the opinion of the District, are appropriate to complete the different portions of the work in the order required and within the specified time and to secure a satisfactory quality of work.

5.7.4 UNILATERAL CHANGE ORDERS. If the District and the Contractor fail to agree as to a Bilateral Change Order, if adequate cost information is not provided as required, or for any other reason whatsoever in the discretion of the District, the Contractor shall proceed immediately with the changed Work upon receipt of a Unilateral Change Order or written direction from the District. If the Contractor disputes the Unilateral Change Order or written direction, the Contractor may make a claim as required by this Contract but shall be obligated to conduct the Work addressed by the Unilateral Change Order or written direction.

5.7.5 PRICING FOR ALL TYPES OF

CHANGES

5.7.5.1 The following limitations shall apply in the calculation of the costs of changes in all changed work:

5.7.5.1.1 Markups for Overhead and Profit:

5.7.5.1.1.1 For Work performed by the Contractor shall equal a maximum of fifteen percent (15%) of the direct cost (as defined herein) unless Contractor's overhead is stipulated as a daily rate in the bid schedule, in that event, the bid daily rate shall apply.

5.7.5.1.1.2 For Work performed by a subcontractor of any tier shall equal a maximum of fifteen percent (15%) of its direct costs (as defined herein). Both the Contractor and subcontractor shall receive a five percent (5%) markup on the total cost of their respective subcontractors.

5.7.5.1.1.3 In no case shall the markup exceed twenty-five percent (25%) of the direct cost as described in Subparagraphs 5.7.5.1.1.1 and 5.7.5.1.1.2, above, regardless of the number of Contract tiers actually existing.

5.7.5.1.1.4 For deleted Work of any Contract tier described in 5.7.5.1.1.1 through 5.7.5.1.1.3 above, the credit markup shall be ten percent (10%). For deleted Work, neither the Contractor nor subcontractor shall be allowed a positive markup on their respective subcontractor to administer the credit Change Order.

5.7.5.1.1.5 Where the total direct cost of a Change Order exceeds Fifty Thousand Dollars (\$50,000.00), the markup for the affected Contract tiers, as provided in Subparagraphs 5.7.1.1 and 5.7.1.2 herein shall be reduced from fifteen percent (15%) to ten percent (10%). All other markup percentages shall remain unchanged.

5.7.5.1.1.6 The markup for overhead and profit for the Contractor and subcontractors of any tier shall be considered to include insurance required by the Contract of the Contractor other than mentioned herein, field and office supervisors, salaries for project managers, engineers, superintendent, timekeeper, storekeeper and secretaries, assistants, inspectors, watchmen, use of small tools, consumables, incidental job burdens and general field and home office

expenses, including the preparation of Change Orders, and no separate allowance will be made thereof. Payment for markup, which includes overhead and profit, shall constitute satisfaction of all costs incurred as a result of performing the Change Order work. Incidental job burdens include, but are not limited to, office equipment and supplies, computer services, small tools, reproduction costs and services, temporary toilets, telephone, facsimile, office personnel and conformance to regulatory requirements. Items such as, but necessarily limited to, review and coordination, estimating, recording, detailing, engineering and expediting relative to Contract changes are associated with field and office supervision and are considered to be included in the Contractor's markup percentages for profit and overhead.

5.7.5.1.1.7 The mark-up for overhead and profit for the Contractor and subcontractors of any tier shall not include the actual cost of scheduling services required for the preparation of the time impact evaluation resulting from excusable and compensable delays. The fully burdened rate for this work shall not exceed one hundred dollars (\$100) per hour.

5.7.5.1.2 Direct costs:

5.7.5.1.2.1 Direct costs for the purposes of markup shall include basic rates for labor and the actual cost to the Contractor for the equipment and materials directly required for the performance for the changed Work. Direct costs shall not include any employer payments to or on behalf of the workers for health, welfare, vacation and similar purposes.

5.7.5.1.2.2 Unless otherwise agreed in writing, labor rates will not be recognized nor owing when in excess of those prevailing in the locality at time the Work is being performed. Premium and/or overtime rates shall not be paid by the District unless specifically authorized or directed by the District in writing. The costs for all supervision, including general superintendents and foremen, shall be included in the markups established by the Contract. The only exception to this may be working foreman who performed actual manual labor or superintendents in excess of Contract Work, in the discretion of the Engineer. No labor charges will be accepted for engineering or proposal preparation. These costs shall be included in the markups established by the

Contract. If not previously submitted, a breakdown of the payroll rates for each trade shall be furnished for all Change Orders within fifteen (15) days after issuance of a notification to commence with the change order work, including the base rate and labor burden, including but not limited to benefits, payroll taxes and insurance.

5.7.5.1.2.3 Equipment Costs: The allowance for equipment costs (both rental as well as Contractor-owned equipment) shall not exceed that as recommended by the rental rates established by the Rental Rate Blue Book.

5.7.5.1.2.3.1 In computing the hourly rental of equipment, any time less than thirty (30) minutes shall be considered one-half (1/2) hour. No payment will be made for time while equipment is inoperative due to breakdown or for non-workdays. Whenever equipment is ordered by the Engineer to be held on the Work on a standby basis, or when the District is obligated for other reasons to pay for idle equipment, the rate will be seventy five percent (75%) of the rental rate with no allowance for operating costs. Standby or idle time cannot exceed eight (8) hours per day and will not be allowed for Saturday, Sunday, or holidays. Non-operating time for equipment required for account work is not considered standby or idle time if the equipment is operated and used at least once during each working day. In addition, the rental time shall not include the time required to move the equipment to the Work Site for rental of such equipment and to return it to the source. No mobilization or demobilization will be allowed for equipment already on site. If such equipment is not moved by its own power, then loading and transportation costs will be paid in lieu of rental time thereof. However, neither moving time nor loading and transportation costs will be paid if the equipment is used on the project in any other way than upon the changed Work.

5.7.5.1.2.3.2 Individual pieces of equipment having a replacement value of Five Hundred Dollars (\$500.00) or less shall be considered to be small tools or small equipment and no payment will be made thereof. Small tools are part of the Contractor's markup.

5.7.5.1.2.3.3 The amount to be paid to the Contractor for the use of the equipment as set forth above shall constitute full compensation to the Contractor for the cost of fuel, power, oil, lubricants, supplies, small tools, small equipment, necessary attachments, repairs and maintenance

of any kind, depreciation, storage insurance, labor (except for equipment operators) and any and all costs to the Contractor incidental to the use of the equipment.

5.7.5.1.2.3.4 The District shall only compensate the Contractor for equipment that is properly operated and appropriate for the changed Work.

5.7.5.1.3 Taxes and Insurance:

5.7.5.1.3.1 Federal excise tax shall not be included.

5.7.5.1.3.2 State and City sales taxes and payroll taxes and insurance for auto and off-site only shall be shown separately and will be allowed on extras and shall be credited on credits. No markup for overhead and profit will be allowed on taxes and insurance.

5.7.5.1.4 Bond Premiums. The actual rate of bond premiums paid on the total cost of the Change Order will be allowed. No markup for overhead and profit will be allowed on bond premiums.

5.7.5.1.5 Records.

5.7.5.1.5.1 The Contractor shall maintain its records in such a manner as to provide a clear distinction between the direct costs of extra work and the cost of the original Contract Work. This requirement pertains to CORs, Contract Change Orders and Work the Contractor considers to be potential Change Orders.

5.7.5.1.5.2 The Contractor shall furnish within seven (7) days after issuance of Notice to Proceed a certified statement and detailed calculations from its accountant establishing the job site and pro rata home office overhead rates for itself and its major subcontractors, as determined by the District. Such shall be updated quarterly.

No oral instruction of any person whomsoever shall in any manner or degree modify or otherwise affect the terms of this Contract.

5.7.6 AUDIT

5.7.6.1 The District shall have the right to designate its own employee representative(s) or its contracted representatives with a certified public accounting firm who shall have the right to

audit the Contractor's accounting procedures and internal controls of the Contractor's financial systems and to examine any cost, revenue, payment, claim or other records or supporting documentation resulting from any items set forth in the Contract documents including any insurance documents required to complete the Alternate Bid Schedule - Insurance. Any such audit(s) shall be undertaken by the District or its representative(s) after notice and at reasonable times and in conformance with generally accepted auditing standards. The Contractor agrees to fully cooperate with any such auditor(s) and shall make office and support facilities available to the District's representative(s) as may be reasonably necessary to complete any such audit(s) and inspections.

5.7.6.2 This right to audit shall extend during the length of the Contract and for a period of three (3) years or longer, if required by law, following the date of final payment. The Contractor agrees to retain all necessary records/documentation for the entire length of this audit period.

5.7.6.3 The Contractor will be notified in writing of any exception taken as a result of any audit. Any adjustments and/or payments which must be made as a result of any such audit or inspection of the Contractor's invoices and/or records shall be made within thirty (30) days from presentation of the District's findings to the Contractor. If the Contractor fails to make such payment, the Contractor agrees to pay interest, accruing monthly, at the rate of ten percent (10%) per annum. Interest will be computed from the date of written notification of exception(s) to the date the Contractor reimburses the District for any exception(s).

5.7.6.4 If an audit inspection or examination discloses overcharges (of any nature) by the Contractor to the District in excess of one percent (1%) of the value of that portion of the Contract that was audited, the actual cost of the audit shall be reimbursed to the District, in addition to any other remedies allowed by law.

5.7.6.5 Subcontractor Audit Clause. The Contractor shall include a clause in its agreement with subcontractors reserving the right for audits to be performed by its representatives from or agents of the District, who shall have the right to audit the accounting procedures and internal controls of the financial systems and to examine any cost, revenue, payment, claim, other records

or supporting documentation resulting from any items set forth in its agreement including any insurance documents required to complete the Alternate Bid Schedule - Insurance. This right shall extend during the length of this Contract and for a period of three (3) years or longer if required by law, following the date of final payment to the Contractor. The Contractor shall require its subcontractors to agree in writing to retain all necessary records/documentation for the entire length of this audit period.

ARTICLE 5.8 – TIME

5.8.1 PROGRESS AND COMPLETION

5.8.1.1 Unless otherwise specified, the Contractor shall commence the Work on or before seven (7) calendar days from the date of issuance of the Notice to Proceed or the date specified within the Notice to Proceed (the "Notice to Proceed Date") and shall diligently prosecute the Work to its completion. A Notice of Completion shall be recorded for the Work, but the District's failure to do so, timely or otherwise, shall not be raised as a defense to the untimely assertion of any rights by Contractor, its subcontractors or suppliers of any tier.

5.8.1.2 The continuous prosecution of the Work by the Contractor shall be subject only to the delays defined in this Contract. The start of Work shall include attendance at pre-construction conferences, preparation and submittal of submittals, equipment lists, and schedule of values, schedules, requests for substitutions and other similar activities. Submittals shall be prepared in accordance with the Contract documents and shall be made in the time limits indicated. Except as specifically authorized by the District, no Work shall commence on site before the Notice to Proceed Date or after the Notice to Proceed Date but before all applicable Contract requirements have been satisfied. The Contract Time shall begin on the Notice to Proceed Date.

5.8.1.3 The Work shall be brought to completion, as determined by the District, in the manner provided in the Contract documents and in the number of calendar days set forth in the Supplementary Requirements (Contract Time).

5.8.1.4 The Contractor shall allow for the following review time periods: RFIs, seven (7) calendar days; submittals, 21 calendar days;

substitution requests, 45 calendar days.

5.8.1.5 Failure to reach completion as determined by the District within the Contract Time and in the manner required by the Contract documents shall subject the Contractor to liquidated damages as stipulated in the Supplementary Requirements and General Conditions unless extensions of time are granted in accordance with these General Conditions.

5.8.1.6 The Contractor shall at all times keep on the premises sufficient material and employ sufficient supervision and workers to prosecute the Work at a rate necessary to reach completion of the Work required within the Contract Time and in accordance with the initial Contract schedule. Work shall not start nor shall the Work be left in an incomplete state for an indeterminate period of time, while equipment and materials are in transit.

5.8.1.7 It shall be the responsibility of the Contractor to maintain its schedule so as not to delay the progress of the Work or the schedules of other contractors and workers who may be employed by the District on any Work in the vicinity of the Work to be done pursuant to this Contract, and it shall conduct its operations so as not to interfere with the Work of such contractors or workers. The Contractor is required by virtue of this Contract to cooperate in every way possible with other contractors or workers in order to complete the Work within the Contract Time. Except as otherwise provided, no additional compensation will be paid for such cooperation. If the Contractor delays the progress of the Work or the progress of other contractors or workers, it shall be the responsibility of the Contractor to take some or all of the steps outlined below to improve its progress. See Subsection 5.3.15.

5.8.1.8 If, in the opinion of the District, the Contractor falls behind with the Work or current update of the Contract schedule and is not entitled to an extension of time, the Contractor shall take some or all of the steps outlined below to improve its progress at no additional charge to the District, and shall submit operation plans to demonstrate the manner in which the desired rate of progress may be regained.

5.8.1.8.1 Increase construction personnel in such quantities and crafts as will substantially eliminate the backlog of Work and allow the Contractors to

complete the Work within the Contract Time.

5.8.1.8.2 Increase, when permitted, the number of working hours per shift, shifts per working day, working days per week or the amount of construction equipment or any combination of the foregoing, sufficient to substantially eliminate the backlog of Work.

5.8.1.8.3 Reschedule activities to achieve maximum practical concurrence of accomplishment of activities; and/or

5.8.1.8.4 Expedite delivery of materials and equipment.

5.8.1.9 Should the Contractor at any time during the progress of the Work, refuse, neglect or be unable for avoidable reasons to supply sufficient material, supervision or workers to prosecute the Work at a rate necessary to complete the Work within the Contract Time or in accordance with the currently accepted updated construction schedule, the District shall have the right to terminate the Contract or it may give the Contractor written notice, specifying the default and requiring its correction as provided in Subsection 5.2.2. If the Contractor does not comply with a notice or termination from the District within the time specified in the notice, the District shall have the right to provide the materials and workers to finish the Work and/or terminate the Contract. The expenses incurred by the District to complete such Work shall be deducted from any monies due or which may become due under the Contract and/or the construction fund for the Work. In the event the expenses incurred exceed the amounts due to the Contractor of the construction fund for the Work, the Contractor or its surety shall reimburse the District for any such shortage in funds.

5.8.1.10 The Contractor shall submit to the Engineer when the project is fifty percent (50%) complete, a list of proposed maintenance and instruction manuals and the scheduled dates of all required field instruction to be provided by the Contractor or the manufacturer's representatives. Copies of the maintenance and instruction manuals must be furnished to the Engineer at least two weeks prior to the scheduled dates of any required Contractor furnished field instructions or at least one month prior to project completion, if no Contractor-furnished field instructions are required.

5.8.2 LIQUIDATED DAMAGES

5.8.2.1 The Contractor and District agree that the date of beginning and the time for completion as specified in the Contract of the Work to be done hereunder are ESSENTIAL CONDITIONS of this Contract and that the District will suffer financial loss in the form of lost revenues, contract administration expenses (including project management and consultant's expenses), delay and/or loss of public use if the Work is not completed within the Contract Time; and it is further mutually understood and agreed that the Work embraced in this Contract shall be commenced on the Notice to Proceed date as defined by this Contract. The Contractor agrees that said Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion within the Contract Time. It is expressly understood and agreed by and between the Contractor and the District that the time for the completion of the Work is a reasonable time for its completion, taking into consideration the average climatic range prevailing in the locality.

5.8.2.2 If the Contractor shall neglect, fail or refuse to complete the Work within the Contract Time or any portion of the Work as indicated by Contract Time milestone, or any proper extension granted by the District, then the Contractor agrees, as a part consideration for the awarding of this Contract, to pay to the District the daily amount specified in the Supplementary Requirements and/or Technical Specifications of the Contract, not as a penalty but as liquidated damages for such breach of Contract, for each and every calendar day that the Contractor shall be in default after the Contract Completion Date or Contract Time milestone. Liquidated damages shall not be assessed when the delay is due to excusable causes beyond the control of and without the fault or negligence of the Contractor, including acts of the District, as defined in Subsection 5.8.3 below.

5.8.2.3 The liquidated damages amount is fixed and agreed upon by and between the Contractor and the District because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the District would in such event sustain, and the amount is agreed to be the amount of damages which the District would sustain and the amount shall be retained from time to time by the District from current periodical estimates. Contractor and the District also recognize the delays, expense and difficulties involved in the calculation and proof of the actual

loss suffered by the District if the Work is not completed on time. Accordingly, instead of requiring such proof, the District and Contractor agree that the amount of Liquidated Damages specified in Supplementary Requirements and/or Technical Specifications, which amount shall be presumed to be the damages suffered by the District resulting from the delay in completion of the Work. It is agreed that the amount of liquidated damages to be paid by the Contractor for failure to complete the Work within the Contract Time shall be in the daily amount as set forth in the Supplementary Requirements and/or Technical Specifications. The Contractor specifically agrees at the time of Contracting that the amount of liquidated damages is manifestly reasonable under the circumstances for this Work.

5.8.2.4 It is further agreed that time is of the essence of each and every portion of this Contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any Work, the new time limit fixed by such extension shall be of the essence of this Contract. Beneficial occupancy of the Work or partial utilization of the Work by the District prior to completion of the Work does not waive the Contract completion date for purposes of computing and assessing liquidated damages. In addition, any applicable warranty periods do not begin to accrue until completion and acceptance of the work by the District.

5.8.2.5 If specified in the Supplementary Requirements, the District may make a payment of extra compensation to the Contractor, as a bonus, for completion prior to the Contract completion date.

5.8.3 DELAYS AND EXTENSIONS OF TIME

5.8.3.1 Delays:

5.8.3.1.1 Excusable Delays:

5.8.3.1.1.1 Excusable delay is an interruption of the Work beyond the control of the Contractor and which interruption the Contractor could not have avoided by the exercise of care, prudence, foresight and diligence. A Contractor experiencing an excusable delay will be entitled to a Contract Time extension but will not be entitled to additional costs. Such delays include

and are limited to acts of God; acts of the public enemy; unreasonable or unusual adverse weather conditions, fires, floods, windstorms, tornadoes, wars, riots, insurrections, epidemics, quarantine restrictions, strikes, lock-outs, labor shortages caused by war or other Federal hindrances, fuel shortages, freight embargoes, accidents, delays caused by an injunction, judgment or other decree or order of a court of competent jurisdiction, priorities or privileges established for the manufacture, assembly or allotment of material by order, decree or otherwise of the United States or by any department, bureau, commission, committee, agent or administrator of any legally constituted public authority, the prevention of the Contractor from commencing or prosecuting the Work because of the acts of persons or entities not parties to this Contract, excepting the Contractor's subcontractors or agents or suppliers, and the inability to procure or the failure of public utility services. The duration of said excusable delays shall be limited to the extent that the commencement, prosecution and completion of the Work are delayed thereby, as determined by the Engineer.

5.8.3.1.1.2 The Engineer may provide by resolution for extensions of time for causes other than those stated in Subparagraph 5.8.3.1.1.1, which the Contractor could not have avoided by the exercise of care, prudence, foresight and diligence.

5.8.3.1.1.3 The Engineer may order the Contractor to suspend any Work because of climatic conditions. When delay is caused by an order given to suspend Work on account of climatic conditions, which in the opinion of the Engineer could have reasonably been foreseen, the Contractor will not be entitled to any extension of time or other compensation on account of such order.

5.8.3.1.1.4 Delays due to adverse weather conditions will not be considered for weather conditions that could have been reasonably anticipated. Rain day delays shown in Table 1 below are to be included in the contract time limits. The Contractor's schedule will be considered to have incorporated these anticipated rain day delays. Contract time extensions due to delays caused by excessive precipitation will only be considered if the delay caused by excessive precipitation can be shown to delay a task on the critical path; and

precipitation is greater than 0.10 inches per any one day; and the number of days for rain delays is more than the average number of rain days anticipated for any given month as defined in the following table.

Table 1

MONTH	AVERAGE RAIN DAYS
January	7
February	5
March	7
April	2
May	1
June	1
July	0
August	0
September	1
October	2
November	3
December	5

5.8.3.1.2 Inexcusable Delays: A Contractor experiencing an inexcusable delay will not be entitled to a time extension or additional costs. Inexcusable delays in the prosecution or completion of any work shall include:

5.8.3.1.2.1 All delays that could have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor; are caused by the Contractor or are directly attributable to the Contractor.

5.8.3.1.2.2 Delays in the prosecution of parts of the Work, which may in themselves be excusable but do not necessarily prevent or delay the prosecution of other parts of the Work, nor the completion of the whole Work within the Contract Time.

5.8.3.1.2.3 Delays arising from the interruptions occurring in the prosecution of the Work on account of the reasonable interference from other Contractors employed by the District, which do not impact the Contractor's critical path.

5.8.3.2 Notice of Delay. The Contractor shall promptly notify the District in writing of any anticipated delay in the prosecution of the Work, and, in any event, promptly upon the occurrence of the delay. Said notice shall constitute an application for an extension only if the notice requests such extension and sets forth the Contractor's estimate, if feasible, of the additional time required together with a full recital of the

cause of the delay relied upon. The District may take steps to prevent the occurrence or continuance of the delay and may determine to what extent the completion of the Work is delayed. The determination of the existence of any delay for which an extension of time will be granted will be based on whether such delay can be demonstrated by the Contractor to extend the Contractor's current critical path on the construction schedule or require the formulation of a new critical path. A critical path method schedule indicating the occurrence of delays along the critical path is the only method of demonstration that will be accepted by the District to document and claim delays. If notice of a delay is not submitted on or prior to seven (7) consecutive working days after the start of the occurrence of such a delay, the Contractor admits the occurrence had no effect on the length of its duration of Work, that no extension of time is necessary, and that no extension of time or extra compensation will be granted by the District or is due to the Contractor.

5.8.3.3 No damages for Delay. Except as otherwise provided by law or the provisions of these Contract documents, no monetary damages or compensation for any kind shall be paid the Contractor, or any subcontractor or any supplier because of delays which are not the responsibility of the District, which are reasonable under the circumstances involved and were within the contemplation of the parties. To the fullest extent permitted by law, the Contractor and all subcontractors and all suppliers waive all claims against the District, its consultants and their respective directors, officers, members, employees and authorized representatives for any loss or damage sustained by reason of delays in the Completion of the Work beyond the Contract Completion Date which are not the responsibility of the District, which delays are reasonable under the circumstances, and which delays were within the contemplation of the parties. However, an extension of time for the Completion of the work may be granted for a period equal to the period of delay, as defined in these General Conditions.

5.8.3.4 Extensions of Time.

5.8.3.4.1 Should the Contractor seek an extension of time for the Completion of the Work under these provisions, the Contractor must submit justification for the extension of the time requested and otherwise comply with all

provisions of these Contract documents with respect to requests for extension of time.

5.8.3.4.2 Neither this provision, nor any other provision of the Contract documents, is intended by the parties to be contrary to any express provision of law. The parties specifically agree, acknowledge and warrant that neither this provision, nor any other provision of the Contract documents, has for its objective, directly or indirectly, the exemption of the District, its consultants and their respective directors, officers, members, employees and authorized representatives, from responsibility for their own sole negligence, violation of the law or other willful injury to the person or property of another.

5.8.3.4.3 Warranties. In the event it is deemed necessary by the District to extend the time of completion of the Work, such extensions shall in no way release any guarantees/ warranties given by the Contractor pursuant to the provisions of the Contract documents, nor shall such extension of time relieve or release the sureties on the bonds executed pursuant to said provision. The sureties in executing such bonds shall be deemed to have expressly agreed to any such extension of time. The amount of time allowed in any extension of time shall be limited to the period of the delay as determined by the District. The granting of an extension of time because of delay shall in no way operate as a waiver on the part of the District of the right to collect damages or of any other right which the District is entitled.

ARTICLE 5.9 – PAYMENTS AND COMPLETION

5.9.1 PERIODIC PAYMENTS

5.9.1.1 Each month there shall be paid to the Contractor a sum equal to ninety-five percent (95%) of the value of the Work (based on the schedule of values) performed up to the last day of the previous calendar month, less the aggregate of the previous payments. The monthly payments shall be made on the basis of monthly Progress Estimates (See Form 5, Appendix A) that shall be submitted by the Contractor and approved by the Engineer. Quantities used in computing partial payments shall be considered as estimates only and shall be subject to revision in subsequent estimates. Work completed as estimated shall be an estimate only and no inaccuracy or error in said estimate shall operate to release the Contractor

or any surety from damages arising from such work or from the enforcement of each and every provision of this Contract and the District shall have the right subsequently to correct any error made in any Progress Estimate for payment. Materials delivered but not incorporated or installed in the Work will not be included in Progress Estimates and/or payments unless allowed by Supplementary Requirements and/or Technical Specifications. If a Progress Estimate received from the Contractor is undisputed and properly submitted, payment shall be made within thirty (30) days after received, and if not so paid, Public Contract Code section 20104.50 may apply. If, however, the Progress Estimate (or Payment Request as denoted in Section 20104.50) is determined not to be proper or correct, the District may at its option correct the Progress Estimate and pay the amended amount or return the Progress Estimate no later than seven (7) days after receipt, accompanied by a document setting forth in writing the reasons it is not proper. The number of days available to make payment without incurring interest shall be reduced by the number of days the District exceeds the seven (7) day return requirement. Improper or incorrect payment estimates include, but are not limited to: the amount invoiced is inconsistent with the Contract; the estimate or performance under the Contract is in dispute and the Contractor has failed to otherwise comply with the Contract requirements; the item or services have not been accepted; the quantity of items delivered is less than the quantity invoiced; the items or services do not meet the quality requirements of the Contract; proper backup documentation for changed work was not attached to the estimate.

5.9.1.2 Notwithstanding any other provision in this Contract, as provided in Public Contract Code section 22300 and subject to the requirements thereof, Contractor may substitute securities for monies withheld by the District to ensure proper performance under this Contract. The substitution of securities or the deposit of the amount retained shall be at the sole expense of and request of Contractor.

5.9.1.3 The Contractor shall pay each subcontractor, materialmen and/or supplier in the time periods required by law.

5.9.2 APPLICATIONS FOR PAYMENT (PROGRESS ESTIMATES)

5.9.2.1 In Contracts with a duration of sixty (60) days or longer, on or before the 15th day of each calendar month, the Contractor shall submit to the Engineer a Progress Estimate of the value of work done and materials used to the last day of the previous calendar month. Progress Estimates shall be made in the form of itemized invoices in duplicate on a form provided by the District (see Form 5, "Progress Estimate," Appendix A) and shall be submitted together with the data set forth below:

5.9.2.1.1 A detailed estimate of work completed to date including items of Work, unit price and total value of completed Work for each item of the proposal.

5.9.2.1.2 A recapitulation showing balance due current month as follows:

Basic Contract Work Completed to Date	xxx
Change Order Work Completed to Date	xxx
Gross Value of Work Completed to Date	xxx
Less 5% Retention	xxx
Gross Value to Date Less Retention	xxx
Less Previous payments	xxx
Balance Due This Estimate	xxx
Less Deductions (e.g., stop notices, liquidated damages	xxx

5.9.2.2 Contractor warrants that upon submittal of the Progress Estimate that all work for which previous Progress Estimates have been made and payments received from the District shall, to the best of the Contractor's knowledge, information and belief, be free and clear of claims, security interests or encumbrances in favor of the Contractor, subcontractors, material suppliers or other persons, or entities making a claim by reason of having provided labor, materials and equipment related to the Work and that all work for which payment is demanded has been performed in accordance with the Contract and that the amount claimed is due. With each Progress Estimate, Contractor shall certify that the as-built drawings have been updated and jointly reviewed with the District for the month that payment is requested. (see Form 3, "As-Built Drawing Certification Form", Appendix A)

5.9.2.3 Beginning with the second Progress Estimate, each Progress Estimate shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated

with prior Progress Estimates.

5.9.2.4 Contractor agrees to furnish, if and when required by District, receipts, vouchers, releases and/or waivers of claims for labor, material, equipment and services performed by Contractor and any and all subcontractors performing Work or furnishing materials under this Contract or any subcontract with Contractor, all in a form satisfactory to District, and it is agreed that no payment shall be made except at District's option until and unless such receipts, vouchers or releases and/or waivers, or any and all of them, have been furnished. Any progress payment made prior to acceptance of the Work by District shall not be construed as evidence of acceptance of any part of Contractor's Work.

5.9.3 ACCEPTANCE AND PAYMENT

5.9.3.1 When the Contractor considers the Work complete, it shall request in writing a final inspection. Upon inspection and acceptance by the District, a Punch List of items that are not in accordance with the Contract documents or otherwise complete will be prepared and furnished to the Contractor. At the direction of the District, the District may withhold from the final payment up to one hundred and fifty percent (150%) of the value of the Work to be completed or corrected. Upon acceptance of those Punch List items, the retained amount shall be released or, in the case of retention held in escrow, approval given to release the funds.

5.9.3.1.1 Acceptance of the Work on behalf of the District shall occur upon the recordation of a Notice of Completion. To the extent permitted by law, such acceptance shall not constitute a waiver by the District of guarantees provided by the Contractor or "completion" as defined by Public Contract Code section 7107. When the Work has been accepted, there shall be paid to the Contractor a sum equal to ninety-five percent (95%) of the Contract price.

5.9.3.1.2 To the extent permitted by law, the Work shall not be "complete" and the final five percent (5%) shall not become due and payable until all Punch List items are completed and accepted by the District, all final paper work required by Contract documents of the Contractor is submitted including, but not limited to, certified payrolls, completed Record Drawings, certification of record drawings, and an executed final Release of Claims against the District in a

form provided or approved by the District, provided, however, said release(s) may specifically exclude disputed Contract claims.

5.9.3.2 Final payment of the Contract price shall include full compensation to the Contractor for all labor, materials (except as otherwise expressly provided herein), equipment use and expense required for or incidental to the completion of the Work in accordance with the drawings and specifications and to the satisfaction of the Engineer. Acceptance by the Contractor of the final payment shall constitute a waiver of all claims against the District arising under the Contract documents except those previously made in writing and identified by the Contractor as unsettled at the time of the final pay request.

5.9.3.3 In case of suspension of the Contract, any unpaid balance shall be and become the sole and absolute property of the District to the extent necessary to repay to the District any excess in the cost of the Work above the Contract price.

5.9.3.4 Any Punch List items shall be completed in good faith and within thirty (30) days or ten percent (10%) of the Contract Time Period, whichever is greater. Final payment shall not be due and owing until all Punch List items have been completed and accepted by the District. Failure to complete all Punch List items within the prescribed time period shall be a default of the Contract. The District reserves the right to perform Punch List Work and to back charge the Contractor for the actual cost to perform the Work plus any attendant administrative charges.

5.9.4 PARTIAL UTILIZATION AND BENEFICIAL OCCUPANCY

5.9.4.1 The District shall have the right to utilize or place into service any item of equipment or other usable portion of the Work that is substantially complete prior to completion and acceptance of all the Work. Whenever the District plans to exercise said right, the District will perform an inspection and formulate a punchlist of unfinished work, the Contractor will then be notified in writing with a Notice of Partial Utilization signed by the Engineer identifying the specific portion of the Work to be utilized or otherwise placed into service and a copy of the punchlist of unfinished work.

5.9.4.2 The District shall have the right to take control of the entire Work if it is substantially

completed. Whenever the District plans to exercise said right, the Contractor will be notified in writing with a Notice of Beneficial Occupancy and a copy of the punchlist of unfinished work.

5.9.4.3 The Contractor understands that until a Notice of Beneficial Occupancy or Notice of Partial Utilization is issued or plant start up begins, all responsibility for the care and maintenance of all of the Work shall be the responsibility of the Contractor. Upon issuance of any Notice of Beneficial Occupancy or Notice of Partial Utilization the District will accept responsibility for the protection and maintenance of all such items or portions of the Work described in the written notice except for those items included on the accompanying punchlist. The Contractor shall retain full responsibility for the completion of all of the Work, regardless of whether a portion of the Work has been partially occupied or utilized by the District. The Contractor shall not refuse to allow the District to partially utilize or beneficially occupy the Work.

5.9.4.3 The District may follow the provisions of Public Contract Code section 9203 in Beneficial Occupancy or Partial Utilization circumstances or in circumstances where the Contract work is clearly divisible.

5.9.5 QUANTITY UNITS, PAYMENTS AND MEASUREMENTS

5.9.5.1 Quantity Units. The quantity units, such as tons, square feet, cubic yards and other units listed in the proposal, shall be the basis for payment. All Work to be paid for at the Contract price per unit of measurement will be measured by the Engineer in accordance with United States standard measures.

5.9.5.1.1 The Contractor shall accept the compensation as provided by the Contract unit prices and by measurement and/or Contract lump sum prices as full payment for furnishing all supervision, labor, materials and equipment to perform all Work shown on the plans and specified herein, and for all expenses, loss, damage or risk of every description connected with the prosecution of the Work.

5.9.5.2 Area and Linear Measurements. Unless otherwise indicated on the plans and/or specified in Supplementary Requirements and/or Technical Specification, area and linear measurements of surface or underground improvements shall be made horizontally.

5.9.5.3 Earthwork. Quantity of earthwork within the limits indicated on the plans and/or specified in Supplementary Requirements and/or Technical Specifications may be computed in cubic yards by the method of average end areas and centerline distances. Correction for curvature may not be applied to quantities within the roadway prism as indicated on the cross sections. The Engineer shall make the computation of the quantity by the method which, in its opinion, is best suited to obtain accurate results.

5.9.5.4 Concrete: When payment for concrete is on the basis of cubic yards, it will be measured by certified weighmaster delivery tickets as proscribed by Business and Professions Code section 12700, et seq., or other applicable law. At the discretion of the Engineer, volumes may be verified by measurement of dimensions shown on the plans or such other dimensions as determined by the Engineer.

5.9.5.5 Asphalt Concrete and Cement Treated Base: When payment for asphalt concrete or cement treated base is on the basis of tons and the price includes the cost of placing asphalt concrete or cement treated base as pavement, and the completed pavement exceeds the thickness specified, then the computed weight of the asphalt concrete or cement treated base in the excess thickness up to but not exceeding one-fourth (1/4) inch, will be included in payment quantity.

5.9.5.6 Weight – Measurements: Weight measurements shall be in pounds or tons consisting of 2,000 pounds avoirdupois. Unless otherwise specified, material paid for by weight shall be weighed on platform scales furnished by the Contractor or on public scales. Scales furnished by the Contractor shall be satisfactory to the Engineer and shall be inspected and sealed by a representative of the State Division of Weights and Measures as often as the Engineer may deem necessary to insure their accuracy. The Contractor shall furnish to the Engineer on the date the materials are delivered to the Project licensed weighmaster's original certified weight tickets for each load.

5.9.5.6.1 If the material is shipped by rail, the car weights will be accepted provided the actual weight only of material will be paid for and not the minimum car weight used for assessing freight

tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.

5.9.5.6.2 Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as Engineer directs, and each truck shall bear a plainly legible identification mark. Full compensation for all expense involved in measuring and weighing shall be included in the prices bid, and no additional payment will be made therefor.

5.9.5.6.3 Quantities of material wasted or disposed of in a manner not called for under this Contract, or rejected loads of material, including material rejected after it has been placed, material not unloaded from vehicles, material placed outside the plan lines or material remaining on hand after completion of the Work, will not be paid for and such quantities will not be included in the final total measured quantities. No compensation will be allowed for disposing of rejected or excess material.

5.9.5.6.4 Unless otherwise specifically provided, when mineral aggregate, imported borrow or other specified roadway material is being paid for on a weight basis, the weight of material to be paid for will be determined by deducting from the weight of material delivered to the Work, the weight of water in the material at the time of weighing, in excess of six percent (6%) of the dry weight of the material, except that when the material is to be bituminous treated, deduction will be made for the weight of water in excess of three percent (3%). No compensation or other allowance will be made for the weight of such water deducted. The procedure followed for the determination of water shall be in accordance with the "Standard Method for Determination of Moisture of Volatile Distillates in Bituminous Mixtures" of the American Association of State Highway Officials, Serial Designation T-110-42, with the exception that commercial xylene shall be used as the solvent and the percentage of water shall be expressed on the basis of the dry weight of the material according to the following formula:

$$\% \text{ Water} = \frac{\text{Volume of water in trap in milliliters} \times 100}{\text{Weight of wet samples in grams} - \text{Volume of water in milliliters}}$$

ARTICLE 5.10 – CLAIMS AND DISPUTES

5.10.1 CLAIMS AND DISPUTES

5.10.1.1 Definitions:

5.10.1.1.1 "Dispute" or "claim" means a written demand or written assertion by one of the Contracting parties seeking, as a matter of right, the payment of money in a sum certain, the extension of Contract Time, the adjustment or interpretation of Contract terms, or other relief arising under or relating to this Contract including, but not limited to, questions or doubts as to the true meaning of the Contract documents should any error, ambiguity or mistake be apparent in the Contract documents including quantity estimates. A claim arising under a Contract, unlike a claim relating to that Contract, is a claim that can be resolved under a Contract clause that provides for the relief sought by that claimant. A voucher, invoice or other routine request for payment that is not in dispute when submitted is not a claim or dispute under the Contract. The submissions may be converted to a claim under the Contract by complying with the submission requirements of the Contract documents, if it is disputed either as to liability or amount.

5.10.1.1.2 A claim by the Contractor shall be made in writing and submitted to the District for a written decision. A claim by the District against the Contractor shall be made in writing.

5.10.1.2 Procedure:

5.10.1.2.1 Mediation. The Contractor and the District shall make a good faith attempt to resolve all claims and disputes that may arise from time to time during the performance of the Work. If the parties are unable to resolve the claim or dispute by direct negotiation or such other procedures as may be agreed upon at a Partnering Workshop or as required by law, and if the claim is not time barred, the parties agree first to attempt to settle the dispute by mediation administered at San Diego, California by the American Arbitration Association under its Construction Industry Mediation Rules, or by such other agreed upon provider.

5.10.1.2.2 Arbitration. If the mediation is unsuccessful in settling all disputes that are not otherwise time barred, and if both parties agree, any unresolved disputes may be resolved by arbitration administered at San Diego, California, by the American Arbitration Association under its

Construction Industry Arbitration Rules, or by such other agreed upon provider, provided however, that any arbitration award shall be non-binding and advisory only. Any resultant agreements shall be documented and may be used as the basis for a Change Order as appropriate.

5.10.1.3 Procedure for Protest of Disputed Work:

5.10.1.3.1 Protect of Disputed Work: If the Contractor considers any Work required of it to be outside the requirements of the Contract, or if it considers any instruction, meaning, requirement, ruling or decision of the District or its representative to be unauthorized pursuant to the Contract, it shall within fourteen (14) calendar days after such demand is made, or instruction given, or receipt of a decision, file a written protest with the District stating clearly and in detail its objections and reasons therefor.

5.10.1.3.2 The Contractor shall promptly comply with the Work required of it even though a written protest has been filed. If a written protest is not issued within fourteen (14) calendar days, said claim shall be time barred and the Contractor's failure to provide such notice or the installation of any such Work without authorization shall be construed as relieving the District of any claim either for added costs or for extensions of time.

5.10.1.3.3 The District will review the Contractor's timely written protest and provide a decision within 45 days. If after reviewing the District's decision, the Contractor still considers the Work required of it to be outside the requirements of the Contract, the Contractor shall notify the District in writing within seven (7) calendar days after receiving the decision that a formal claim will be issued. Within thirty (30) days of receiving the decision, the Contractor shall submit its claim in writing with the documents required as set forth in Subparagraphs 5.10.1.3 and 5.10.1.4, infra. Failure to furnish notification within seven (7) days and all justifying documentation within thirty (30) days shall render the claim time barred and shall constitute a waiver of Contractor's claim.

5.10.1.3.4 Upon receipt of the Contractor's formal claim including all required documentation supporting Contractor's position, the District or its designee will review the issue and within thirty (30) days from receipt of the Contractor's claim render a final determination. In the event the District does not respond, the claim shall be

deemed denied.

5.10.1.4 Certification:

5.10.1.4.1 The Contractor shall submit under penalty of perjury with each claim its and each subcontractor's written certification that:

5.10.1.4.1.1 The claim is made in good faith.

5.10.1.4.1.2 Supporting data are accurate and complete to the best of the Contractor's knowledge and belief.

5.10.1.4.1.3 The amount requested accurately reflects the Contract adjustment for which the Contractor believes the District is liable.

5.10.1.4.1.4 If the Contractor is an individual, the certification shall be executed by that individual.

5.10.1.4.1.5 If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

5.10.1.4.1.6 The Contractor understands that if a false claim is submitted, it will be considered fraud and the Contractor may be subject to criminal prosecution and any other available relief pursuant to Governmental Code section 12650, et seq.

5.10.1.4.2 Submission of a claim, property certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by the District, is a condition precedent to any action, proceeding, litigation, suit or demand for arbitration by Contractor.

5.10.1.5 Claim Format:

5.10.1.5.1 The Contractor shall submit the claim justification in the following format:

5.10.1.5.1.1 Summary of claim merit and amount and that Contract provision under which the claim is made.

5.10.1.5.1.2 List of documents relating to the claim:

5.10.1.5.1.2.1 Specifications.

5.10.1.5.1.2.2 Plans.

5.10.1.5.1.2.3 Clarifications/Requests for Information.

5.10.1.5.1.2.4 Schedules.

5.10.1.5.1.2.5 Other.

5.10.1.5.1.3 Chronology of events and correspondence.

5.10.1.5.1.4 Analysis of claim merit.

5.10.1.5.1.5 Analysis of claim cost.

5.10.1.5.1.6 Analysis of schedule delays.

5.10.1.5.1.7 Cover letter and certification.

5.10.1.5.1.8 Attachments:

5.10.1.5.1.8.1 Specifications.

5.10.1.5.1.8.2 Plans.

5.10.1.5.1.8.3 Clarifications/Requests for Information.

5.10.1.5.1.8.4 Correspondence.

5.10.1.5.1.8.5 Schedules (all schedules relating to delays must be in a critical path method indicating the cause and occurrence of the delay. No other type of schedule will be accepted).

5.10.1.5.1.8.6 Other.

5.10.2 CONSTRUCTION CLAIMS LESS THAN \$375,000

5.10.2.1 Construction Claims:

5.10.2.1.1 These provisions are included in this Contract as required by the California Public Contract Code:

5.10.2.1.1.1 This section applies to all public work claims of Three Hundred Seventy-Five Thousand Dollars (\$375,000.00) or less which arise between a Contractor and the District.

5.10.2.1.1.2 "Claim" means a separate demand by the Contractor for: (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the Contract for a public work and payment of which is not otherwise expressly provided for or

the Contractor is not otherwise entitled to, or (3) an amount the payment of which is disputed by the District.

5.10.2.1.2 For any claim filed under this section, the following requirements apply:

5.10.2.1.2.1 The claim shall be in writing and include the documents necessary to substantiate the claim as defined in Section 5.10.1.4. Claims must be filed on or before the date of final payment. Nothing in this section is intended to extend the time limit or supersede notice requirements otherwise provided by Contract for the filing of claims.

5.10.2.1.2.2 For claims of less than Fifty Thousand Dollars (\$50,000.00) the District shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the District and the Contractor. The District's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

5.10.2.1.2.3 For claims of over Fifty Thousand Dollars (\$50,000.00) and less than or equal to Three Hundred Seventy-Five Thousand Dollars (\$375,000.00), the District shall respond in writing to all written claims within sixty (60) days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the District and the Contractor. The District's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested

documentation, whichever is greater.

5.10.2.1.2.4 If the Contractor disputes the District's written response, or the District fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within fifteen (15) days of receipt of the District's response or within fifteen (15) days of the District's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.

5.10.2.1.2.5 If following the meet and confer conference, the claim or any portion remains in dispute, the Contractor may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits its written claim pursuant to Subparagraph 5.10.2.1.2.1, above until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer progress.

5.10.2.1.2.6 The proceeding sections do not apply to non-Contract claims and do not effect any applicable time periods for filing such claims.

5.10.2.2 Unless this Contract provides otherwise, all claims, counter-claims, disputes and other matters in question between the District and the Contractor arising out of or relating to this Contract or its breach shall be decided in a court of competent jurisdiction within the County of San Diego in the State of California and shall be governed by the laws of the State of California.

ARTICLE 5.11 – TERMINATION OR SUSPENSION OF THE CONTRACT

5.11.1 TERMINATION OR SUSPENSION FOR CAUSE

5.11.1.1 If the Contractor fails to begin the delivery of the material, to commence Work as provided in the Contract, to make delivery of material promptly as ordered, to maintain the rate of delivery of material or progress of the Work in such a manner as in the opinion of the Engineer

will insure a full compliance with the Contract Time, files for bankruptcy protection, or if in the opinion of the Engineer the Contractor is not carrying out the provisions of the Contract in their true intent and meaning or persistently disregard laws, ordinances, Contract terms or rules or regulations or orders of a public authority having jurisdiction, persistently fails to timely pay its subcontractors, materialmen, or suppliers as required by law or otherwise has breached a provision of the Contract documents, written notice will be served on the Contractor to provide satisfactory compliance with the Contract within a specified time period. In the event Contractor neglects or refuses to comply with such notice, the Engineer may with the written consent of the Executive Director and consent of the Board evidenced by resolution, terminate the operation of all or any part of the Contract, or the Engineer may in its discretion after such notice, at the expense and for the account of the Contractor, cause to be performed any part of the Work, or purchase any or all of the material included in the Contract or required for its completion, without terminating the Contract.

5.11.1.2 If the Contractor is debarred by the Board pursuant to District ordinance, this Contract and any other existing Contract by and between the District and the Contractor shall be terminated. Notwithstanding the foregoing, the Board may continue this Contract, and any other existing Contract, upon advice from the Executive Director as to the effect of termination of this Contract.

5.11.1.3 Upon termination, the Engineer may, at its discretion, take possession of all or any part of the machinery, tools, appliances, material and supplies used in the Work covered by the Contract or that have been delivered by or on account of the Contractor for use in connection therewith and the same may be used either directly by the District or by other parties for it, in the completion of the Work suspended; or the District may employ other parties to perform the Work or may substitute other machinery or material or purchase the materials contracted for in such manner as it may deem proper or hire such force and buy such machinery, tools, appliances, materials and supplies at the Contractor's expense as may be necessary for the proper conduct and completion of the Work. When the District terminates the Contract for cause, the Contractor shall not receive future payments until the Work is completed. Any cost

to the District in excess of the Contract arising from the suspension of the Contract, or from Work performed or purchases made by the District either before or after suspension and required on account of the failure of the Contractor to comply with this Contract or other orders of the Engineer issued in pursuance thereof, and any costs incurred by the District in locating and/or Contracting with a replacement Contractor, shall be charged to the Contractor and its sureties, who shall be liable therefor. The Contractor shall maintain all insurance required by the Contract as if the Contract had been satisfactorily completed and accepted by the District.

5.11.1.4 A special lien to secure the claims of the District in the event of termination for cause of the Contract is hereby created against any property of the Contractor taken into the possession of the District under the terms hereof, and such lien may be enforced by a sale of such property under the direction of the Board and the proceeds of the sale, after deducting all expenses thereof, and connected therewith, shall be credited to the Contractor. If the net credits shall be in excess of the claims of the District against the Contractor, the balance will be paid to the Contractor or its legal representatives.

5.11.1.5 The Contractor shall not make any disposition of the plant, machinery, tools, appliances, supplies or materials used on or in connection with the Work, either by sale, conveyance or encumbrance, inconsistent with the special lien of the District expressly created by this Contract.

5.11.1.6 The decision of the Engineer, when approved by the Executive Director and by the Board evidenced by resolution, shall be final and binding upon both parties. In the event it is determined that cause did not exist for termination pursuant to these provisions, the termination shall be without further notice considered termination for convenience. Suspension of the Contract or any part thereof, shall operate only to terminate the right of the Contractor to proceed with the Work covered by the Contract or the suspended portions thereof. The provisions of the Contract permitting the District to make changes and to make proper adjustment of accounts to cover any increase or decrease of cost on account of such changes, and all other stipulations of the Contract except those giving the Contractor the right to proceed

with Work on the item covered by the suspension, shall be and remain in full force and effect after such suspension and until the Contract shall have been completed and final payment or final adjustment of account made.

5.11.2 TERMINATION OR SUSPENSION FOR CONVENIENCE.

The District may, without cause, order the Contractor in writing to suspend, interrupt or terminate performance of the Work in whole or in part for such period of time as the District may determine. An adjustment may be made for an increase in the cost of performance of the Contract including profit on the increased cost of performance, if any, caused by any such suspension or interruption or termination. An equitable adjustment may be made of the price or prices specified in the Contract relating to the portion of the Work not suspended, interrupted or terminated by the notice of suspension, interruption or termination. No adjustment shall be made to the extent:

5.11.2.1 That performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or

5.11.2.2 An equitable adjustment is made or denied under another provision of this Contract.

5.11.3 EFFECT OF SUSPENSION, INTERRUPTION OR TERMINATION FOR CAUSE OF CONVENIENCE

5.11.3.1 Any such suspension, interruption or termination for cause or convenience shall be effected by delivery to the Contractor of a written notice of suspension, interruption or termination specifying the extent to which performance of Work under the Contract is suspended, interrupted or terminated and the date upon which such suspension, interruption or termination becomes effective. After receipt of the notice of suspension, interruption or termination and except as otherwise directed by the District, the Contractor shall:

5.11.3.1.1 Stop Work under the Contract on the date and to the extent specified in the notice of suspension, interruption or termination;

5.11.3.1.2 Place no further orders or subcontracts for materials, services or facilities except as necessary to complete the portion of the Work under the Contract which is not suspended,

interrupted or terminated;

5.11.3.1.3 Place no further equipment at the Project except as necessary to complete the portion of the Work under the Contract which is not suspended, interrupted or terminated;

5.11.3.1.4 Terminate all orders or subcontracts to the extent they relate to the performance of Work suspended, interrupted or terminated by the notice of suspension, interruption or termination;

5.11.3.1.5 Assign to the District in the manner, at the times, and to the extent directed by the District, all the right, title and interest of the Contractor under the orders and subcontracts so suspended, interrupted or terminated. The District shall have the right, in its discretion, to settle or pay any or all claims arising out of the suspension, interruption or termination of such orders and subcontracts;

5.11.3.1.6 Settle all outstanding liabilities and all claims arising out of such suspension, interruption or termination of orders and subcontracts, with the approval or ratification of the Board to the extent the Board may so require. The Board's approval or ratification shall be final for all purposes of this clause;

5.11.3.1.7 Transfer title to the District, and deliver in the manner, at the times, and to the extent, if directed by the District, the fabricated or unfabricated parts, work in process, completed Work, supplies and other materials produced as a part of, or acquired in connection with the performance of, the Work terminated by the notice of suspension, interruption or termination, and the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the District;

5.11.3.1.8 Use its best efforts to sell, in the manner, at the times, and to the extent, and at the price or prices that the District direct or authorized, any property of the types previously referred to herein, but the Contractor shall not be required to extend credit to any purchaser and may acquire any such property under the conditions prescribed and at a price or prices approved by the District. The proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the District to the Contractor under this Contract or shall otherwise be credited to the price or cost of

the Work covered by this Contract or paid in such other manner as the District may direct;

5.11.3.1.9 Complete performance of such part of the Work as shall not have been suspended, interrupted or terminated by the notice of suspension, interruption or termination;

5.11.3.1.10 Take such action as may be necessary, or as the District may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the District has or may acquire an interest;

5.11.3.1.11 The Contractor shall maintain the Work site and provide such ingress and egress for local resident or tenants or the public as may be necessary during the period of suspended work or until the Contract has been declared terminated; and

5.11.3.1.12 Maintain all required insurance as if the Contract had been satisfactorily performed and accepted by the District.

5.11.3.2 After receipt of the notice of suspension, interruption or termination, the Contractor shall submit to the District a certified suspension, interruption or termination claim. Such claim shall be submitted promptly but in no event later than ninety (90) days from the effective date of the notice of suspension, interruption or termination. If the Contractor fails to submit a suspension, interruption or termination claim at any time after such ninety (90) day period, the District may determine, on the basis of information available to it, the amount, if any, due to the Contractor. The District shall then pay to the Contractor the amount so determined.

5.11.3.3 After receipt of a certified claim, the District and the Contractor may agree upon the whole or any part of the amount or amounts to be paid to the Contractor because of the total or partial suspension, interruption or termination of the Contract. The amount may include a reasonable allowance for profit on Work performed. However, such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total Contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract price of Work not suspended, interrupted or terminated and any claims the District may have against the Contractor. Nothing in Subparagraph 5.11.3.5 of

this section, shall be deemed to limit, restrict or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this paragraph.

5.11.3.4 After receipt of a certified claim, if the Contractor and District fail to agree on the amounts to be paid to the Contractor, the District shall determine, on the basis of the information available to it the amount, if any, due to the Contractor by reason of the suspension, interruption or termination and shall pay the Contractor the amount which shall be determined as follows:

5.11.3.4.1 For all work specified in the Contract which is performed before the effective date of the notice of suspension, interruption or termination, the total of:

5.11.3.4.1.1 The reasonable cost to the Contractor, without profit, for all Contract Work performed prior to the notice of suspension, interruption or termination, including the Work done to secure the project for termination. In determining the reasonable cost, the District may utilize the schedule of values, Contract unit prices, Contract lump sum, the percentage of Work completed and any other method available to it. For purposes of determining reasonable costs, deductions will be made for the cost of materials to be retained by the Contractor, amounts realized by the sale of materials, and for other appropriate credits against the cost of the Work. When in the opinion of the District the cost of an item of Work is unreasonably high, the reasonable cost to be allowed will be the estimated reasonable cost of performing such Work in compliance with the requirements of the plans and specifications and excessive actual cost shall be disallowed.

5.11.3.4.1.2 Reasonable cost will include a reasonable allowance for project overhead and general administrative overhead not to exceed a total of ten percent (10%) of direct costs of such Work.

5.11.3.4.1.3 A reasonable allowance for profit on the cost of the Work performed as determined under Subparagraph 5.11.3.4.1.1 provided the Contractor established to the satisfaction of the District that it would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed five percent (5%) of the cost of the Work

completed.

5.11.3.4.1.4 The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the District or otherwise disposed of as directed by the District.

5.11.3.5 In no event shall the District be liable for costs incurred by the Contractor or any of its subcontractors after receipt of a notice of suspension, interruption or termination. Such non-recoverable costs include, but are not limited to, anticipated profits on the Contract post-suspension, post-interruption or post-termination, employee salaries, administrative expenses, overhead or unabsorbed overhead, the costs of preparing and submitting the bid, attorneys' fees or other costs relating to the prosecution of a claim or lawsuit, pre-judgment interest, or any other expense which is not reasonable or authorized under this subparagraph of this section.

***** END OF SECTION *****

SECTION 6.0 - TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

SECTION 01 11 00 SUMMARY OF WORK	1
PART 1 GENERAL	1
1.1 SUMMARY	1
1.2 RELATED REQUIREMENTS	1
1.3 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS	1
1.4 PROJECT INFORMATION	2
1.5 ACCESS TO SITE	4
1.6 WORK RESTRICTIONS AND REGULATIONS	5
1.7 SPECIFICATION AND DRAWING CONVENTIONS	6
PART 2 PRODUCTS (NOT USED)	6
PART 3 EXECUTION (NOT USED)	6
END OF SECTION	6
SECTION 01 13 00 SUPPLEMENTARY REQUIREMENTS	7
PART 1 - GENERAL	7
1.1 SUMMARY	7
1.2 RELATED REQUIREMENTS	7
1.3 COMMUNICATIONS REGARDING THE WORK	7
1.4 DISTRICT REVIEW TIME	7
1.5 PROTECT AND MAINTAIN EXISTING FACILITIES	8
1.6 EXISTING UTILITIES, IMPROVEMENTS AND OBSTRUCTIONS	8
1.7 CLEANUP	8
1.8 EQUAL OPPORTUNITY CONTRACTING REQUIREMENTS (WITHOUT SBE GOAL)	9
PART 2 - PRODUCTS (NOT USED)	12
PART 3 - EXECUTION (NOT USED)	12
END OF SECTION	12
SECTION 01 14 00 WORK RESTRICTIONS	13
PART 1 GENERAL	13
1.1 SUMMARY	13
1.2 RELATED REQUIREMENTS	13
1.3 WORKING HOURS, HOLIDAYS AND OTHER LIMITS	13
1.4 COST OF OVERTIME CONSTRUCTION INSPECTION	14
1.5 CONTRACTOR'S WORK PLAN	14
1.6 CHANGES TO THE WORK	14
1.7 ACCESS TO SITE, BUSINESSES, TENANT LEASEHOLD, PRIVATE PROPERTY, DRIVEWAYS, ALLEYWAYS, AND THOROUGHFARES	14
1.8 CONTRACTORS USE OF PREMISES	15
1.9 OUTSIDE AGENCY DIRECTIVES AND PERMITS	15
PART 2 PRODUCTS (NOT USED)	15

PART 3 EXECUTION	15
3.1 ORDER OF WORK	15
3.2 TRANSPORT OF MATERIAL	16
3.3 DUST CONTROL	16
3.4 CLEAN UP	16
3.5 TURBIDITY MONITORING	16
END OF SECTION.....	17
SECTION 01 27 00 MEASUREMENT AND PAYMENT	18
PART 1 GENERAL.....	18
1.1 SUMMARY	18
1.2 RELATED REQUIREMENTS.....	18
1.3 BID ITEM 1 – GENERAL CONSTRUCTION	18
1.4 BID ITEM 2 – INSURANCE AND BONDS.....	19
1.5 BID ITEM 3 – CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) PLAN.....	19
1.6 BID ITEM 4 - LIVE FEED CELLULAR CAMERA.....	19
1.7 BID ITEM 5 – WASHED NATURAL SAND.....	20
1.8 BID ITEM 6 - POST CONSTRUCTION TOPO SURVEY	20
1.9 BID ITEM 7 - ALLOWANCE FOR RELATED WORK	20
PART 2 PRODUCTS (NOT USED)	21
PART 3 EXECUTION	21
3.1 APPLICATION FOR PAYMENT	21
END OF SECTION.....	21
SECTION 01 29 73 SCHEDULE OF VALUES.....	22
PART 1 GENERAL.....	22
1.1 SUMMARY	22
1.2 RELATED REQUIREMENTS.....	22
1.3 DEFINITIONS.....	22
1.4 SCHEDULE OF VALUES	22
PART 2 PRODUCTS (NOT USED)	23
PART 3 EXECUTION (NOT USED)	23
END OF SECTION.....	23
SECTION 01 31 19 PROJECT MEETINGS	24
PART 1 - GENERAL.....	24
1.1 SUMMARY	24
1.2 RELATED REQUIREMENTS.....	24
1.3 PRE-CONSTRUCTION CONFERENCE	24
1.4 PROGRESS MEETINGS	25
1.5 OTHER MEETINGS	25
PART 2 - PRODUCTS (NOT USED).....	25

PART 3 - EXECUTION (NOT USED)	25
END OF SECTION	26
SECTION 01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION	27
PART 1 GENERAL	27
1.1 SUMMARY	27
1.2 RELATED REQUIREMENTS	27
1.3 PROJECT MANAGEMENT DOCUMENTATION & ADMINISTRATION	27
1.4 DEFINITIONS	27
1.5 CONTRACTOR'S CONSTRUCTION SCHEDULES, GENERAL	28
1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)	29
1.7 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)	29
1.8 CONTRACTOR'S CONSTRUCTION SCHEDULES	31
1.9 CONSTRUCTION SCHEDULE UPDATE AND REVISIONS	32
1.10 DAILY CONSTRUCTION REPORTS	33
1.11 SITE CONDITION REPORTS	33
PART 2 - PRODUCTS (NOT USED)	34
PART 3 - EXECUTION	34
3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE	34
3.2 COORDINATION	34
3.3 REPORTS	35
END OF SECTION	35
SECTION 01 32 36 LIVE FEED CELLULAR CAMERA	36
PART 1 GENERAL	36
1.1 SUMMARY	36
1.2 RELATED SECTIONS	36
1.3 SUBMITTALS	36
PART 2 PRODUCTS (NOT USED)	36
PART 3 EXECUTION (NOT USED)	36
END OF SECTION	36
SECTION 01 33 00 SUBMITTAL PROCEDURES	37
PART 1 GENERAL	37
1.1 SUMMARY	37
1.2 RELATED REQUIREMENTS	37
1.3 VIRTUAL PROJECT MANAGER (VPM)	37
1.4 LCPTRACKER (CERTIFIED PAYROLLS)	38
1.5 SUBMITTAL LOG	38
1.6 ADMINISTRATIVE SUBMITTALS	38
1.7 TECHNICAL SUBMITTALS	39
PART 2 PRODUCTS (NOT USED)	42

PART 3 EXECUTION (NOT USED)	42
END OF SECTION	42
SECTION 01 35 23 OWNER SAFETY REQUIREMENTS	43
PART 1 GENERAL	43
1.1 SUMMARY	43
1.2 RELATED REQUIREMENTS	43
1.3 PUBLIC HEALTH, SAFETY AND CONVENIENCE	43
1.4 WORKPLACE SAFETY	43
PART 2 PRODUCTS (NOT USED)	45
PART 3 EXECUTION (NOT USED)	45
END OF SECTION	45
SECTION 01 41 00 REGULATORY REQUIREMENTS	46
PART 1 GENERAL	46
1.1 SUMMARY	46
1.2 RELATED REQUIREMENTS	46
1.3 CONTRACTOR'S LICENSE REQUIREMENT	46
1.4 REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) 401 WATER QUALITY CERTIFICATION	46
1.5 ARMY CORP OF ENGINEER PERMIT (APPENDIX C)	46
1.6 APPROVALS, PERMITS, AND FEES	46
1.7 WATER CONSERVATION	47
1.8 STORM WATER MANAGEMENT	47
1.9 FINAL ENVIRONMENTAL IMPACT REPORT (EXHIBIT B)	47
1.10 DISTRICT COASTAL DEVELOPMENT PERMIT	48
1.11 MATERIAL DISPOSAL SITES	48
1.12 CONSTRUCTION AND DEMOLITION DEBRIS ORDINANCES	48
PART 2 PRODUCTS (NOT USED)	48
PART 3 EXECUTION (NOT USED)	48
END OF SECTION	48
SECTION 01 42 00 REFERENCE STANDARDS	49
PART 1 GENERAL	49
1.1 SUMMARY	49
1.2 RELATED REQUIREMENTS	49
1.3 REFERENCES TO STANDARDS, CODES AND RULES	49
PART 2 PRODUCTS (NOT USED)	51
PART 3 EXECUTION (NOT USED)	51
END OF SECTION	51

SECTION 01 45 00 QUALITY CONTROL	52
PART 1 GENERAL.....	52
1.1 SUMMARY	52
1.2 RELATED REQUIREMENTS.....	52
1.3 OBSERVATION AND SUPERVISION	52
1.4 RESPONSIBILITY	53
1.5 TESTS AND INSPECTIONS.....	53
1.6 AUTHORITY AND DUTIES OF INSPECTOR	54
PART 2 PRODUCTS (NOT USED)	54
PART 3 EXECUTION (NOT USED)	54
END OF SECTION.....	54
SECTION 01 50 13 TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES	55
PART 1 - GENERAL.....	55
1.1 SUMMARY	55
1.2 RELATED REQUIREMENTS.....	55
1.3 SUBMITTALS.....	55
1.4 CONTRACTOR'S STAGING AREA.....	55
1.5 PROJECT SECURITY	55
1.6 TEMPORARY UTILITIES.....	56
1.7 TEMPORARY LIGHTING	56
1.8 PROJECT SAFETY.....	56
1.9 REMOVAL OF TEMPORARY FACILITIES AND UTILITIES	56
PART 2 - PRODUCTS (NOT USED).....	56
PART 3 - EXECUTION (NOT USED)	56
END OF SECTION.....	56
SECTION 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS	57
PART 1 GENERAL.....	57
1.1 SUMMARY	57
1.2 RELATED REQUIREMENTS.....	57
1.3 POTENTIAL CONTAMINATION	57
1.4 SOUND CONTROL.....	57
1.5 DUST CONTROL	58
1.6 WASTE REMOVAL	59
1.7 DRAINAGE.....	59
PART 2 PRODUCTS (NOT USED)	59
PART 3 EXECUTION (NOT USED)	60
END OF SECTION.....	60
SECTION 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL	61
PART 1 GENERAL.....	61

1.1	SUMMARY	61
1.2	RELATED REQUIREMENTS.....	61
1.3	SCOPE OF WORK.....	61
1.4	SUBMITTALS.....	61
1.5	REFERENCES.....	61
1.6	REGULATIONS.....	62
1.7	BEST MANAGEMENT PRACTICES	62
PART 2	PRODUCTS	63
2.1	GENERAL	63
PART 3	EXECUTION	64
3.1	GENERAL	64
3.2	AUTHORITY OF THE ENGINEER AND DISTRICT STAFF.....	64
3.3	UNAUTHORIZED DISCHARGES.....	64
3.4	NOTIFICATION	65
3.5	CLEANUP	65
END OF SECTION.....		65
SECTION 01 71 13	MOBILIZATION AND DEMOBILIZATION	66
PART 1	GENERAL.....	66
1.1	DESCRIPTION.....	66
1.2	REFERENCE	66
PART 2	PRODUCTS (NOT USED)	66
PART 3	EXECUTION	66
3.1	MOBILIZATION AND DEMOBILIZATION.....	66
END OF SECTION.....		66
SECTION 01 74 19	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	67
PART 1	GENERAL.....	67
1.1	SUMMARY	67
1.2	RELATED REQUIREMENTS.....	67
1.3	DESCRIPTION.....	67
1.4	SUBMITTALS.....	67
1.5	MANAGEMENT.....	67
1.6	RECYCLING AND SOLID RESOURCE MANAGEMENT PLAN (RSRMP)	68
1.7	MATERIALS MANAGEMENT AND DISPOSAL PLAN (MMDP)	69
1.8	SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION (SSWDD).....	69
1.9	DISPOSAL MANIFESTS.....	70
PART 2	PRODUCTS (NOT USED)	70
PART 3	EXECUTION	70
3.1	DISPOSAL OPERATIONS.....	70
3.2	HAULING	70
END OF SECTION.....		73

SECTION 31 80 00 SAND FILL MATERIAL.....	74
PART 1 - GENERAL.....	74
1.1 SUMMARY	74
1.2 PERMITS	74
1.3 SUBMITTALS.....	74
1.4 QUALITY ASSURANCE	75
PART 2 - PRODUCTS	75
2.1 MATERIALS	75
2.2 SAND SUPPLIERS	76
PART 3 - EXECUTION	76
3.1 SAND FILL PLACEMENT	76
3.2 RESTORATION OF ADJACENT AREAS	77
3.3 ORDER OF WORK	77
3.4 TRANSPORT OF MATERIAL	77
3.5 DUST CONTROL	78
3.6 CLEAN-UP	78
3.7 TURBIDITY MONITORING	78
END OF SECTION.....	78

SECTION 01 11 00 SUMMARY OF WORK

PART 1 GENERAL

1.1 SUMMARY

- A This section provides a summary of the Work described in the Contract Plans and Specifications. This summary is a brief description of the Work and the requirements for executing the Work. This information is supplemented by the information contained in the Contract Plans and Specifications and by any regulations, codes, certifications, notices, etc. that may be enforced or required by jurisdictions that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
1. SECTION 01 13 00 - SUPPLEMENTARY REQUIREMENTS
 2. SECTION 01 14 00 - WORK RESTRICTIONS
 3. SECTION 01 41 00 - REGULATORY REQUIREMENTS
 4. SECTION 31 80 00 - SAND FILL MATERIAL

1.3 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

- A The Work Includes:
1. Furnish all labor, materials, equipment, supplies, transportation, and disposal as necessary to complete the construction of Sand Replenishment at Kellogg Beach FY 2025 as shown on the Drawings and described in these Specifications.
 2. The work shall include, but not limited to the following as shown on the Plans and described in these Specifications
 - a. Furnishing and placing of approximately 2,200 cubic yards of sand fill material (natural washed sand fill) on the Kellogg Beach as shown on the drawings and specified.
 - b. Contractor's access to the site, including temporarily removal of chain, removal and disposal of galvanized post, sawcut and remove portion of concrete wall as necessary for equipment access. After sand placement restore wall to match existing including painting and install new removable galvanized post. Protect existing concrete sidewalk, curb, gutter, storm drain, fence, landscaping, and other existing structures.
 - c. Placement of sand fill shall be performed by a land-based equipment.
 - d. Implementation and maintenance of Best Management Practices including the use of silt curtain during sand placement.
 - e. Installation of pole mounted live streaming Webcam that shall be accessible to the public and the District. Contractor shall collect and disseminate a daily

video recording of the construction work in the field to document construction progress. Contractor to submit the video as part of the daily report. The contractor shall submit the video in MP4, AVI, or WMV format.

- f. All other work as shown on the drawings and as specified.
 - g. Work shall be performed in conformance with the City of San Diego Right-of-Way Permit requirements. APPENDIX D - CITY OF SAN DIEGO RIGHT-OF-WAY PERMIT includes a permit from a previous project for reference.
 - h. Work shall be performed in conformance with Army Corp of Engineers Permit requirements. The Port of San Diego, the permittee is responsible for compliance with the requirements of the permit such as pre-and post-project monitoring, pre-construction survey for *Caulerpa taxifolia*, placement of silt curtain, and turbidity monitoring during the placement of sand and other requirements of the permit. See APPENDIX C - ARMY CORP OF ENGINEERS PERMIT of the specifications for the current permit that expires in April 2025. A new permit issuance is expected in April 2025.
3. It is intended that the Work be completed in every respect under the Contract Document, and such items or details not mentioned above or not included in the Bid Schedule that are required by the Contract Documents shall be furnished, performed, placed, constructed, or installed by the Contractor.

B Contractor License Information:

- 1. California Contractors State License Board, **Classification A - General Engineering Contractor or C-12 Earthwork and Paving Contractor**, in accordance with the provisions of Division 3, Chapter 9, of the Business and Professions Code of the State of California.

C Subcontractors

- 1. Zero percent (0%) percent of the Work is required to be subcontracted. See detailed Specifications in Section 01 13 00 - SUPPLEMENTARY REQUIREMENTS.

D Type of Contract

- 1. Project will be constructed under a single prime contract.

1.4 PROJECT INFORMATION

A Project Identification

- 1. Specification No: 2024-26
- 2. Project Title: Sand Replenishment at Kellogg Beach FY 2025
- 3. Project Location: San Diego, CA

B Contract Document Specifications and Drawings

- 1. Drawings: The following drawings accompany these Specifications and are made a part thereof:
 - a. Drawing Number: SI-2024-02

- 1) Given dimensions shall be followed in preference to scaled dimensions in all cases. It is the intention of the drawing to convey the impression that all parts of the work to be done shall be complete in every detail, regardless of an omission thereon to name or show fully any element or part. The Contractor shall report any error, omission, or inconsistency in the drawings and/or specifications before commencing work.

b. Drawing Title: Sand Replenishment at Kellogg Beach FY 2025

C Contract Time Limits and Liquidated Damages

1. Commencement of Work

- a. Contractor shall commence work under this Contract within seven (7) calendar days of the issuance of the Notice to Proceed or on the date specified within the Notice to Proceed and the project shall be completed within **60 calendar days** from that date, including Saturdays, Sundays and holidays.
- b. The total contract time of 60 calendar days shall include the approximate lead time of 45 calendar days to review the sand submittals by the Army Corp of Engineers and California Regional Water Quality Board. See APPENDIX C - ARMY CORP OF ENGINEERS PERMIT.

2. Liquidated Damages

- a. Contractor further agrees to pay, as liquidated damages, the sum of \$500 for each consecutive calendar day thereafter as provided in General Conditions Article 5.8.2, "Liquidated Damages". In determining the number of days this Contract, or portions thereof, remains incomplete, the completion date shall be as defined in Article 5.1.2.8.

D District: San Diego Unified Port District

1. Mailing Address:

San Diego Unified Port District
Engineering-Construction Department
P.O. Box 120488
San Diego, CA 92112-0488

2. Hand or Courier Delivery Address:

San Diego Unified Port District
Engineering-Construction Department
3165 Pacific Highway
San Diego, CA 92101-1128

3. District's Engineer:

Ernesto Medina
Chief Engineer

Tel No: 619-686-7229

Email: emedina@portofsandiego.org

4. District's Representatives:

Hector Arias

Design Project Manager

Tel No: 619-643-1445

Email: harias@portofsandiego.org

Zeke Coleman

[Construction Manager

Tel No: 619-942-2966

Email: zcoleman@portofsandiego.org

E Project Management Documentation & Administration:

1. The District reserves the right to utilize an online cloud-based project management system. Virtual Project Manager (VPM) allows for paperless documentation and project administration. For more information, go to www.new.virtual-pm.com.
 - a. See Section 01 33 00 - SUBMITTAL PROCEDURES and Section 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION for requirements for administering and using VPM.

F Labor Compliance Documentation:

1. The District reserves the right to utilize an online cloud-based Labor Compliance System. LCPtracker allows for weekly submittal of certified payrolls and related labor compliance documentation. LCPtracker is available to Contractor involved with the project using the internet. For more information, go to www.lcptracker.com.
 - a. See Section 01 33 00 - SUBMITTAL PROCEDURES for requirements for administering and using LCPtracker.

1.5 ACCESS TO SITE

- A General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract Document limits and as indicated by requirements of these Specifications.
- B Use of Site: Contractor use of premises will be limited only to those areas necessary for completing the Contract Work. All other areas shall remain undisturbed.
 1. Limits: Confine construction operations to the limits as specified in the plans .
 2. Driveways, Walkways and Entrances: Keep driveways, parking lots, loading areas, and entrances serving premises clear and available to District, District's employees, and emergency vehicles at all times including during the placement of sand. Do not use these areas for parking or storage of materials.

3. Beach Access: Beach access to the public is not permitted during the active placement of sand. Contractor shall place precautionary safety measures at the beach to prevent public access during active placement of sand. Beach access shall be open to the public after end of every workday, see Work Restrictions below.

1.6 WORK RESTRICTIONS AND REGULATIONS

- A Work Restrictions, General: Comply with restrictions to construction operations listed in this Section, SECTION 01 13 00, SECTION 01 14 00, SECTION 01 41 00, and in other portions of the Contract Documents.
 1. The project will be advertised for public bidding prior to the receipt of all necessary regulatory permits, including but not limited to permits from the U.S. Army Corps of Engineers and the City of San Diego.
 2. The award of contract and commencement of work under this contract are contingent upon the acquisition of all aforementioned permits. The Contractor shall not commence work on the site or any portion thereof until all such permits have been obtained by the District.
 3. The project specifications include language and conditions derived from similar projects that have been permitted by the relevant agencies. Bidders must acknowledge that the final project conditions and specifications may be subject to change to comply with the terms and conditions of the permits ultimately issued for this project.
 4. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
 5. Comply with all local, state, and federal requirements for the disposal of materials and debris. The Contractor shall provide valid documentation, when requested by the Engineer, to demonstrate the disposal of materials and debris is in compliance with local, state, and federal requirements.
 6. Comply with the Army Corp of Engineers Permit requirements.
 7. All new sand fill placed during the day shall be spread over the site at the end of every workday unless approved by the District Representative.
- B On-Site Work Hours: Limit work in/on/around the project site. to normal business working hours of **8:00 AM to 4:30 PM, Monday through Friday**, unless otherwise directed by the Construction Manager.
- C Existing Utility Interruptions: Do not interrupt utilities unless permitted under the following conditions and only after providing temporary utility services according to requirements indicated.
 1. Notify District's Construction Manager not less than **seventy-two (72) hours** in advance of proposed disruptive operations.
 2. Obtain District's Construction Manager written permission before proceeding with utility interruptions.

- D Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise, vibration, odors, or other disruptions to the District or Public.
 - 1. Notify District not less than **seventy-two (72) hours** in advance of proposed disruptive operations.
 - 2. Dust Control: Contractor shall take preventative measures to prevent dust conditions being caused by his operations in connection with the execution of Work. Contractor shall provide and apply water to the work site and equipment lay down area as necessary to prevent dust conditions. Contractor will not be allowed to tap into the private residents' water source.
- E Controlled Substances: Use of controlled substances on Project site is not permitted.
- F This project is governed by the Army Corp of Engineers Permit, see APPENDIX C of the Specifications.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A Division 01 General Requirements: Requirements of Section in Division 01 apply to the Work of all Sections in the Specifications.
- B Specification Requirements: Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- C Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this document.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 13 00 SUPPLEMENTARY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A This section describes the supplementary requirements for the Work. Information provided in this section may be addressed in further detail elsewhere in the Specifications. These requirements are in addition to those appearing elsewhere in the Specifications.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
1. SECTION 01 14 00 - WORK RESTRICTIONS
 2. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 3. SECTION 01 41 00 - REGULATORY REQUIREMENTS
 4. SECTION 01 50 13 - TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

1.3 COMMUNICATIONS REGARDING THE WORK

- A Authorization: No directions or information regarding the Work shall have a contractual effect unless directed to the Contractor and authorized by the District. Afterwards, all communications shall be addressed to the Construction Manager, or alternate District Representative determined by the Construction Manager.
- B Prioritization: The Contractor shall prioritize all communications regarding the Work that require a response by the District. The Contractor shall initiate all communications regarding work as far in advance as is practical to permit timely District response.
- C Standard Communication Forms: **APPENDIX A - FORMS** contains standard communication forms that shall be used by the Contractor in communications regarding the Work unless otherwise directed by the District. The Contractor shall fill in all information required by the forms. If a space on the forms calls for information that is not applicable to the specific communication involved, the Contractor shall fill in "None," or "N/A," or other similar comment. If additional information is required beyond that called for on the forms, it shall be provided by the Contractor as an attachment to the form.

1.4 DISTRICT REVIEW TIME

- A Contractor shall allow the following review time periods:
1. Requests for Information (RFI's): Seven (7) calendar days unless stated otherwise in the Contractor Documents.
 2. Construction Best Management Practices (BMP) Plan: Fifteen (15) calendar days. Resubmittals shall be allowed the same for review as the time permitted for the initial submittal.

3. Submittals: Seven (7) calendar days unless stated otherwise in the Contract Documents. Resubmittals shall be allowed the same for review as the time permitted for the initial submittal.
4. Substitution Requests: Seven (7) calendar days unless stated otherwise in the Contract Documents.
5. Other Requests: Seven (7) calendar days unless stated otherwise in the Contract Documents.
6. Sand Submittals: Forty-five (45) Calendar Days.

1.5 PROTECT AND MAINTAIN EXISTING FACILITIES

- A Contractor shall protect and maintain all the existing facilities within the project limit.

1.6 EXISTING UTILITIES, IMPROVEMENTS AND OBSTRUCTIONS

- A Existing underground Contractor shall take measures necessary to protect existing utilities and improvements. Any damages on existing utilities and improvements not included for demolition shall be repaired and or restored by the Contractor without cost to the District.
- B Contractor is directed to and shall comply with Section 4216 et seq of the California Government Code, and Article 5.3.15, "EXISTING UTILITIES, IMPROVEMENTS AND OBSTRUCTIONS" of the General Conditions of this Contract and this Section.
- C Contractor shall contact Underground Service Alert of Southern California (DigAlert) at least two (2) working days prior to beginning any digging or excavation work.
- D Underground utilities shall be marked in accordance with the APWA Uniform Color Code for Marking Underground Utilities.

1.7 CLEANUP

- A Throughout all phases of construction and until final acceptance of the specified Contract Work, Contractor shall keep the pavement surfaces and project site clean and free from rubbish, debris, gravel, and other loose materials generated by contractor operations. In addition to the requirements contained in the section, attention is directed to Article 5.3.23, "CLEANING UP", of the General Conditions. In addition to the requirements contained in the section, the following requirements shall also apply:
 1. Contractor shall provide the necessary personnel, equipment, and materials needed to maintain cleanliness. Conduct daily inspections to verify that requirements of cleanliness are being met.
 2. Contractor to remove any loose and excess sand materials from the laydown and stockpile area including sweeping down to the hard surface prior to leaving the job site.
 3. The Contractor shall use broom and vacuum cleaner to remove gravel and other loose materials generated by the Contractor operations to keep job site surfaces clean. The District reserves the right to withhold approval of payment requests for failure on the part of the Contractor to regularly clean the project site in

conformance with the requirements of this section. The District also reserves the right to clean any work areas that have not been acceptably cleaned by the Contractor and charge the Contractor for the District's cleaning costs.

4. The Contractor shall take every reasonable precaution to prevent foreign material and debris from falling into or otherwise reaching the bay during its operations. Any foreign materials or equipment, buoyant or non-buoyant, that reach the bay shall be removed by the Contractor.
5. Objects that sink to the bottom of the bay shall be periodically removed during the execution of the Contract. Any object, which in the opinion of the Engineer might constitute a nuisance or a dangerous obstruction to navigation or cause pollution to the bay water, shall be removed immediately. During the final inspections, the District may inspect the bay bottom in the vicinity of the work to assure complete cleanup and removal of all debris

B Upon completion of Work, and prior to final acceptance, the Contractor shall remove from the vicinity of work and dispose of off Tidelands all surplus materials and equipment used by the operations, and completes all the cleaning and removal of rubbish and debris.

C The Contractor shall submit documentation to demonstrate the disposal site for all materials, equipment and debris is in compliance with all federal, state, and local regulations.

1.8 EQUAL OPPORTUNITY CONTRACTING REQUIREMENTS (WITHOUT SBE GOAL)

A Policy Statement:

1. It is the policy of the San Diego Unified Port District (District) that all businesses be provided equal opportunity to participate in the performance of District contracting and leasing opportunities; and to ensure that workers on public works projects of one thousand dollars (\$1,000) or more are paid the general prevailing rate of per diem wages for regular, holiday, and overtime work as provided by California Labor Code Section 1771.
2. The District is committed to take all necessary and reasonable steps to increase its utilization of small businesses for a positive economic impact to the region. District policy prohibits discrimination against any person because of age (over 40), ancestry, color, disability (mental and physical), gender (including identity, appearance, or behavior, whether or not that identity, appearance, or behavior is different from that traditionally associated with the person's sex at birth), marital status, medical condition, military status, national origin, pregnancy, race, religion, sexual orientation, genetic information, or veteran status, in the award or performance of District contracts or leases.
3. The District will create a level playing field on which small businesses can compete fairly for District contracts. This policy will help remove barriers to the participation of small businesses in District contracts and assist in the development of firms to

compete successfully in the marketplace outside the District's Equal Opportunity Contracting Program.

B Americans with Disabilities Act (ADA) Policy

1. The San Diego Unified Port District (District) does not discriminate on the basis of disability in employment and complies with the ADA, and all other applicable federal, state, and local laws, regarding barrier-free access to all District services, programs, and activities.
2. In conjunction with BPC Policy No. 361, it is the District's policy not to discriminate against qualified individuals with disabilities in regard to application procedures, hiring, advancement, discharge, compensation, training, or other terms, conditions, and privileges of employment.
3. An individual with a disability, who can be reasonably accommodated for a job, without undue hardship to the District, will be given the same consideration for that position as any other applicant. Additionally, the District will engage in an interactive process to attempt to reasonably accommodate qualified individuals with disabilities so they can perform the essential functions of a job. All employees are required to comply with safety standards.
4. The District is committed to ensure all services, programs, and activities are accessible and usable by all individuals except where to do so would result in a fundamental alteration in the nature of the service, program, or activity, or in undue financial and administrative burdens.
5. To ensure high visibility, the District will participate in community outreach events, report on activities that further enhance accessibility, and consider the use of Universal Design, which is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design, to support and include people with disabilities in all services, programs, and activities as appropriate.
6. In conjunction with BPC Policy No. 361, the District will promptly investigate all complaints of employment discrimination and barriers to services, programs, and activities, and when appropriate, take effective remedial action to address and remedy any complaints.
7. The Executive Director will designate person(s) responsible for developing and implementing the District's ADA program and ensuring that District employees, agents, lessees, and Contractors adhere to the provisions of the ADA program. The ADA program will be implemented at the same priority as compliance with all other legal obligations incurred by the District.

C Small Business Enterprise Program

1. The District's Small Business Enterprise Program utilizes external resources in their search for small businesses to participate on contract opportunities. The information is maintained and updated by those sources and their registered

clients. Businesses that are registered within these data sources claim they meet the federal or state size standards to qualify as a small business.

2. Please be aware that the District's Small Business Enterprise Program does not control or guarantee the accuracy, or completeness of this outside information. Questions regarding a small business size protest should be addressed with the outside source.
3. The resources that are used to search for available certified small businesses are:
 - a. State of California Department of Transportation (CALTRANS)
 - b. System for Award Management (SAM)
 - c. California Department of General Services (DGS)

D Small Business Enterprise (SBE) Goal:

1. **No SBE participation goal was established for this solicitation.** Although there is no SBE participation goal for this solicitation, if any subcontractors will be utilized, Contract should make good faith efforts to include SBE participation in the conduct of this activity. Portions of work to be performed by an SBE must be clearly defined. District staff will review the work proposed to confirm whether it is included in the expected scope of work. All bidders will be provided a Sub-Participant Form in the Bid Package to fill in with their proposed SBE subcontractors, SBE material suppliers, and SBE truckers. The information required will include SBE name, location, type of work, and bid amount. This form shall be submitted with the original Bid Proposal package. This requirement in no way relieves the Contractor of the requirements of California State law to list required subcontractors at the time of bidding on the Subcontractor Listing Information Form.
2. The San Diego Unified Port District SBE Information is provided for you on our "Doing Business with the Port" page in our website, www.portofsandiego.org. Click on "Business Tab," which takes you to the "Doing Business" page. The "Doing Business" page contains websites that will provide you with small business sub-participants to contact in your good faith efforts for sub-contracting opportunities on specific work categories pertaining to this project, a list of Outreach Organizations and Good Faith Effort Documentation forms. If you do not have access to the Internet, please contact Equal Opportunity Contracting at (619) 686-7245.

E Equal Employment Opportunity Program Information:

1. As prescribed under BPC Policy No. 358, the District requires all service providers, vendor, contractors and lessees to comply with all applicable Federal, State, and local law or regulation relating to equal employment opportunity and nondiscrimination, including any such law, regulation, and policy hereinafter enacted for the promotion of equal employment opportunities and nondiscrimination.
2. Questions regarding American with Disabilities Act Requirements, and Equal Opportunity Program Requirements of this opportunity should be directed to:

01 13 00

Shirley Parsons, Manager, Diversity, Equity, & Inclusion

Diversity, Equity, & Inclusion

Phone: 619-686-7245

E-mail: sparsons@portofsandiego.org

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 14 00 WORK RESTRICTIONS

PART 1 GENERAL

1.1 SUMMARY

- A This section describes special requirements and construction constraints that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
1. SECTION 01 13 00 - SUPPLEMENTARY REQUIREMENTS
 2. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 3. SECTION 01 35 23 - OWNER SAFETY REQUIREMENTS
 4. SECTION 01 41 00 - REGULATORY REQUIREMENTS
 5. SECTION 01 50 13 - TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES
 6. SECTION 31 80 00 - SAND FILL MATERIAL
 7. APPENDIX C - ARMY CORP OF ENGINEERS PERMIT
 8. APPENDIX D - RIGHT OF WAY PERMIT FROM THE CITY OF SAN DIEGO

1.3 WORKING HOURS, HOLIDAYS AND OTHER LIMITS

- A Work or activity of any kind shall be limited to the hours **from 8:00 AM to 4:30 PM, Monday through Friday**, unless otherwise approved by the Engineer.
- B Work in excess of eight (8) hours per day, on Saturdays, on Sundays, or on District Holidays (except emergency work) must be approved by the Engineer and shall be scheduled at least **seventy-two (72) hours** in advance with the Construction Manager. Contractor shall allow ample time to enable Engineer to make satisfactory arrangements for inspection of work in progress.
- C District Holidays are:
- New Year's Day
 - Martin Luther King Day (3rd Monday in January)
 - President's Day (3rd Monday in February)
 - Cesar Chavez's Birthday (March 31)
 - Memorial Day (Last Monday in May)
 - Juneteenth (June 19th)
 - Independence Day

Labor Day (1st Monday in September)

Veteran's Day

Thanksgiving Day and following Friday

Christmas Eve

Christmas Day

New Year's Eve

- D Truck transport/disposal operations will not be allowed to idle on site for more than five (5) minutes.

1.4 COST OF OVERTIME CONSTRUCTION INSPECTION

- A Overtime construction work performed at the option of, for the convenience of, or due to negligence of the Contractor will be inspected by the District at the expense of the Contractor or for the convenience of the Contractor will be inspected by the District at the expense of the Contractor. For any such overtime beyond the regular 8-hour day and for any time worked on Saturday, Sunday, or District Holidays, the charges will be as shown in the following schedule:

1. District Inspection: \$187.50/hour

1.5 CONTRACTOR'S WORK PLAN

- A The Contractor has the responsibility of determining an overall sequence of pre-construction and construction/remediation activities, provided that it meets the requirements set forth in this section, other sections and the drawings for this project.
- B The Contractor shall submit an overall Work Plan to the Engineer for approval. This plan shall address the general order of work as well as the overall approach as applies to the entire facility. The Contractor shall be responsible for incorporating into the Work Plan all procedures and steps necessary in order to accomplish the work within the contract timeline. In addition, this plan shall summarize the proposed methodology for performing various phases of the work. It shall describe possible equipment and personnel to be used, general sequencing of the work activities, the use of the site for staging, stockpiling and other activities, and security.

1.6 CHANGES TO THE WORK

- A Changes to the Work will be set forth in written Contract Change Orders that specify the Work to be done or change to be made, and the payment to be made or credit to be taken and the adjustment of time, if any. Attention is directed to Article 5.7.1, "CHANGES AND EXTRA WORK", of the General Conditions.
- B A copy of the District's standard Contract Change Order Request form is included in **APPENDIX A - FORMS**.

1.7 ACCESS TO SITE, BUSINESSES, TENANT LEASEHOLD, PRIVATE PROPERTY, DRIVEWAYS, ALLEYWAYS, AND THOROUGHFARES

- A The Contractor shall schedule its operations on the job site to provide for:

1. Pedestrian/vehicle ingress and egress at all times, except if otherwise approved in writing by the Engineer.
2. Pedestrian/vehicle ingress and egress for each driveway at all times (work on said facilities shall be scheduled so that no less than one-half the width is available at a time).
 - a. The District recognizes temporary complete closure of certain pedestrian/vehicle ingress and egress locations may be unavoidable due to site and project requirements. Contractor shall work closely with Engineer to keep these instances to an absolute minimum.
 - b. When complete closures are necessary, detours shall be provided unless they are shown to cause undue hardship.
3. The construction schedule shall show the start and end of any partial closures to pedestrian and vehicle pathways, walkways, alleys and driveways. Contractor shall notify the District **seventy-two (72) hours** in advance of any closures and post notices of closures **forty-eight (48) hours** in advance. This will allow the Engineer time to fulfill the District's responsibility to notify all concerned parties and to apprise each party of what conditions can be expected when construction commences.
4. Contractor shall notify Engineer immediately upon any change in project schedule or operation that may affect access. Engineer will be responsible for notification to affected parties.

1.8 CONTRACTORS USE OF PREMISES

- A Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings and as indicated by requirements of these Specifications. Contractor use of premises will be limited only to those areas necessary for completing the Contract Work. All other areas shall remain undisturbed.
- B Contractor shall protect existing improvements during the construction period and shall minimize any noises and repair all damage caused by Contractor operations. Contractor shall schedule deliveries of equipment and materials before or after District hours to minimize disruption or normal District activities.

1.9 OUTSIDE AGENCY DIRECTIVES AND PERMITS

- A There are outside agency directives and permits that the Contractor shall obtain and/or comply with during the execution of the Work. Those requirements are identified in Section 01 41 00 REGULATORY REQUIREMENTS.
- B This project is governed by the Army Corp of Engineers Permit, see APPENDIX C of the Specifications.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ORDER OF WORK

- A Contractor shall make their best effort to make a prompt submittal for the sand fill material and sand sample to the District for approval. See SECTION 31 80 00 – SAND FILL MATERIALS of the Specifications
- B Contractor shall submit the remaining submittals listed on APPENDIX A – Register of Required Submittals for District approval.
- C **Contractor is not allowed to place sand until the sand submittals are approved by the Army Corp of Engineers through the District.**

3.2 TRANSPORT OF MATERIAL

- A Use only rubber front-end loader equipment for transporting and placement of sand. The size of vehicle equipment shall fit the Contractor's access shown on the drawings. If the vehicle equipment will not fit, Contractor shall modify the access, see note on the Drawings.
- B All sand material placed on the project site during the workday should be spread over the site by the end of each day.
- C Contractor shall remove all equipment at the work site at the end of every workday, other than the equipment stored at the lay down area. The beach shall be open to the public after end of every workday.
- D Contractor's access route to the project site is indicated on the drawing.

3.3 DUST CONTROL

- A Contractor shall take whatever measures to prevent or minimize dust conditions in connection with the execution of work.
- B Contractor shall provide and apply water to the work site and equipment lay down area as necessary to prevent dust conditions. Contractor to provide water truck with portable water. Contractor will not be allowed to tap into the private residents' water source.

3.4 CLEAN UP

- A Contractor shall take precautionary measures to prevent construction debris from falling into the bay during construction. Contractor shall immediately remove any construction debris, buoyant or non-buoyant, which fall into the bay.
- B No debris, soil, silt, sand, sawdust, rubbish, cement or concrete washing, oil or petroleum products from construction shall be allowed to enter into or placed where it may be washed by rainfall or run-off into bay.
- C No maintenance or fueling of equipment or vehicle is allowed on the project site.
- D Contractor shall keep the project site clean of all rubbish and debris at all times.
- E Upon completion of work, and prior to final acceptance, the Contractor shall remove from the vicinity of Work all equipment, surplus material, and portable restrooms.

3.5 TURBIDITY MONITORING

- A The Port will carry out turbidity monitoring during the placement of sand. Turbidity is collected once daily from a boat using a water quality meter. See APPENDIX C-Department of the Army Corp Permit of the Specifications.
- B Contractor shall comply with the Port's direction to temporarily stop placement of sand or place additional BMPs for turbidity containment when turbidity limits are exceeded.
- C Contractor to install silt curtain or other measures during placement of soil as a required BMP to fully contain the waterside portion of the site during any shoreline work to avoid turbidity plumes migrating beyond the project limit. Contractor to cease placement if directed by Port's representative.

END OF SECTION

SECTION 01 27 00 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SUMMARY

- A This section defines the bid schedule and describes measurement and payment provisions for each of the bid items.
 - 1. Payment for all items of the Bid Schedule whether lump sum or unit price shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidental appurtenances to the items of work being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
 - 2. No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs shall be included in the prices named in the Bid Schedule for the various appurtenant items of work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 - 1. GENERAL CONDITIONS, ARTICLE 5.9 - PAYMENTS AND COMPLETION
 - 2. DIVISION 01 and other related Specification Sections
 - 3. BID SCHEDULE
 - 4. DIVISION 31 - EARTHWORK

1.3 BID ITEM 1 – GENERAL CONSTRUCTION

- A No unit measurement shall be made for this item.
- B Payment for GENERAL CONSTRUCTION will be made at the lump sum price named in the BID SCHEDULE, which price shall constitute full compensation for completion of all mobilization, temporary facilities and utilities, temporary construction signs, demobilization, cleanup, disposal, design, design engineering fees, construction work plans, submittals, safety requirements, insurance, supervision, planning, construction progress documentation, video monitoring, construction waste management, preparation of Injury and Illness Prevention Plan (IIPP) and Construction Site Security Plan (CSSP), and furnishing and constructing all facilities, protection of existing improvements, requirements for access to the work, complete in place as defined within these Contract Documents, with the sole exclusion of the payments to be made as defined herein for the other items in the BID SCHEDULE.

- C Payment for this item shall be based on the percent complete of the entire Work.

1.4 BID ITEM 2 – INSURANCE AND BONDS

- A No unit measurement shall be made for this item.
- B Payment for INSURANCE AND BONDS shall be made at the lump sum price named in the BID SCHEDULE, which price shall constitute full compensation for furnishing all labor, materials, equipment, tools, and incidentals; and for doing all the work of INSURANCE AND BONDS, complete in place, including but not limited to the materials and labor bond; performance bond; and other insurance and bonds as defined within these Contract Documents, with the sole exclusion of the payments to be made as defined herein for the other items in the BID SCHEDULE. These costs are incurred at the beginning of the contract.
- C Payment shall be based on the presentation of valid certification of insurance and a copy of the invoice for the insurance. This may be included with the Contractor's first progress payment request.

1.5 BID ITEM 3 – CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) PLAN

- A No unit measurement shall be made for this item.
- B Payment for a CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) PLAN as described in SECTION 01 57 23 - TEMPORARY STORM WATER POLLUTION CONTROL, shall be made at the lump sum price named in the BID SCHEDULE, which price shall constitute full compensation for planning, preparation and implementation of CONSTRUCTION BMP PLAN and other associated work, including BMPS such as silt curtain for turbidity requirements during placement of sand; compliance to the Army Corp of Engineers Permit requirements, complete in place as defined within these Contract Documents, with the sole exclusion of the payments to be made as defined herein for the other items in the BID SCHEDULE.
- C Payment for this item shall be based on the percent complete of the entire Work.
- D Up to five (5) percent of this line item (minimum of \$250) shall be deducted for each day where the Contractor's Construction BMPs are in not in compliance with the approved Plans and these Specifications and all local or federal regulations and requirements.

1.6 BID ITEM 4 - LIVE FEED CELLULAR CAMERA

- A No unit measurement shall be made for this item.
- B Payment to LIVE FEED CELLULAR CAMERA shall be made at the lump sum price named in the Bid Schedule, which price shall constitute full compensation for furnishing all labor, materials, equipment, tools, and incidentals; and for doing all the work of LIVE FEED CELLULAR CAMERA and other associated work, complete in place, including but not limited to facilitate the installation of pole mounted live streaming webcam as shown on the Specifications and specified within these Contract Documents. Contractor shall collect and disseminate the video of the progress of work and submit in MP4, AVI or WMV format with high quality resolution. See the Work as specified in SECTION 01 32 36 – LIVE FEED CELLULAR CAMERA.

- C Payment shall be based on the percent complete of the entire work.

1.7 BID ITEM 5 – WASHED NATURAL SAND

- A WASHED NATURAL SAND shall be measured by number of cubic yards of WASHED NATURAL SAND furnished and placed at Kellogg beach and meeting the requirements of the plans and specifications as determined by the District Inspector from truck weight tickets as determined by the Engineer from field measurements.
- B The Contract unit price for WASHED NATURAL SAND shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals for doing all the Work of WASHED NATURAL SAND complete in place as shown on the drawings and specified within these Contract Documents. See the Work as specified in SECTION 31 80 00 – SAND FILL MATERIAL of the Specifications.
- C Payment for this Bid Item shall be determined using the unit price and the number of cubic yards from truck weight tickets submitted. The estimated bid quantity is for the purpose for establishing a Contract unit price for this item and the District reserves the right to vary the actual quantity from 25% to 150% of the bid quantity at no change in the Contract unit price but cannot exceed 2,200 cubic yards per the ACOE Permit.

1.8 BID ITEM 6 - POST CONSTRUCTION TOPO SURVEY

- A No unit measurement shall be made for this item.
- B Payment for POST CONSTRUCTION TOPO SURVEY shall be made at the lump sum price named in the Bid Schedule, which price shall constitute full compensation for furnishing all labor, materials, equipment, tools, and incidentals; and for doing all the work of POST CONSTRUCTION TOPO SURVEY and other associated work, complete in place, including but not limited to conducting a topographic survey post construction and providing digital files in AutoCAD 2019 or later version to District as shown in the PLANS and as defined within these Contract Documents, with the sole exclusion of the payments to be made as defined herein for the other items in the Bid Schedule. Work shall be done by a Land Surveyor licensed in the State of California or under his/her direction.
- C Payment shall be based on the percent complete of the entire work.

1.9 BID ITEM 7 - ALLOWANCE FOR RELATED WORK

- A At the request of the Engineer, additional work related to these Contract Documents may be requested of the Contractor. Contractor shall submit a detailed cost breakdown and written description of work to be done to Engineer for approval prior to starting this work item.
- B Payment for ALLOWANCE FOR RELATED WORK shall be made at the actual price as negotiated with the Contractor and paid to each related work item which price shall constitute full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work under the ALLOWANCE FOR RELATED WORK and other associated work, complete in place, as defined within these Contract

Documents, with the sole exclusion of payments to be made as defined herein for the other items in the BID SCHEDULE.

- C Payment shall be based on the approved method of payment as described in a detailed cost breakdown and written description of work.
- D Payment for work under this bid item will be made only to the extent that such work is specifically authorized in written direction by the Engineer. Payment for additional work due to unforeseen conditions, including removal of unsuitable material or objects not specified in the Contract Documents, will be made in accordance with the provisions of Article 5.7, "CHANGES IN THE WORK", of the General Conditions. This bid item is considered incidental to the Contract and may be adjusted or deleted in its entirety.
- E Payment for this item shall be made only with prior written direction by the Construction Manager.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 APPLICATION FOR PAYMENT

- A Submit applications for payment in accordance with Article 5.9.2, "APPLICATIONS FOR PAYMENT (PROGRESS ESTIMATES)", and in "Certified Payroll" and "Invoices" of Section 01 33 00 – SUBMITTAL PROCEDURES.
- B A copy of the Districts' standard Progress Estimate form is included in **APPENDIX A - FORMS**.

END OF SECTION

SECTION 01 29 73 SCHEDULE OF VALUES

PART 1 GENERAL

1.1 SUMMARY

- A This section includes the requirements necessary for the preparation and submittal of the Schedule of Values for the Work. Refer to Article 5.3.7.1, "SCHEDULE OF VALUES", of the General Conditions Section.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 1. SECTION 01 27 00 - MEASUREMENT AND PAYMENT
 2. SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION
 3. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 4. BID SCHEDULE

1.3 DEFINITIONS

- A Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A Schedule of Values: Within ten (10) calendar days after Contract Notice to Proceed (NTP), the Contractor shall expand (break down) the lump sum and unit prices entered in the bid schedule in order to submit a detailed Schedule of Values for the Work. The Initial Application for Payment will not be approved until the Schedule of Values has been submitted to and accepted by the District.
- B Format and Content: The Schedule of Values shall conform to the format, content, and numbering system of the Contractor's Construction Schedule. Contractor, subcontractor and supplier's profit and overhead shall be included in each line item. The items identified in the Schedule of Values should relate to both the BID SCHEDULE and the Construction Schedule. Special item numbers may be sequentially numbered.
 1. Entries shall match approved Contractor's Construction Schedule. The Schedule of Values has to be updated if revisions have been made to the Construction Schedule.
 2. The Schedule of Values shall be a detailed itemization of the price to provide each item of work and material on the project. No values shall be included for non-construction activities, including, but not limited to, procurement and submittals, unless such items are shown on the BID SCHEDULE.
 3. Mobilization cost shall be a separate line item for entire construction duration.

4. Each line item on the Schedule of Values shall be presented so that the Construction Manager can easily find that item of work within the pertinent construction period. The Construction Manager will evaluate whether that line item or any line item is 100 percent or not.
5. Each line item on the Schedule of Values shall be ascribed a value by the Contractor that represents the value of the Work. If required by the Construction Manager, the Contractor shall substantiate each value by the use of supplier or subcontractor written quotations, labor rates, hourly estimates, or other industry recognized cost estimating references (as approved by the District).
6. Each line item of the Schedule of Values shall be coordinated with other line items of work.
7. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed. Each sheet of the Schedule of Values shall be titled and numbered sequentially.
 - a. Line Item Number
 - b. Description of Item
 - c. Quantity
 - d. Unit of Measure
 - e. Unit Price
 - f. Value of Line Item
8. Round amounts to the nearest whole dollar, the total sum shall equal the Contract Sum.

- C Schedule Updating: Update and resubmit the Schedule of Values prior to each payment application when approved Change Orders result in a change in the Contract Sum.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 19 PROJECT MEETINGS

PART 1 - GENERAL

1.1 SUMMARY

- A This section describes the requirements for project meetings and the items that are part of those meetings. These requirements are in addition to those appearing elsewhere in the Specifications.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 1. SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION
 2. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 3. SECTION 01 35 23 - OWNER SAFETY REQUIREMENTS
 4. SECTION 01 57 23 - TEMPORARY STORM WATER POLLUTION CONTROL

1.3 PRE-CONSTRUCTION CONFERENCE

- A Upon receipt of the Notice to Proceed, or at an earlier time if mutually agreeable, the District will arrange a Pre-Construction Conference to be attended by the Contractor's project representative authorized to commit on the behalf of the Contractor and to direct the performance of the Work by others, as well as, the Contractor's superintendent, the Owner, the District or his representative, and representatives of utilities, major sub-contractors, and others involved in the execution of the Work.
- B The purpose of this conference will be to establish a working relationship and understanding between the parties and to discuss project organization, job communications, the construction schedule, shop drawing submittals and their processing, cost breakdown, payment applications and their processing, extra work procedures and such other subjects as may be pertinent for the execution of the Work, including safety and permit requirements.
- C The Contractor shall submit prior to or at the meeting the following discussion:
 1. Injury and Illness Prevention Plan (IIPP) per Section 01 35 23 - OWNER SAFETY REQUIREMENTS
 2. Construction Best Management Practices (BMP) Plan per Section 01 57 23 [- TEMPORARY STORM WATER POLLUTION CONTROL
 3. Contractor's Work Plan per Section 01 14 00 – WORK RESTRICTIONS
 4. Construction Start-Up Schedule per Section 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION
 5. Contractor's Onsite Representative per GENERAL CONDITIONS Articles 5.3.2.2.1 & 5.3.2.2.2.

- D The Contractor shall not be allowed to start work at the site until the items listed above have been reviewed and approved.

1.4 PROGRESS MEETINGS

- A The District will arrange and conduct weekly progress meetings. The District will prepare and circulate a draft agenda of each meeting. The Contractor may add items as appropriate to the draft agenda.
- B Progress meetings shall be attended by the District, District operations personnel, Contractor's project representative and superintendent, and representatives of all subcontractors involved in the Work at the time of the meeting, required by the Contractor, or requested by the District.
- C The purpose of the meetings will be to facilitate the Work of the Contractor and any subcontractor or other organization that is not on schedule, resolve conflicts, identify and resolve any potential delays or necessary changes in the Work, plan for future activities and in general, coordinate and facilitate the execution of the Work.
- D The agenda of progress meetings shall include review of work progress, the latest construction schedule, and the three (3) week look-ahead schedule (both provided by the Contractor), potential project delays, the status of key shop drawings, submittal reviews, information requests, security awareness, safety concerns, record drawings, extra work items, and other issues related to the progress of the Work.
- E The construction schedule will be reviewed weekly during the progress meeting to verify at a minimum:
 1. Actual start and finish dates of activities
 2. Durations and progress of all activities not completed.
 3. Critical submittals/materials delivery problems
 4. Potential project delays
 5. Any activity behind schedule and Contractor's plan to bring it back on schedule
 6. Reason, logic, time, and cost data for change order work that is to be incorporated into the construction schedule or payment request form
 7. Payment due the Contractor based on percentage complete of items in the payment request form
 8. The three (3) week look-ahead schedule for planning purposes.

1.5 OTHER MEETINGS

- A From time to time, other meetings may be needed to coordinate the progress of the Work. The District will arrange and conduct any other necessary meetings. The District will prepare a draft agenda for the meeting. The Contractor may add items as appropriate to the draft agenda.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the administrative and procedural requirements for documenting the progress of construction during performance of the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
1. SECTION 01 13 00 - SUPPLEMENTARY REQUIREMENTS
 2. SECTION 01 14 00 - WORK RESTRICTIONS
 3. SECTION 01 29 73 - SCHEDULE OF VALUES
 4. SECTION 01 31 19 - PROJECT MEETINGS
 5. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 6. SECTION 01 35 53 - SECURITY PROCEDURES

1.3 PROJECT MANAGEMENT DOCUMENTATION & ADMINISTRATION

- A The contractor shall submit the items associated with this section via Virtual Project Manager (VPM), an online cloud-based project management system, as specified in Section 01 11 00 - SUMMARY OF WORK and Section 01 33 00 – SUBMITTAL PROCEDURES.

1.4 DEFINITIONS

- A Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 2. Predecessor Activity: An activity that precedes another activity in the network.
 3. Successor Activity: An activity that follows another activity in the Network.
- B CPM: Critical Path Method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
1. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- C Float: The measure of leeway in starting and completing an activity.

1. Float time belongs to the Project and is not for the exclusive use or benefit of either Owner or Contractor.

1.5 CONTRACTOR'S CONSTRUCTION SCHEDULES, GENERAL

- A Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B Activities: Treat each story, component, or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
1. Activity Duration: Define activities so no activity is longer than shown in "Contractor's Construction Schedules" of this Section, unless specifically allowed by Engineer.
 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in the schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal and Approval Review Time: Include review, approval, and resubmittal times indicated in "District Review Time" of Section 01 13 00 – SUPPLEMENTARY REQUIREMENTS in the schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for District's administrative procedures necessary for certification of Substantial Completion.
 5. Punch List and Final Completion: Include not more than 30 calendar days for completion of punch list items and final completion.
- C Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.
- D Upcoming Work Summary: Prepare summary report indicating activities schedules to occur or commence prior to submittal of next schedule update. Summarize the following issues:
1. Unresolved issues.
 2. Unanswered Requests for Information.
 3. Rejected or unreturned submittals.
 4. Notations on returned submittals.
 5. Pending modifications affecting the Work and Contract Time.
- E Recovery Schedule: When the periodic update indicates the Work is 5 Calendar days or more calendar days behind current approved schedule, submit a separate recovery

schedule indicating means by which Contractor intends to regain compliance with the schedule. Refer to Article 5.8.1.8 of the General Conditions for additional information.

- F Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A Submittal: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type Contractor's construction schedule within the time specified in "Construction Schedule" of this Section.
- B Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 1. For construction activities that require long durations to complete break the activities into identifiable components within the required maximum time durations specified in "Construction Schedule" of this Section.

1.7 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A General: Prepare network diagrams using AON (activity-on-node) format.
- B Startup Network Diagram: Submit diagram within the time specified in "Start-up Schedule" of this Section. Outline significant construction activities. Include skeleton diagram for the Work and cash requirement prediction based on indicated activities.
- C CPM Schedule: Prepare Contractor's construction schedule using a cost-and-resource-loaded, time-scaled CPM network analysis diagram for the Work.
 1. Develop network diagram insufficient time to submit CPM schedule so it can be accepted for use no later than the time specified in "Construction Schedule" of this Section.
 2. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates, regardless of Architect's approval of the schedule.
 3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
 4. Use "one workday" as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule in order to coordinate with the Contract Time.
- D CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the startup network diagram, prepare a skeleton network to identify probably critical paths.
- E Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:

1. Preparation and processing of submittals.
 2. Mobilization and demobilization.
 3. Delivery.
 4. Fabrication.
 5. Work by District that may affect or be affected by Contractor's activities.
 6. Testing and commissioning.
- F Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
- G Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
- H Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near edges.
- I Sub networks on separate sheets are permissible for activities clearly off the critical path.
- J Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.
- K Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:
1. Contractor or subcontractor and the Work or activity.
 2. Description of activity.
 3. Main events of activity.
 4. Immediately preceding and succeeding activities.
 5. Early and late start dates.
 6. Punch list and final completion.
 7. Early and late finish dates.
 8. Activity duration in workday.
 9. Total float or slack time.
 10. Average size of workforce.
 11. Dollar value of activity (coordinated with the schedule of values).
- L Schedule Updating: Concurrent with making revision to schedule, prepare tabulated reports showing the following:
1. Identification of activities that have changed.

2. Changes in early and late start dates.
3. Activities occurring following final completion.
4. Utility interruptions.
5. Installation.
6. Purchase of materials.

1.8 CONTRACTOR'S CONSTRUCTION SCHEDULES

- A Start-up Schedule: Contractor shall submit a start-up schedule within seven (7) calendar days of the Contract Award. The start-up schedule shall address the first thirty (30) calendar days of the contract.
1. The Start-up schedule shall be in a Gantt Chart prepared using Microsoft Project or other software, which can be opened, read, and manipulated in Microsoft Project.
 2. Activities shall be broken down so that no activity duration exceeds fourteen (14) calendar days.
 3. Along with the Start-up Schedule, the Contractor shall submit a complete list of anticipated submittals as specified in "Submittal Log" of Section 01 33 00 – SUBMITTAL PROCEDURES.
 4. The start-up schedule shall include review times for the submittals. (Refer to "District Review Time" of Section 01 13 00 - SUPPLEMENTARY REQUIREMENTS.
- B Construction Schedule: The Contractor's Construction Schedule shall be of a size required to display entire schedule for the entire construction period. The schedule shall be submitted for approval within fourteen (14) calendar days of the Pre-Construction Conference. If the initial construction schedule submittal is not acceptable to the District, it shall be revised and resubmitted within three (3) calendar days of the return of the submittal to the Contractor.
1. The Construction Schedule shall be in a Gantt Chart prepared using Microsoft Project or other software, which can be opened, read, and manipulated in Microsoft Project.
 2. Activities shall be broken down so that no activity duration exceeds fourteen (14) calendar days.
 3. The Construction Schedule shall identify the dates for submittal deliveries, reviews and approvals of major submittals including SWPPP (items requiring approval from jurisdictions having authority over the work) and substitution requests. Time should be allowed for resubmittals and subsequent review times.
 4. The Construction Schedule shall identify the dates for Public Events and Cruise Ship Berths.

5. The Construction Schedule shall identify the dates for testing, start-up, commissioning, and training for District staff. In addition, time shall be shown for punch list walkthrough, preparation of the punch list, completion of punch list activities and the punch list acceptance walkthrough.
6. Each of the activities described in the preceding paragraph shall be identified as a separate activity. Each of the activities shall be performed on separate days; none of the activities can be combined to be performed on the same day.
7. The Contractor shall submit a Schedule Narrative. The Schedule Narrative shall describe at a minimum: The basis for the schedule calendar (calendar days, working days, specified occurrences or dates when work is impacted by identified restrictions, and other pertinent information related to the schedule calendar), the basis used to develop durations for activities (production rates, imposed requirements for start and stop of activities or requirements for curing, etc.), a description of the logic used to sequence activities and a description of the critical path for the Work.
8. The Contractor shall submit a working electronic copy of the schedule and a PDF file.

C Look Ahead Schedule: The Look Ahead Schedule shall be submitted at each weekly progress meeting. The Look Ahead Schedule shall identify the activities that took place during the prior week and identify the activities to be performed in the next three (3) weeks. The activities shown on the Look Ahead Schedule shall relate to the activities shown on the Construction Schedule.

1. The Look-ahead Schedule shall be in a Gantt Chart prepared using Microsoft Project or other software, which can be opened, read, and manipulated in Microsoft Project.
2. Activities shall be broken down so that no activity duration exceeds seven (7) calendar days.
3. The Contractor shall submit paper copies that will be distributed to attendees at the weekly progress meeting.

1.9 CONSTRUCTION SCHEDULE UPDATE AND REVISIONS

- A The schedule update shall reflect the progress of the work to date. The schedule update shall be accompanied by a narrative that identifies the items that were updated, modified, revised, added, or deleted and includes an estimated percent complete for the entire Work. Submit the schedule update with Applications for Payment, per "Summary Report" of Section 01 31 19 – PROJECT MEETINGS at the weekly progress meeting, if required, or when requested by the District.
- B Revisions to the Construction Schedule: If the Contractor is behind schedule by fourteen (14) days, a Recovery Construction Schedule with a narrative of the items that are revised shall be submitted, if requested by the District. The Recovery Construction Schedule shall meet the requirements of the original Construction Schedule regarding

activities, descriptions, durations, and narrative. If, in the opinion of the District, the Recovery Construction Schedule does not adequately reflect the performance of the work by the Contractor, the activities, descriptions, durations, narrative, and logic shall be revised to reflect the performance of the Work. Recovery Construction Schedules shall be submitted for approval within five (5) calendar days of receipt of directions from the District to prepare a Recovery Construction Schedule. If the Recovery Construction Schedule submittal is not acceptable to the District, it shall be revised and resubmitted within three (3) calendar days of the return of the submittal to the Contractor.

1.10 DAILY CONSTRUCTION REPORTS

A Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. List of personnel at Project site including name, class, company, and hours worked.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of rain or wind.
7. Accidents.
8. Meetings and significant decisions.
9. Unusual events.
10. Stoppages, delays, shortages, and losses.
11. Meter reading and similar recordings.
12. Emergency procedures.
13. Orders and requests of authorities having jurisdiction.
14. Change Orders received and implemented.
15. Services connected and disconnected.
16. Equipment or system tests and startups.
17. Partial completions and occupancies.
18. Substantial Completion authorized.

1.11 SITE CONDITION REPORTS

A Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information (RFI). Include a detailed description of the differing conditions, together with

recommendations for correcting the existing condition. Identify any impacts that may occur to the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A Contractor's Construction Schedule Update: At interval specified in Section 01 31 19 – PROJECT MEETINGS, “Updated Version of The Construction Schedule”, update the schedule to reflect actual construction progress and activities. Issue schedule as specified in Section 01 31 19 – PROJECT MEETINGS, “Updated Version of The Construction Schedule” before each regularly scheduled progress meeting.
- B Revisions: The schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each such meeting.
- C Report: Include a report with the updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
- D Activity Reporting: As the Work progresses, indicate the final completion percentage for each activity.
- E Distribution of Approved Schedule: Distribute copies of approved schedule to the Engineer, Construction Manager, Owner, separate contractors, testing and inspecting agencies, and other parties identified by the Contractor with a need-to-know schedule responsibility.
- F Posting: Post copies of the schedule in Project Meeting rooms and temporary field offices, if applicable.
- G Distribution of Updates: When updates or revisions are made, distribute updated schedules to the same parties, and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

3.2 COORDINATION

- A Submittal: Prepare and submit a schedule for all submittals in accordance with “Submittal Log” of Section 01 33 00 – SUBMITTAL PROCEDURES, and Register of Required Submittals in **APPENDIX B**.
- B Preparation: Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- C Schedule of Values: Coordinate Contractor's construction schedule with the schedule of values, submittal schedule, progress reports, payment requests, other required schedules, reports, and contract requirements.

- D Time Commitments for Work: Secure time commitments for performing critical elements of the Work from entities involved, including but not limited to testing, start-up, commissioning, training, and completion of punch list activities.
- E Work Activities: Coordinate each construction activity in the schedule with other activities and schedule them in proper sequence.

3.3 REPORTS

- A Daily Construction Reports: Submit daily construction report at intervals identified in "Progress Meetings" of Section 01 31 19 - PROJECT MEETINGS.
- B Site Condition Reports: Submit site condition report at time of discovery of differing conditions together with recommendations for changing the Contract Document and including all information as described in Part 1 – SITE CONDITION REPORTS of this Section.

END OF SECTION

SECTION 01 32 36 LIVE FEED CELLULAR CAMERA

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the video and web camera (webcam) documentation service requirements of the construction project and site that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications.
- B Contractor shall facilitate the installation of pole mounted live streaming webcam, similar to EarthCam.com, or equal. Web based camera shall be accessible to the public and to the District.
- C Contractor shall collect and disseminate the video of the progress of work and submit in MP4, AVI or WMV format with high quality resolution.
- D The cost of this work shall be included in the bid item of General Construction, as specified in SECTION 01 27 00 – MEASUREMENT AND PAYMENT.

1.2 RELATED SECTIONS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 - 1. SECTION 01 27 00 – MEASUREMENT AND PAYMENT
 - 2. SECTION 01 33 00 - SUBMITTAL PROCEDURES

1.3 SUBMITTALS

- A Submit the video as part of the daily report via Virtual Project Manager (VPM), as specified in SECTION 01 33 00 – SUBMITTAL PROCEDURES.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A This section outlines in general the items that the Contractor must prepare or assemble for submittal during the progress of the Work. There is no attempt herein to state in detail all of the procedures and requirements for each submittal. The Contractor's attention is directed to the individual Specification Section in these Contract Documents that may contain additional and special submittal requirements. The District reserves the right to direct and modify the procedures and requirements for submittals as necessary to accomplish the specific purpose of each submittal. The Contractor shall anticipate resubmitting submittals for major pieces of equipment and for control systems. Should the Contractor be in doubt as to the procedure, purpose, or extent of any submittal, he should direct his inquiry to the Engineer.

1.2 RELATED REQUIREMENTS

- A Drawing and general provisions of the Contract, including General and Supplementary Conditions and other Specification Sections apply to this Section. Refer to:
1. SECTION 01 13 00 - SUPPLEMENTARY REQUIREMENTS
 2. SECTION 01 27 00 - MEASUREMENT AND PAYMENT
 3. SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION
 4. SECTION 01 35 23 - OWNER SAFETY REQUIREMENTS

1.3 VIRTUAL PROJECT MANAGER (VPM)

- A Virtual Project Manager (VPM) allows for paperless documentation and project administration. All posted information is available to all personnel involved with the project at any time using the internet.
- B The use of VPM by the Contractor is mandatory. Access to VPM will be provided at no cost to the contractor.
- C In order to utilize VPM, the contractor needs a computer, internet access, a digital camera, and a scanner. For more information, go to **www.new.virtual-pm.com**. To Login, from the homepage, select LOGIN and enter the Username and Password that will be provided to you by the District.
- D The contractor shall use the following features:
1. Daily Logs: Contractor's daily reports shall be entered electronically here.
 2. Change Order Manager: Contractor requests for change order shall be submitted electronically here.
 3. Transmittals: Schedules, Pay applications, etc. shall be electronically submitted here.
 4. Submittals: Submittals requiring approval shall be submitted electronically here.

5. RFIs: Requests for information (RFIs) shall be submitted electronically here.

1.4 LCPTRACKER (CERTIFIED PAYROLLS)

- A LCPtracker allows for submittal of weekly certified payrolls and related labor compliance documentation. LCPtracker is available to Contractor involved with the project using the internet.
- B The use of LCPtracker by the Contractor is mandatory. Access to LCPtracker will be provided at no cost to the contractor.
- C In order to utilize LCPtracker, the contractor needs a computer and internet access. A digital camera and a scanner may be useful. For more information, go to www.lcptracker.com. To Login, go to www.lcptracker.net and from the homepage, select LOGIN and enter the Username and Password that will be provided to you by the District.

1.5 SUBMITTAL LOG

- A The Contractor shall submit a complete list of anticipated submittals, including Specification and/or drawing references when the Start-up Schedule is submitted (Refer to Section 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION). The submittal list shall be updated with submittal dates on the Contractor's Construction Schedule and periodically thereafter. Any additional submittals shall also be included in updates.

1.6 ADMINISTRATIVE SUBMITTALS

- A Contractor Sanctions: The Contractor is reminded of his obligation as required by law to make required submittals promptly to the applicable federal, state, or local agencies. Failure to comply with this requirement may result in the withholding of monthly progress payments and make the Contractor liable for other prescribed action and sanctions.
- B Communications: The Contractor shall submit to the Engineer a copy of all letters relative to the Contract, transmitting notifications, reports, certifications, certified payrolls, and the like, that he submits directly to a federal, state, or other governing agencies.
- C Contractor Personnel: During the performance of the Contract, the Contractor shall maintain on a daily basis and submit to the Engineer as requested, full and correct information as to the number of person employed in connection with each subdivision of the Work, the classification, rate of pay, citizenship status, and address of each person, and the cost, source, and amount of each class of materials delivered, equipment received, and major construction equipment used in each subdivision of the Work.
- D Certified Payroll: In accordance with Article 5.3.3.3, "PAYROLL RECORDS" of the General Conditions, the Contractor shall submit, on a weekly basis, a certified copy of each payroll electronically via the software LCPtracker
 - 1. Electronic submission is a web-based system, accessed on the World Wide Web by a web browser. Each contractor will be given a Log-On identification and password to access the San Diego Unified Port District's reporting system.
 - 2. Use of the system will entail data entry of weekly payroll information including; employee identification, labor classification, total hours worked, and hours worked

on this project, wage and benefit rates paid etc. The Contractor's payroll and accounting software might be capable of generating a 'comma delimited file' that will interface with the software.

3. Contractor must require all lower-tier subcontractors the mandatory requirement to use LCPTracker to provide required labor compliance documentation. Lower-tier subcontractors will be given a Log-On identification and password from the Contract.
4. Training options will be provided to the Contractor.

E Invoices: Applications For Payment (Progress Estimates) shall be in accordance with Article 5.9.2 of the General Conditions and shall be submitted to the Project Manager/Construction Manager.

1.7 TECHNICAL SUBMITTALS

A General

1. Requirements in this Section are in addition to any specific requirements for submittals specified in other Divisions and Sections of these Contract Documents.
2. Each submittal shall contain material pertaining to no more than one (1) equipment or material item and shall have the Specification Section and applicable paragraph number clearly identified on the front of the submittal transmittal form. Each submittal shall be sequentially numbered starting with the first one delivered. Re-submittals shall include the number of the original submittal plus the suffix ".1" for the first re-submittal, ".2" for the second re-submittal, etc. (e.g., submittal 3.0, 3.1, 3.2, etc.). Submittals not conforming to these requirements will be rejected.
3. Submitted data shall be fully sufficient in detail for determination of compliance with the provisions and intent of the Contract Documents.
4. Submittals will be acted upon by the Engineer as promptly as possible, and returned to the Contractor no later than the time allowed for review in "District Review Time" of Section 01 13 00 – SUPPLEMENTARY REQUIREMENTS. The Contractor shall provide in his Construction Schedule time for District review of each submittal (and re-submittal for major equipment and control systems) in accordance with the allowable time specified herein and in "District Review Time" of Section 01 13 00 – SUPPLEMENTARY REQUIREMENTS. This required time for District review shall not be a cause for delay in contract completion or a reason for an extension of contract time. If the Contractor is required by the District to resubmit submit data, then neither the time required for the Contractor to prepare and resubmit such data, nor the required time for District review, shall be a cause for delay in Contract completion or for an extension of Contract time. Responsibility for time required for preparing and submitting required data shall be assigned solely to the Contractor.
5. It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the Engineer by the second submission of a submittal item. Additional costs of the Engineer's review beyond the second submission shall be

the responsibility of the Contractor and may be deducted from the Contract Amount. This applies to all submittals including shop drawings.

6. After a submittal has been reviewed and accepted, no charges or substitutions in that submittal will be allowed without the Engineer's approval. If allowed, the Contractor will be responsible for the additional time and costs for engineering, administrative, clerical, or other work required for additional review.
7. All submittals including but not limited to layout diagrams, catalog cuts and data, test reports, and information in sufficient detail to show complete compliance with all specified requirements shall be furnished to the Engineer. For Contractor's convenience, a Register of Required Submittals has been attached to the Specification as APPENDIX B. Although the District has endeavored to indicate all required Contract submittals in the register, there is no expressed or implied guarantee as to the accuracy or completeness of the information contained in the register. Contractor shall be responsible to provide all submittals required per the Contract Documents, whether or not included in the register.

B Submittal Procedure

1. The Contractor shall utilize the Port's online cloud-based project management system (Virtual Project Manager) for submittals.
2. The Contractor shall submit to the Engineer for his review submittals in accordance with Article 5.3.4, "SUBMITTALS", of the General Conditions (shop drawings, electrical diagrams, certificate of compliance, and catalog cuts for fabricated items and manufactured items furnished under this Contract.
3. Once a submittal has been accepted by the District, it shall be the responsibility of the Contractor to ensure that the product/material is comparable with the project/improvement/system being installed by the Contractor. If for any reason the product/material fails to meet the specifications contained herein, the Contractor, at his/her expense, shall replace, fix, or repair said product/material to be in compliance.

C Submittal of Samples

1. Attention is directed to Article 5.3.5, "MATERIALS AND SAMPLES", of the General Conditions.
2. Sand Samples. See SECTION 31 80 00 – SAND FILL MATERIAL

D Shop Drawings

1. Identification: Include name and location of project, name of Contractor, Port District work order and contract numbers, and cross reference to Contract Documents. Number shop drawings consecutively. Drawings shall be of a sufficiently large-scale to accurately describe the work, and be legible, and complete.
2. Submittals shall be accompanied by letter of transmittal addressed to the District, to parties as identified in the District's letter of instruction to be issued to Contractor

at start of project. Each submittal shall be consecutively numbered and shall contain lists of items submitted, properly identified as to drawing numbers, Specification Section or other identification; and number and dates of previous submittals, if a re-submittal. Submittals not adequately identified or incomplete will be returned to Contractor for correction and re-submittal.

3. Mark each set of the submittal to show that it has the Contractor's review and approval. Prior to delivery to the District, the Contractor shall review and affix their Contractor's stamp, with the required information completed, in the exact form as follows:

(SAMPLE STAMP)
(PROJECT)
(CONTRACT NUMBER)
(CONTRACTOR)
DESCRIPTION: _____
SPECIFICATION SECTION: _____
ORIGINAL SUBMITTAL NO. [] RE-SUBMITTAL NO. []
[Contractor's Name] certifies that the submittal has been reviewed and approved for compliance with the Contract Documents and the field measurements have been verified.

4. Stamp Space on Submittals: Provide a 3-inch by 6-inch blank space (minimum) for the Engineer's review stamp on the cover sheet or top page of each submittal. Acceptance of submittals by the Engineer will be general and shall not relieve Contractor from responsibility for proper fitting and construction of work, or from furnishing materials and work required by Contract, which may not be indicated on submittals. Do not commence work until the District has approved required submittals.

E Certificates of Compliance

1. A Certificate of Compliance shall be furnished prior to the use of any materials for which Technical Specifications specify. In addition, when so authorized in this Section, the Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material of the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the Specifications. A certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

2. All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents and any such material not conforming to such requirements will be subject to rejection whether in place or not.
3. The District reserves the right to refuse to permit the use of materials on the basis of a Certificate of Compliance. Certificates of Compliance shall be issued on a company letterhead from the Supplier with specific reference to this project.

F Record Drawings

1. The Contractor shall maintain a record set of full-size project Drawings upon which all field changes are recorded on a daily basis as described in the General Conditions, Article 5.3.8, "RECORD DRAWINGS", and as required herein. As a condition of final acceptance of the project by the District, this record set of project Drawings with as-built changes shall be signed by the Contractor, shall be delivered to the Engineer within ten (10) calendar days after construction of Work, and shall be considered the property of the District.
2. Original data that is superseded shall be lined out and shall remain legible. Original figures shall not be eradicated, nor corrections be made over the item.

G Quality Assurance

1. Source Limitations: To the greatest extent possible for each unit of work, the Contractor shall provide products, materials, or equipment of a singular generic kind from a single source.
2. Compatibility of Options: Where more than one (1) choice is available as options for Contractor's selection of a product, material, or equipment, the Contractor shall select an option, which is compatible with other products, materials, or equipment already selected. Compatibility is a basic general requirement of product/material selections.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 35 23 OWNER SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the owner safety requirements that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications or any regulations, codes, certifications, notices, etc. that may be required by jurisdictions that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
1. SECTION 01 31 19 - PROJECT MEETINGS
 2. SECTION 01 33 00 - SUBMITTAL PROCEDURES
 3. SECTION 01 50 13 -TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES
- B Abbreviations:
1. California Occupational Safety & Health Administration (Cal/OSHA)
 2. Safety Data Sheet (SDS)
 3. Code of Federal Regulations (CFR)
 4. California Department of Transportation (CALTRANS)

1.3 PUBLIC HEALTH, SAFETY AND CONVENIENCE

- A Conformance: All occupational safety and health standards, public convenience and public safety, through contractor operation areas including construction zones, shall conform to the provisions in Sections 7-1.02K(6) "Occupational Safety and Health Standards", 7-1.03 "Public Convenience", and 7-1.04 "Public Safety" of the 2015 CALTRANS Standards Specifications.
- B Precedent: This subsection in no way will change the precedent set forth in accordance with the provisions in Article 5.5, "PROTECTION OF PERSON AND PROPERTY" of the General Conditions of these Specifications.

1.4 WORKPLACE SAFETY

- A The Contractor shall conform to Labor Code Section 6400 to provide a safe workplace for the Contractor's personnel. The Contractor shall comply with OSHA and multiple CAL/OSHA requirements. Attention is directed to Title 8, Group 1, Section 3203, "Injury and Illness Prevention Program" (IIPP) of the General Industry Safety Orders. The Contractor shall submit an IIPP including a Fall Protection Plan, Hot Work Permit, a Safety Data Sheet (SDS), and ear protection for Engineer's review and approval. No work shall be allowed at the site until the IIPP is approved. The IIPP shall be prepared

by a qualified person and developed specifically for the site where work is being performed.

1. Fall Protection

- a. The Contractor shall comply with OSHA and multiple Cal/OSHA requirements for worker fall protection. In general, the Contractor shall ensure that each worker, employee, and subcontractor walking/working with an unprotected side or edge that is six feet or more above a lower level shall be protected from falling by the use of a guardrail system, safety net system, or personal fall arrest system. The following shall be included in the Fall Protection Plan:
 - 1) Name of person or persons who shall be responsible for implementing the Fall Protection Program
 - 2) Methods and procedures for fall protection
 - 3) Communication procedures to report potential fall hazards
 - 4) Applicable structural design of Fall Protection methods shall be prepared and stamped by a registered civil engineer in the State of California
 - 5) Log of inspection schedule shall be signed by person(s) responsible for implementing Fall Protection Program.

2. Hazard Communications

- a. Materials that contain hazardous substances or mixtures may be required on the Work. A Safety Data Sheet (SDS) as described in Section 5194 of the California Code of Regulations shall be provided by the Contractor from the manufacturer of any hazardous products used.
- b. Material usage shall be accomplished with strict adherence to California Division of Industrial Safety Requirements and all manufacturer warnings and application instructions listed on the Safety Data Sheet and on the product container label.
- c. Contractor shall notify, in advance, the Engineer and occupant(s) about any chemicals used in or surrounding the construction area. Included in the notification shall be the hazards, health effects, and precautions. Safety Data Sheet sheets shall be available for occupant(s) inspection.
- d. Contractor shall take all reasonable precautions to minimize the escape, migration, and infiltration of products requiring a Safety Data Sheet (SDS) outside of the immediate construction areas.
- e. Occupants in or surrounding the construction area, including contractor's employees and those who cannot evacuate, shall be furnished with personal protective equipment.
- f. In addition, the Contractor shall conform to Part 29 CFR, Section 1926.500, Subpart M, and all applicable appendices. The Engineer shall have the right

to withhold progress payments for any work until a satisfactory IIPP is submitted to the Engineer.

3. Ear Protection

- a. Noise levels at the project site may exceed 85 decibels (dB). When required by Section 5096(b) of the General Industry Safety Orders, ear protection shall be provided to the employee by the Contractor and the Contractor shall require employees to wear ear protection.

4. Safety Protection Requirements for the Work

- a. The workers shall have the basic protection safety glasses, hearing protection, leather gloves, etc.
- b. When working near water without a rail to prevent workers falling, the workers must wear a life vest. The Contractor shall comply with OSHA Regulations (Standards – 29 CFR), Part 1917 – Marine Terminals; 1917.112(b) – Guarding of Edges; and CAL-OSHA Subchapter 4 – Construction Safety Orders and Article 13 – Work Over or Near Water for Construction Requirement.

5. Site Protection

- a. At the end of the working day and any non-working time, the Contractor shall install a temporary fence or barrier along the perimeter of the work area to prevent persons and equipment from entering the work area.
- b. Contractor shall install temporary barrier at the project site during the placement of sand. Public access to the beach is not allowed during the placement of sand. Beach shall be open to the public after all new sand fill is placed at the end of every work day.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 41 00 REGULATORY REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the regulatory requirements and construction restraints that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications or in the codes, regulations, notices, etc., of regulatory agencies that may have jurisdiction over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 1. SECTION 01 14 00 – WORK RESTRICTIONS
 2. SECTION 01 57 19 – TEMPORARY ENVIRONMENTAL CONTROLS
 3. SECTION 01 57 23 – TEMPORARY STORM WATER POLLUTION CONTROL

1.3 CONTRACTOR'S LICENSE REQUIREMENT

- A The Contractor's License Requirement for this Contract is a California State Contractor's License, Classification A–General Engineering Contractor or C-12 Earthwork and Paving Contractor in accordance with the provisions of Division 3, Chapter 9, Contractors, Article 4, Classifications.

1.4 REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) 401 WATER QUALITY CERTIFICATION

- A This Part is covered in PART 1.5 below.

1.5 ARMY CORP OF ENGINEER PERMIT (APPENDIX C)

- A The District has obtained a U.S. Army Corps of Engineers (ACOE) Permit for his project. The current permit expires in April 2025. A new permit issuance is expected in April 2025. See attached APPENDIX C for details.
- B Contractor shall comply with the terms and conditions in the attached permit.
- C There will likely be some additional requirements with the new permitting, as the Regional Water Board will now have conditions attached to it as well. In case the new permit conditions differ from the current specified requirements and affect the work, an allowance has been included in the Bid Item 6 – Allowance for Related Work to allow for negotiation and reimbursement with the Contractor for complying to the additional permit conditions (if any).
- D Contractor shall be responsible for all legal fees, fines and penalties assessed due to Contractor's failure to fully comply with the requirements of the permit.

1.6 APPROVALS, PERMITS, AND FEES

- A Temporary Utilities: All temporary utility services costs, including, without limitation, connection fees and charges during the construction period, shall be at Contractor's expense, and full compensation for all temporary utilities services and related costs (including those costs for construction offices) shall be included in the Contract prices for the appropriate related bid items, and no separate payment or reimbursement will be made therefor.
- B Incidental Permits: Contractor shall also obtain all other permits incidental to the Work, or made necessary by its operation, including but not limited to, those permits required for night work, overload, demolition, disposal, environmental and equipment, and shall pay all fees and costs incurred for an by the permit requirements. Contractor shall not be entitled to reimbursements from the District for said fees and costs unless reimbursement is specifically identified in the Contract Documents.

1.7 WATER CONSERVATION

- A Construction Water Conservation: Attention is directed to these Specifications, which require the use of water for the construction of this project. Attention is also directed to state and local ordinances regarding water conservation and storm water pollution prevention.
- B Equipment Maintenance: The Contractor shall, whenever possible, and not in conflict with the Specifications and ordinances, minimize the use of water during construction of the project. Watering equipment, hose, piping and valves shall be kept in good working order; water leaks shall be repaired promptly; and washing of equipment, except when necessary for safety or for the protection of the equipment, shall be discouraged. Wash water from such activities shall not be discharged into the storm water conveyance system.

1.8 STORM WATER MANAGEMENT

- A Construction BMP Plan Submittal: The Contractor shall submit the Construction BMP Plan as soon as possible but no later than the time identified in "Pre-construction Conference Submittal" of Section 01 31 19. Time is needed to allow for staff review and approval prior to the anticipated start of on-site work.
- B Construction Start Date Requirements: Construction cannot be initiated until the Construction BMP Plan has been approved by District Environmental Services. Subsequent modifications and amendments to the Construction BMP Plan are subject to the review and approval of District Construction Support or District Environmental Services and accepted by the engineer.

1.9 FINAL ENVIRONMENTAL IMPACT REPORT (EXHIBIT B)

- A The proposed project is not a separate project under CEQA but a subsequent discretionary approval related to a previously approved project (CEQA Guidelines § 15378(c)). It was analyzed in the Final Environmental Impact Report (FEIR) (Exhibit B) for the La Playa Beach Restoration, Shelter Island (UPD#78102-EIR-6; Clerk Document No. 12179), certified by the District on September 11, 1979 (Resolution No. 79-226).

- B Per CEQA Guidelines §§ 15162 and 15163, no further environmental review is needed because: no substantial project changes introduce new or more severe environmental impacts; no new significant information has emerged that would alter previous findings or require additional mitigation.

1.10 DISTRICT COASTAL DEVELOPMENT PERMIT

- A California Coastal Act review been completed for the proposed project, and there are no applicable requirements for the Contractor. The proposed project is considered excluded development pursuant to Sections 8.a.(10) (Existing Facilities) and 8.d.(3) (Minor Alterations to Land) of the District's Coastal Development Permit Regulations because the proposed project would consist of sand replenishment and would involve no expansion of use beyond that previously existing and would not involve the removal of mature, scenic trees. A "Coastal Act Categorical Determination of Exclusion" was previously issued for the proposed project on March 1, 2005, therefore, issuance of a Coastal Development Permit or subsequent Exclusion is not required for the proposed project.

1.11 MATERIAL DISPOSAL SITES

- A All materials shall be disposed of at authorized sites to receive the material, subject to District approval, outside District Tidelands in compliance with all federal, state, and local regulations. Removal and disposal operations shall be done in a manner that will prevent spillage on street and nearby areas outside the project site. Contractor shall submit documentation, if requested, to demonstrate the disposal site is in compliance with all federal, state, and local regulations.

1.12 CONSTRUCTION AND DEMOLITION DEBRIS ORDINANCES

- A Assembly bill 939, California Integrated Solid Waste Management Act of 1989 requires that localities throughout the State develop source reduction, reuse, recycling and composting programs to reduce the tonnage of solid waste disposed in landfills 25 percent by 1995 and 50 percent by the year 2000. The disposal of materials resulting from all District projects shall, at a minimum, comply with the California Integrated Waste Management Act of 1989 (AB 939).
- B In addition to AB 939, all materials disposed shall be reused or recycled in accordance with any local Construction and Demolition (C&D) debris ordinances in effect for work conducted within the Port's jurisdictional member cities (City of San Diego, City of Chula Vista, City of National City, City of Imperial Beach and City of Coronado). The Contractor must demonstrate that C&D debris ordinance requirements of the jurisdictional member city or cities in which the project is located have been complied with and shall submit such documentation to the District.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 42 00 REFERENCE STANDARDS

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the reference standards that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications or any regulations, codes, certifications, notices, etc. that may be required by jurisdictions that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.3 REFERENCES TO STANDARDS, CODES AND RULES

- A Other Publications: Where references are made in these Specifications to other publications, such publications shall be the latest issue available on the bid date of this Specification, except that the Standard Specifications for Public Works Construction (SSPWC) shall be the latest issue adopted by the City of San Diego, complete with the City of San Diego Standard Special Provisions adopted at the same time and the California Building Code (CBC) adopted by the City of San Diego, including CBC revisions adopted therewith. All specified portions of referenced publications shall be a part of these Specifications as though quoted in their entirety herein, except that all measurement and payment clauses included in any references are suspended by the provisions of these Specifications. Any reference to a controlling authority in any referenced portion shall be considered to mean the Engineer of the District.
- B Associations: To the extent specified elsewhere in these Contract Documents, comply with the requirements of the following standards and associations.
 1. ACI - American Concrete Institute
Box 19150
Detroit, MI 48219
(313) 532-2600
 2. AGC - Associated General Contractors of America
1957 E. Street, N.W.
Washington, DC 20006
(202) 393-2040
 3. ANSI - American National Standards Institute
11 West 42nd Street
New York, NY 10036
(212) 642-4900
 4. ASCE - American Society of Civil Engineers

1015 15th Street, N.W., Suite 600
 Washington, DC 20005
 (202) 705-7496

5. ASTM - American Society for Testing Materials
 1916 Race Street
 Philadelphia, PA 19103-1187
 (215) 299-5400
6. AWWA - American Water Works Association
 6666 West Quincy Avenue
 Denver, CO 80235
 (303) 794-7711
7. CRSI - Concrete Reinforcing Steel Institute
 933 Plum Grove Road
 Schaumburg, IL 60173
 (708) 517-1200
8. CSI - Construction Specifications Institute
 601 Madison Street
 Alexandria, VA 22314-1791
 (703) 684-0300
9. ETL - Environmental Testing Laboratories
 P.O. Box 2040, Route 11, Industrial Park
 Cortland, NY 13045
 (607) 753-6711
10. EPA - United States Environmental Protection Agency (EPA) – National Pollutant Discharge Eliminations System (NPDES)
 General Permit Requirements
 (Federal Register September 9, 1992) Vol-57, No. 175
11. FS - Federal Specification
 Naval Publications Forms Center
 5801 Tabor Avenue
 Philadelphia, PA 19120
 (215) 697-2000
12. IRI - Industrial Risk Insurers
 85 Woodland Street
 Hartford, CT 06102
 (203) 520-7300
13. MS - Military Specifications

Naval Publications and Forms Center
5801 Tabor Avenue
Philadelphia, PA 19120
(215) 697-2000

14. OSHA - Occupational Safety and Health Association

S. Department of Labor Publications
200 Constitution Avenue, N.W.
Washington, DC 20210
(202) 219-4667

15. PCA - Portland Cement Association

5420 Old Orchard Road
Skokie, IL 60077
(708) 966-6200

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 45 00 QUALITY CONTROL

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the quality control and inspection requirements that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 1. SECTION 01 33 00 – SUBMITTAL PROCEDURES
 2. SECTION 31 80 00 – SAND FILL MATERIAL
 3. APPENDIX C – ARMY CORP OF ENGINEERS PERMIT

1.3 OBSERVATION AND SUPERVISION

- A Engineer Access: The Engineer or his appointed representative will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review.
- B Responsibility for the Work: The Contractor shall be solely responsible to supervise and direct the entire Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to complete the Work in accordance with the Contract Documents. The Contractor shall be solely responsible for the means, methods, techniques, sequences, quality control, and procedures of construction and safety precautions and programs incidental thereto. The foregoing includes work performed by the Contractor's subcontractors. The Contractor shall be responsible to see that the finished Work complies accurately with the Contract Documents.
- C Contractor's Representative: The Contractor shall designate in writing and keep on the Work site at all times during its progress a technically qualified, English-speaking superintendent, who shall not be replaced without written acceptance of the Engineer. The superintendent shall be the Contractor's representative at the job site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor.
- D Superintendent Availability: The Contractor's superintendent shall be present at the site of the Work at all times while work is in progress. The superintendent shall be available 24 hours a day, seven (7) days a week for communication with the District, and be able to meet at the project site within four (4) hours of request by the District outside of scheduled working hours. Failure to observe this requirement shall be considered as suspension of the Work by the Contractor until such time as such superintendent is again present at the site.

1.4 RESPONSIBILITY

- A Quality Assurance Testing: The Engineer may conduct periodic independent quality assurance testing and inspection to verify compliance with the Contract Documents.
- B Retesting Costs: The District reserves the right to back charge the Contractor for retesting of deficient or defective work or products upon written notification. Compensation for retesting on behalf of the District will be made through deductions from the Contract Amount.
- C Defective Work Corrections: The Contractor is responsible for correcting all defective work discovered prior to final acceptance of the Contract, despite the failure of the Inspector(s) to previously discover it.

1.5 TESTS AND INSPECTIONS

- A Scheduling: Contractor shall be responsible for scheduling all required tests.
- B Contractor Testing and Re-Testing Costs: Contractor shall pay for all tests, re-tests or re-inspections by the District, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.
- C Contractor Quality Control Testing Costs: Contractor shall pay for any testing performed by the Contractor for his own quality control.
- D District Costs: The District shall pay for:
 - 1. Inspections
 - 2. First-time tests of materials, and
 - 3. Certification requested by the District and not required by the Contract Documents.
- E Submittals-Agency or Laboratory Reports: Two (2) copies of the agency or laboratory report of each test or inspection identified in the Contract Documents shall be submitted to the Engineer. All tests of materials shall be made in accordance with the commonly recognized standards of national technical organizations, and such other special methods and tests as are prescribed in the Contract Documents.
- F Submittals-Contractor Purchases: One (1) copy of each of the Contractor's purchase for materials forming a portion of the Work shall be submitted to the Engineer, if requested. Each such purchase order shall contain a statement that the materials included in the order are subject to inspection by the District. Materials purchased locally will be inspected at the point of manufacture or supply, and materials supplied from points outside the San Diego Area will be inspected upon arrival at the job, except when other inspection requirements are provided for specific materials in other Sections of this Specification.
- G Submittals-Samples of Materials: The Contractor shall submit such samples of materials as are required by the Engineer, without charge. No material shall be used until the Engineer has had the opportunity to test, examine, and approve such materials. Samples will be secured and tested whenever necessary to determine the quality of the material. Samples and test specimens prepared at the job site, such as concrete test cylinders,

shall be taken or prepared by the Engineer in the presence and with the assistance of the Contractor.

1.6 AUTHORITY AND DUTIES OF INSPECTOR

- A Inspectors employed by the District shall be authorized to inspect all work done and materials and equipment furnished to complement the contractor furnished independent inspector.
- B Such inspection may extend to all or any part of the Work, and to the preparation, fabrication, or manufacture of the materials and equipment to be used.
- C The Inspector shall not alter or waive the provisions of the Contract Documents.
- D The Inspector will keep the Engineer informed as to the progress of the Work and the manner in which it is being done.
- E The Inspector will call the Contractor's attention to nonconformance with the Contract Documents that the Inspector may have observed.
- F The Inspector will not be responsible for the adequacy or correctness of the Contractor's means, methods, techniques, sequences, or procedures for construction.
- G The Inspector will not approve or accept any portion of the Work, issue instructions contrary to the Contract Documents, or act as foreman for construction.
- H The Inspector may reject defective materials, equipment, or work when it is not in compliance with the Contract Documents.
- I The Inspector will not be responsible for:
 - 1. The Contractor's quality control program
 - 2. The Contractor's safety program
 - 3. Coordinating the work or activities of the Contractor or his subcontractor
- J The Contractor shall provide safe access to the Work for the Inspector to perform his/her duties.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 50 13 TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

- A This section describes the temporary construction facilities and utilities that may apply to the Work. These requirements and constraints are in the addition to those appearing elsewhere in the Specifications or any regulations, codes, certifications, notices, etc. that may be required by the jurisdiction that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this section. Refer to:
 1. SECTION 01 35 23 - OWNER SAFETY REQUIREMENTS
 2. SECTION 01 57 19 - TEMPORARY ENVIRONMENTAL CONTROLS
 3. SECTION 01 57 23 - TEMPORARY STORM WATER POLLUTION CONTROL

1.3 SUBMITTALS

- A Whenever required by safety regulations, the Contractor shall submit design calculations for staging and shoring prior to application of loads.

1.4 CONTRACTOR'S STAGING AREA

- A Materials and Equipment Storage: The Contractor shall limit the location of his storage of equipment and materials to the staging area(s) as directed by the Construction Manager. The Contractor shall make his own arrangements for additional space that may be required and shall bear all associated costs. All stockpiles, materials, vehicles, and equipment shall be stored at the contractor's equipment and stockpile area or removed from the site at the end of each calendar day for the duration of this project.

1.5 PROJECT SECURITY

- A Storage - General: The Contractor shall provide any temporary storage required for the protection of equipment and materials as recommended by manufacturers of such materials.
- B Storage Security: The Contractor shall provide its own security for its equipment and materials at its own expense. Subject to approval of the Engineer as to location and type of fencing, Contractor may erect a fence around the equipment and stockpile area; however, Contractor shall repair or restore all surfaces, including pavement and planted areas, to the same condition as existed before the Contractor entered the area, unless otherwise required by the plans and specifications.
- C Protection of the Work: The Contractor shall make adequate provision for the protection of the Work areas against fire, theft, and vandalism and for the protection of the public and District forces against exposure to injury, and for the security of any off-site storage areas. All costs for this protection shall be included within the Contractor's bid.

- D Graffiti Removal: Contractor shall be responsible to remove or cover up any graffiti or other markings that are not necessary for the execution of the Work.

1.6 TEMPORARY UTILITIES

- A Use of District Utilities Prohibited: The Contractor shall provide and pay for all necessary temporary telephones, fuel, power, potable water, sanitary and proper toilet accommodations. Contractor shall not use District owned utilities, unless use of such utilities is allowed elsewhere in the contract documents.
- B Restrooms: Contractor shall provide its own portable restroom, the location of which shall be approved by the Construction Manager. Contractor shall regularly service for cleaning the portable restroom.

1.7 TEMPORARY LIGHTING

- A The Contractor shall provide temporary lighting in all work areas sufficient to maintain a lighting level during working hours not less than lighting levels required by CAL/OSHA standards.

1.8 PROJECT SAFETY

- A The temporary facilities to be provided by the Contractor, as described above, shall conform to all requirements in regard to operation, safety, and fire hazards of Federal, State, local authorities and of Underwriters.

1.9 REMOVAL OF TEMPORARY FACILITIES AND UTILITIES

- A Notification to Construction Manager: At such time or times as any temporary construction, facilities and utilities are no longer required for the Work, the Contractor shall notify the Construction Manager of his intent and schedule for removal of the temporary facilities and utilities, and obtain the Engineer's approval before removing the same. As approved, the Contractor shall remove the temporary facilities and utilities from the site as his property and leave the site in such condition as specified, as directed by the Engineer, and/or as shown on the Drawings.
- B Restore Unfinished Areas: Contractor shall return the site and facilities to their original "as found" or better condition, unless otherwise specified in the Contract Documents, at the completion of the Project. In unfinished areas, the condition of the site shall be left in a condition that will restore original drainage, evenly graded, seeded or planted as necessary, and left with an appearance equal to, or better than original.
- C Existing Improvements: Contractor shall return the site and facilities to their original "as found" or better condition, unless otherwise specified in the Contract Documents, at the completion of the Project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the temporary environmental controls requirements that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications or any codes, certifications, notices, etc. that may be required by jurisdictions that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.3 POTENTIAL CONTAMINATION

- A Historical Use: The properties that comprise the San Diego Unified Port District (District) Tidelands have been historically used for industrial purposes since the late 1800's. Due to these industrial activities, the potential exists that any excavation and some work related to certain structures conducted on the District Tidelands may expose hazardous wastes and contaminated soil/ground water and other contaminated materials.
- B Disclosure Statement: Contamination may include, but is not limited to, petroleum hydrocarbons, poly-nuclear aromatic hydrocarbons, polychlorinated biphenyls, heavy metals, asbestos-containing materials, lead-containing surfaces, and other hazardous substances. This statement serves as District disclosure of the potential for such contamination and in doing so, the protection and well-being of Contractor and subcontractor personnel health and safety is the sole responsibility of Contractor per Title 29 Code of Federal Regulations (CFR) part 1910.120.
- C Submittal: Prior to the award of the Contract, the Contractor shall sign the NOTIFICATION REGARDING ENVIRONMENTAL CONDITIONS attached as **Exhibit A**, at the end of these Specifications. Such statement shall be a part of these Specifications.

1.4 SOUND CONTROL

- A Compliance with Local Regulations: The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances that apply to any work performed pursuant to the Contract. Each internal combustion engine, used for any purpose for the Work or related to the Work, shall be equipped with a muffler of a type recommended by the manufacturer, so as to produce a maximum noise level of 85 dBA at five (5) feet. No internal combustion engine shall be operated at the work site without said muffler.
- B Minimize Noise: Operations shall be performed in a manner to minimize unnecessary noise generation.

- C Other Contract Specifications: The Contractor shall comply with all other sound control measures specified in the contract documents.
- D Noise Reduction Methods: The Contractor shall implement noise reduction methods listed below to minimize construction noise emission levels. The intent of these measures is to minimize construction noise impact to nearby tenants. Noise reduction methods shall include, but not be limited to:
1. Maintaining equipment mufflers and lubrication.
 2. Avoiding surface irregularities on the construction haul road to prevent unnecessary noise.
 3. Limiting the number and duration of equipment idling on site.
 4. Configuring, to the extent feasible, the construction site in a manner that keeps loud equipment and activities as far as possible from noise-sensitive locations.
 5. Minimizing noise from the use of backup alarms using any of the following measures, in conformance with OSHA regulations. This includes 1) use of self-adjusting ambient-sensitive backup alarms. The ambient-sensitive alarms shall automatically adjust to a maximum of 5 dBA over the surrounding background noise levels, or 2) manually adjustable alarms on low setting. The manually adjustable alarms shall be set at the lowest setting required to be audible above the surrounding noise, or 3) use of observers.
 6. Construction site access should be designed to the extent possible such that delivery and haul trucks move through the site in a forward manner without need to back up.
 7. Contractors shall use approved haul routes to minimize noise at sensitive noise receptor sites.
 8. Contractor shall schedule activities to the extent possible so that alarm noise is minimized.

1.5 DUST CONTROL

- A Authority and Responsibility: The Construction Manager shall determine the need for dust control at the work site. The Contractor shall take whatever steps, procedures, or means as are required to prevent unaccepted dust conditions being caused by his operations in connection with the execution of the Work; in any building and on any road which the Contractor or any of his subcontractors are using. Control may be by sprinkling of water, use of dust palliatives, modification of operations, or any other means acceptable to the District.
- B The Contractor shall have at least one water truck working on the site at all times during the clearing and grubbing and excavation work. The excavation area and the access road and haul road shall be watered as needed to keep the dust down, and as required by the Engineer.

- C The Contractor shall take whatever steps, procedures, or means as are required to prevent the generation of dust conditions being caused by his operation in connection with the execution of the Work; and on any road which the Contractor or any of his subcontractors are using. Control shall be by sprinkling of water, use of dust palliatives, medication of operations, or any other means acceptable to the District.
- D Damage to personal property, etc., resulting from the Contractor's construction operations shall be borne by the Contractor at no cost to the District.
- E The Contractor shall be financially responsible for washing vehicles and boats at nearby District tenant facilities if dust control measures are not effectively implemented and maintained.
- F General: The Contractor shall keep the street and work area clean at all times by means of mechanical sweepers or hand sweeping. Water will be used for dust control only, and not for cleaning streets.

1.6 WASTE REMOVAL

- A Daily: The Contractor shall contain, sweep, and properly dispose of debris on a daily basis.
- B Regulations: All waste disposals shall be in accordance with applicable Federal, State, and local laws and regulations, and District requirements.
- C Landfill Requirements: If the Contractor proposes to dispose of construction debris, trench spoils, excavation spoils, etc., at a landfill, he shall be responsible to provide and pay for all permits and analyses required by the landfill.
- D Prohibitions: Ditches, washes, or drainage ways shall not be filled.
- E Disposal Site Maintenance: Disposal operations shall no create unsightly or unsanitary nuisances.
- F Site Condition: The Contractor shall maintain the disposal site in a condition of good appearance and safety during the construction period.

1.7 DRAINAGE

- A Regulations: The Contractor shall take all necessary actions as required to meet discharge requirements of the State of California Regional Water Quality Control Board (RWQCB) and other pertinent local ordinances and regulation pertaining to dewatering and/or site drainage discharged into storm drains, bays, ocean, and creeks.
- B Existing Drainage: In excavation, fill, and grading operations, care shall be taken to not disturb the pre-existing drainage pattern as little as possible. Particular care shall be taken not to direct drainage water onto private property on into streets or drainage ways inadequate for the increase flow. Adequate drainage shall be provided to protect the Work.
- C Construction BMP: Refer to Section 01 57 23 – TEMPORARY STORM WATER POLLUTION CONTROL for additional details.

PART 2 PRODUCTS (NOT USED)

01 57 19

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL

(LESS THAN ONE ACRE OF DISTRIBUTED SOIL) - CONSTRUCTION BEST MANAGEMENT PRACTICE (BMP) PLAN REQUIRED

PART 1 GENERAL

1.1 SUMMARY

- A This section describes the temporary storm water pollution control requirements for construction sites less than one acre that may affect the Work. These requirements and constraints are in addition to those appearing elsewhere in the Specifications or any regulations, codes, certifications, notices, etc. that may be required by jurisdictions that have authority over the Work.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B Related Sections include the following:
 - SECTION 01 13 00 - SUPPLEMENTARY REQUIREMENTS
 - SECTION 01 33 00 – SUBMITTAL PROCEDURES
 - SECTION 01 41 00 - REGULATORY REQUIREMENTS

1.3 SCOPE OF WORK

- A The Work includes preparing a Construction BMP Plan and implementation and maintenance of storm water pollution prevention Best Management Practices (BMPs) required to control discharges to the storm water conveyance system or direct discharges to the San Diego Bay from construction activities as shown on the drawings and as specified in these Special Provisions.
- B The BMPs shall apply to all construction related areas and activities associated with the project, such as staging areas, equipment and material storage sites, waste management areas, temporary plant sites, and borrow pit operations, which may be outside the construction limits and shall remain and be maintained through the completion of all punch list items.

1.4 SUBMITTALS

- A Contractor's Construction BMP Plan for Disturbances of Less than One Acre.
- B End of Project Storm Water Compliance Report with copies of inspection reports.

1.5 REFERENCES

- A The publications and guidance listed below form a part of this specification to the extent referenced. These items are referred to in the text by the basic designation only.
 1. Port of San Diego Environmental Division webpage – <https://www.portofsandiego.org/stormwater-management>. Port of San Diego

specific templates and guidance on preparation of Construction BMP Plan. All projects requiring construction phase stormwater BMPs must use PORT templates unless otherwise approved by the Engineer and District Environmental Services.

2. State Water Resource Control Board webpages – http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml. Supplemental guidance on preparation of a California NPDES Construction Activities Storm Water General Permit SWPPP (General Construction Storm Water Permit).
3. Caltrans webpage – <https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control>. BMP guidance and details are available in the Caltrans Storm Water Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual. Guidance is also provided for construction storm water monitoring.

1.6 REGULATIONS

- A Comply with all applicable federal, state, and local regulations, including but not limited to air, water, environmental, transport and disposal regulations. Specific regulations applicable to discharges to the storm water conveyance system for this project include the following:

1. State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ. National Pollutant Discharge Elimination System (NPDES), General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Storm Water Permit) as amended, and/or modified.
2. Regional Water Quality Control Board (RWQCB) Order No. R9-20013-0001, (permit can be found at <https://www.portofsandiego.org/stormwater-management>) National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0109266, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District (Municipal Storm Water Permit) as amended, and/or modified.
3. Port of San Diego Jurisdictional Runoff Management Program (JRMP), Construction Component Chapter 5. <https://pantheonstorage.blob.core.windows.net/environment/JRMP-January-2020-Complete-Documents-and-Appendices.pdf>

1.7 BEST MANAGEMENT PRACTICES

- A Best Management Practices: All construction activities shall be evaluated by the Contractor for their potential to impact storm water quality. Adequate BMPs shall be identified and implemented to control the potential impacts. The BMPs shall include effective erosion and sediment controls, non-storm water management controls, material and waste management controls, and temporary impermeable canopy BMPs.

- B The Contractor, with the approval of the Engineer, shall modify the working details, as necessary, to adapt the BMPs for site conditions to meet the pollution control objectives. There shall be no additional costs to the District resulting from modification of selected BMPs used by the Contractor to achieve the pollution prevention objectives.
- C General BMP requirements include the following:
1. No discharges of any material may enter the storm drain system including wash water, dust, petroleum products, soil, or debris. The Contractor must immediately remove any such material that inadvertently enters the storm drain system of the receiving water body.
 2. If any contractor activity could potentially release materials to the storm drain system, appropriate protection of the storm drain system shall be implemented as described in the CALTRANS Storm Water Quality Handbook – Construction Contractor’s Guide and Specifications (<https://www.dot.ca.gov/programs/construction/storm-water-and-water-pollution-control>) or US EPA’s Preliminary Data Summary of Urban Storm Water Best Management Practices (EPA-821-R-99-012, August 1999). Storm drain protection may include storm drain barriers or filtration systems. **Note: Sand bags are not appropriate for activities lasting more than 7 days.**
 3. Any materials being stored which could release constituents by wind or runoff transport shall be protected by overhead cover, secondary containment, tarpaulins, or other appropriate methods.
 4. Contractor shall ensure all stockpiles are covered daily throughout the term of the contract. All dirt and/or debris transport onto paved surfaces shall be removed at the end of each workday.
 5. Any fuel products, lubricating fluids, grease or other products and/or waste released from the Contractor’s vehicles or equipment shall be collected and disposed of immediately, in accordance with state, Federal, and local laws.
 6. Any pavement cutting activity that generates cutting waste shall be collected/vacuumed and properly disposed of.
 7. All job site waste materials will be properly disposed of at the completion of work, including unsalvageable materials that may have been used in the storm water pollution prevention plan.
 8. Contractor shall ensure that all employees are trained and provided with training on the nature and implementation of the special provisions outlined above. This training shall include identifying the location of the storm drains on the job site and highlighting the proximity of the bay and the direct connection between the storm drain and the bay.

PART 2 PRODUCTS

2.1 GENERAL

- A Materials shall be as shown and specified in the references listed in this Section.

01 57 23

- B The Contractor shall have adequate materials on site to quickly deploy BMPs to protect the exposed portions of the site and to prevent sediment and pollutant discharges from the site.

PART 3 EXECUTION

3.1 GENERAL

- A The regulations listed in this Section prohibit degradation of water quality and require prevention or control of discharges from construction sites and construction activities for all District projects.
- B The Contractor shall implement appropriate BMPs to prevent and/or control potential discharges and to protect the storm water conveyance system from any and all activities with the potential to release materials directly or indirectly into the storm water conveyance system.
- C If a selected BMP fails, it shall be repaired and modified, if necessary, or replaced with an acceptable alternate as soon as it is safe to do so.
- D Qualifications of the Contractor's Storm Water Representative/Inspector: Contractor is to have a designated Water Pollution Control Manager (WPCM) to oversee, document, and maintain all storm water compliance at the site. The WPCM is responsible for non-storm water and storm water visual observations. The WPCM must have authority to implement and make field decisions to maintain compliance with the approved Construction BMP Plan.
- E Routine storm water inspections are to be carried out by the WPCM as required by the approved Construction BMP Plan. The site is to be inspected and BMPs are to be evaluated at least weekly and before, during and after a rain event. Required inspections are to be carried out for the duration of the project and through completion of punch list activities. The scheduled inspections are to be documented and inspection reports are to be maintained on the site.
- F The Contractor is required to submit a complete copy of the approved and implemented Construction BMP Plan and any amendments along with the inspection reports at project completion.

3.2 AUTHORITY OF THE ENGINEER AND DISTRICT STAFF

- A The Engineer and the District's Environmental Staff have the authority to require BMPs to be installed or maintained by the Contractor at any time and to stop or delay work that could result in pollutant transport, until such time as the Contractor provides adequate BMP protection.

3.3 UNAUTHORIZED DISCHARGES

- A No discharges of any material may enter the storm water conveyance system including process and wash waters, dust, petroleum products, soil or debris. The rinsing of paint or cementitious products into storm drains is prohibited. The Contractor shall be responsible for cleanup, mitigation, and penalties resulting from failure to implement and maintain appropriate BMPs for pollution prevention.

3.4 NOTIFICATION

- A The Contractor shall notify the Engineer immediately of any unauthorized releases to the storm drain. The Contractor shall immediately document all unauthorized releases including but not limited to the time, date, and duration, material released, and action taken to stop discharge and prevent future discharges. Documentation shall be provided to the Engineer.

3.5 CLEANUP

- A All unsalvageable materials used in the BMP program shall be properly disposed of outside of the Tidelands at the completion of work.

END OF SECTION

SECTION 01 71 13 MOBILIZATION AND DEMOBILIZATION

PART 1 GENERAL

1.1 DESCRIPTION

- A Mobilization shall mean preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings, staging areas, and other facilities necessary for the work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.
- B Demobilization shall consist of all work required to prepare plant and equipment for the return trip and removing all plant equipment, labor, unused materials and incidentals from the job site at the completion of all contract work as shown in the contract drawings and as specified in these specifications, including any land-based staging area used in the prosecution of the work, and cleanup of all facilities to pre-project conditions.

1.2 REFERENCE

- A The publications of the most recent edition and addenda listed below form a part of these specifications to the extent referenced. The publications are referred to in the text by the basic designation only.
- B The State of California Department of Transportation Standard Specifications (CALTRANS).

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 MOBILIZATION AND DEMOBILIZATION

- A Perform all work of Mobilization and Demobilization in accordance with the provision in Section 11, "MOBILIZATION," CALTRANS and these Technical Specifications.

END OF SECTION

SECTION 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 SUMMARY

- A This Section describes the requirements of construction and demolition waste management including Recycling and Solid Resource Management Plan (RSRMP), FORM A, Materials Management and Disposal Plan (MMDP), and Summary of Solid Waste and Disposal and Diversion (SSWDD), FORM B.

1.2 RELATED REQUIREMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Refer to:
 1. SECTION 01 11 00- SUMMARY OF WORK
 2. SECTION 01 13 00- SUPPLEMENTARY REQUIREMENTS
 3. SECTION 01 57 19- TEMPORARY ENVIRONMENTAL CONTROLS
 4. SECTION 01 14 00- WORK RESTRICTIONS
 5. SECTION 01 32 00- CONSTRUCTION PROGRESS DOCUMENTATION
 6. SECTION 01 35 23- OWNER SAFETY REQUIREMENTS
 7. SECTION 01 41 00 – REGULATORY REQUIREMENTS

1.3 DESCRIPTION

- A Assembly Bill 939, California Integrated Solid Waste Management Act of 1989 requires that localities throughout the State develop source reduction, reuse, recycling, and composting programs to reduce the tonnage of solid waste disposed in landfills 25 percent by 1995 and 50 percent by the year 2000. The disposal of materials resulting from all District projects shall, at a minimum, comply with the California Integrated Solid Waste Management Act of 1989 (AB 939).
- B In addition to AB 939, all materials disposed shall be used or recycled in accordance with any local Construction and Demolition (CUD) debris ordinances in effect for work conducted within the Port's jurisdictional member cities (City of San Diego, City of Chula Vista, City of National City, City of Imperial Beach and City of Coronado). The Contractor must demonstrate that C&D debris ordinance requirements of the jurisdictional member city or cities in which the project is located have been complied with and shall submit such documentation to the District.

1.4 SUBMITTALS

- A RSRMP and FORM A to the Engineer for approval.
- B MMDP to the Engineer for approval.
- C SSWDD (FORM B) and Disposal Manifest.

1.5 MANAGEMENT

- A Contractor shall take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. Construction and demolition waste include products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the Work. Contractor shall conduct a site assessment and estimate the types and quantities of materials under the Work that are anticipated to be feasible for source separation for recycling, or reuse, and shall note the procedures intended for a recycling, reuse, or salvage program. In the management of waste, consideration shall be given to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. Contractor is solely responsible for anticipating market changes in pricing and demand. The contractor is also solely responsible for coordinating the work to recycle or reuse material. Contractor shall be responsible for implementation of any special progress involving rebates or similar incentives related to recycling of waste. Revenues or other savings obtained for salvage, or recycling shall accrue to Contractor. Firms and facilities used for recycling, reuse, and disposal shall be appropriately permitted for the intended use to the extent required by federal, state, and local regulations. No change orders or additional compensation will be provided to the contractor for changes in the recycle market or demand.
- B Materials resulting from demolition including equipment to be removed by Contractor and determined by Contractor as being recyclable, reusable, recoverable, salvageable, re processed material and/or equipment then the Title is vested in Contractor upon approval by the Engineer and demolition/removal activities conform to environmental regulations and Contract Specification Sections.
- C If Contractor elects to recycle and/or reuse and/or salvage and/or recover and/or process items/materials resulting from the demolition; which requires Contractor to perform means and method-operations, such as; crushing operations, reduction in size operations. Processing of materials operations to be conducted on the construction site; then indemnity provisions of General Conditions apply at commencement of the Contractor means and method operations and thereafter.

1.6 RECYCLING AND SOLID RESOURCE MANAGEMENT PLAN (RSRMP)

- A Contractor shall be prepared to discuss the contractor's proposed RSRMP at the pre construction conference. Prepare and submit a RSRMP within ten (10) days after the pre-construction meeting. The plan shall include the following:
1. Name of individuals on the Contractor's staff responsible for waste prevention and management.
 2. Actions that will be taken to reduce solid waste generation.
 3. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas and equipment to be used for processing, sorting, and temporary storage of wastes.

01 74 19

4. Characterization, including estimated types and quantities, of the waste to be generated.
5. Name of the landfill to be used.
6. Identification of local and regional reuse programs.
7. List of specific waste materials that will be salvaged for resale, salvaged and reused, or recycled. Recycling facilities that will be used shall be identified.
8. Review of Contractor's RSRMP will not otherwise relieve Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
9. The RSRMP Form explanation is provided (FORM A).

1.7 MATERIALS MANAGEMENT AND DISPOSAL PLAN (MMDP)

- A Prepare a MMDP and submit a copy of the plan for Engineer acceptance prior to disposing of any material (except for water wastes which shall be addressed in the Storm Water Pollution Prevention Plan). The plan shall identify how Contractor will remove, handle, transport, recycle and dispose of all material required to be removed under this Contract in a safe, appropriate, and lawful manner in compliance with all applicable regulations of local, state, and federal agencies having jurisdiction over the disposal of removed materials. Materials or wastes shall only be recycled, reused, reclaimed, or disposed of at locations approved on the MMDP. A list of recycling and disposal sites can be found at the County of San Diego's website at: <https://www.sandiegocounty.gov/content/sdc/dpw/recycling/Map.html>.
- B Submit permission to reuse, recycle, reclaim, or dispose of material from reuse, recycling, reclamation, or disposal site owner along with any other information needed by the District to evaluate the acceptability of the proposed reuse, recycling, or disposal site prior to removing of any material from the project site. All existing information pertinent to the characterization of the material or waste must be disclosed to the District and the reuse, recycling, reclamation, or disposal facility. Submit copies of any profile forms and/or correspondence between Contractor and the reuse, recycling, reclamation, or disposal facility.
 1. Contractor is to comply with SECTION 01 13 00 SUPPLEMENTARY REQUIREMENTS, regarding demolition and removal "Title to Material", "Indemnifications", and "Exclusions on Delivered Locations".

1.8 SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION (SSWDD)

- A Failure to submit this Form and its supporting documentation may delay final acceptance and release of retention. Include manifests, weight tickets, receipts, and invoices specifically identifying the Project and materials sent to:
 1. Source Separated Recycling Facilities
 2. Mixed Debris Recycling Facilities
 3. Class III Landfills

4. Inert Materials accepted at class II landfills and daily cover.
5. Inert Fills (to be determined by the District).

B Contractor shall submit to the Engineer the completed Form quantifying all materials generated in the Work, disposed in Class III landfills, or diverted from disposal brought recycling. Indicate zero (0) if there is no quantity to report for a type of material. As indicated on the Form:

1. Report disposal or recycling either in tons or in cubic yards: if scales are available at disposal or recycling facility, report in tons; otherwise, report in cubic yards. Obtain District's written permission before proceeding with utility interruptions.
2. Indicate locations to which materials are delivered for disposal, recycling, accepted as daily cover, or taken for inert backfill.
3. The Form shall be accompanied by legible copies of weigh tickets, receipts, or invoices that specifically identify the project generating the material. Said documents shall be from recyclers and/or disposal site operators that can legally accept the materials for re-use, recycling, or disposal.
4. Indicate the Project title; Specification Number; name of the company completing Form and compiling backup documentation; the printed name, signature, and daytime phone number of the person completing the Form, the beginning and ending dates of the period covered on the Form, and the date that the Form is completed.

1.9 DISPOSAL MANIFESTS

- A Manifests shall be maintained to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration. Manifests shall be submitted to the District for signature prior to transportation and disposal by Contractor and Affidavit of Disposal is required.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 DISPOSAL OPERATIONS

- A Using a permitted waste hauler or Contractor's own trucking services, Contractor shall legally transport and dispose of materials under this program that cannot be delivered to a source separated or mixed recycling facility, to a transfer station or disposal facility that can legally accept the materials for disposal.

3.2 HAULING

- A Contractor is responsible for arranging collection of materials under this program by a permitted waste hauler or using Contractor's own trucks, to facilities that can legally accept construction and demolition materials for purpose of re-use, recycling, or disposal.

- B Prior to delivering materials under this program, Contractor shall familiarize itself with the specifications for acceptance of construction and demolition materials at recycling facilities.

FORM A				
CONTRACTOR'S RECYCLING AND SOLID RESOURCES MANAGEMENT PLAN				
Contract Number		Specification Number		
Project Title				
Contractor's Name				
Address				
Phone				
Date Submitted				
<p>These are procedures to be used for re-using, salvaging, or recycling materials. Indicate the procedures (by number), types of materials, and estimated quantities that will be recycled or disposed in the sections below:</p> <ol style="list-style-type: none"> 1. Hand-wrecking to recover salvageable materials 2. On-site concrete and asphalt crushing for use on-site 3. On-site concrete and asphalt crushing for use off-site (not permitted) 4. Source separation of materials and separately hauling to recyclers 5. Hauling mixed recyclables to a mixed debris recycling facility 6. Other (please describe) 				
RE-USE/SALVAGE/RECYCLING OF MATERIALS				
Type of Material	Procedures to be used (as above)	Facility to be used/ Location	No. of Estimated Quantities	
			Tons	Cubic Yards
ASPHALT/ASPHALT				
CONCRETE				
CONCRETE				
SOILS (CLEAN)				
GREENS (CLEAN)				
SCRAP METAL				
SALVAGE ITEMS (Describe)				
OTHER (Describe)				

MISC. CONSTRUCTION DEBRIS				

FORM B							
SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION							
Contract Number					Specification Number		
Project Title							
Contractor's Name							
Address							
Phone							
Type of Material	Name of Facility/Site Where Taken	(a) Disposed in Class II Landfills		(b) Diverted from Class III Landfills by Recycling or Accepted at Class Ipil Landfill as Daily Cover		(c) Disposed in Inert fills (District approved site only)	
		Tons	Cubic Yards	Tons	Cubic Yards	Tons	Cubic Yards
ASPHALT/ASPHALT							
CONCRETE							
CONCRETE							
METAL							
OTHER SEGREGATED MATERIALS (Describe):							
MISCELLANEOUS CONSTRUCTION WASTE							
COMPANY NAME				DATE OF REPORT:			
NAME OF PERSON COMPLETING FORM: (Please Print):							

01 74 19

TITLE	DAYTIME PHONE:
SIGNATURE	
PERIOD COVERED IN THIS REPORT: FROM:	TO:

END OF SECTION

SECTION 31 80 00 SAND FILL MATERIAL

PART 1 - GENERAL

1.1 SUMMARY

- A Furnish all services, labor, materials and equipment for complete placement of natural washed sand at Kellogg beach as shown on the drawings and as specified on this Section.
- B The Work shall include all testing and other requirements for the submittal requirements for the washed natural sand to comply with the Army Corp of Engineers Permit, **APPENDIX C** of the Specifications.

1.2 PERMITS

- A This project is governed by the Department of the Army Corp Permit. See **APPENDIX C** of the Specifications.
- B The Contractor shall be responsible for obtaining all applicable permits for the sand source. The Contractor shall submit evidence satisfactory to the District that the sand source to be used for this project is permitted by local, State, and Federal authorities, as applicable. The Contractor is likewise responsible for obtaining all applicable permits and licenses for the transport of equipment and material undertaken as part of the Work. Contractor is also responsible for all permit fees.

1.3 SUBMITTALS

- A Contractor shall submit the following for approval by the Engineer before the start of Work:
 1. Physical sample of sand (2-3-pound bags). Color of the proposed sand fill materials shall closely match of the existing sand at the project site. The project site is open to the public. Contractor can get samples of existing sand anytime. Proposed sand fill materials will be rejected if solely in the Construction manager's opinion, the color does not closely match the existing sand color.
 2. Character of sand; name, address of the source of sand.
 3. Written evidence that the proposed sand source is permitted under local, State and other authorities.
 4. Analytical Testing results that will show the sand fill material exceeds the required water quality standards. The source material will require submittal and ACOE approval per the permit conditions and aligned with their Inland Testing Manual.
 5. Metal Testing: Contractor shall submit one sample of the proposed sand fill material analyzed for certain metals in the accordance with the Total Threshold Limit Concentration as defined in CCR Title 22 (EPA Method 6010). If the analysis shows concentration of any metal in the proposed sand fill material is greater than its corresponding limit set forth in Table 1 below, the sand fill material shall be rejected.

TABLE 1

METAL	CONCENTRATION LIMIT (mg/kg)
Arsenic	33
Cadmium	5
Chromium	80
Copper	70
Lead	35
Mercury	0.15
Nickel	30
Silver	1
Zinc	120

6. Contractor shall provide a copy of the laboratory analysis to the Construction Manager for approval.
7. Grain Size Distribution data of the proposed sand. Submitted data shall be representative of the entirety of the proposed sand material.
8. **After the sand sample has passed the appropriate water quality standards and passed the threshold limit for metal testing, Construction Manager shall coordinate with Port's Real Estate Asset Manager and Marketing/Communication Department to show to the community the sand sample that will be placed at Kellogg Beach.**

1.4 QUALITY ASSURANCE

- A All sampling and testing shall be performed by a Certified Testing Laboratory retained by the Contractor. The laboratory shall be a geotechnical testing laboratory qualified under ASTM E-329-95c standards and certified by AASHTO (American Association of State Highway and Transportation Officials) National Voluntary Accreditation Program or MMRL AASHTO Material Reference Laboratory accreditation; personnel qualified by NICET (National Institute for Certification of Engineering Technicians).
- B Samples are collected at the sand source for laboratory testing. Sampling and testing shall be completed and approved by the District before it is transported to the project site and shall be representative samples of the sand to be delivered.

PART 2 - PRODUCTS

2.1 MATERIALS

- A Sand Fill Materials shall be obtained from domestic upland source(s). If the sand is to be furnished from several sources, a blending plan shall be provided showing the sand components will be thoroughly mixed before placement on the beach.
- B Sand Fill Material shall be natural created material, pre-washed or a pre-washed river sand. **Manufactured sand is not allowed.**
- C Sand Fill Material shall consist of granular material, and shall not contain organic material, mica, loam, clay, trash, asphalt concrete, concrete, hazardous materials or

debris. Color of sand shall closely match with the color of existing sand at the project site. Acceptability of the color of the proposed sand fill material shall be entirely at the discretion of the Construction Manager.

- D Sand fill material placed on the Work Site, which in the opinion of the Construction Manager, the color does not closely match with the color of the existing sand, regardless of the approved submittal, shall be removed from the Work Site and shall be replaced with suitably colored material at no additional cost to the District.
- E The grain size distribution shall be as indicated on the table below:

SIEVE SIZE	PERCENT PASSING
No. 4 (4.75 mm)	95-100
No. 8 (2.36 mm)	75-90
No. 16 (1.18 mm)	55-75
No. 30	30-50
No. 50	10-50
No. 100	2-20
No. 200	0-5

- F Sand Fill Material shall be free of contaminants at levels that will not adversely impact beneficial uses. See Table for Metal Testing on this Section of the specifications.
- G Sand Fill Material shall not have a greater than 10% sand difference from the receiving beach and shall not have a negative aesthetic impact on the receiving beach.

2.2 SAND SUPPLIERS

- A The sand suppliers below were used by the previous sand replenishment projects. Sand sample and testing were approved by the Army Corp of Engineers.
 1. East County Sand, LLC
9029 Park Plaza Drive, Suite 104, La Mesa, CA 91942
Tel # (619) 390-6500
 2. Martin Marietta Materials
8514 Mast Boulevard, Santee, CA, 92071
Tel # (858) 715-5600
- B Contractor may submit other sand suppliers as long as the sand meets the requirements specified in the contract documents and shall be approved by the Army Corp of Engineers.

PART 3 - EXECUTION

3.1 SAND FILL PLACEMENT

- A Sand Fill Materials shall be placed to the lines and grades shown on the drawings; shall be placed with a moisture content between 10% and 20%; shall be placed when the tide elevation is at minimum of 1 foot below the elevation of the sand fill being placed, except that this requirement shall not apply when sand fill material is being placed at or below

the +1.0 MLLW contour. Although specific compaction density values are not required, Contractor shall wheel roll all sand fill (with rubber-tired construction equipment such as front-end loader) to assure adequate compaction. Final surface of sand fill shall be smoothed to remove all wheel tracks and ruts.

- B Sand Fill Material shall be placed during low tide conditions and installation of a silt curtain per Section 01 57 23 - TEMPORARY STORM WATER POLLUTION CONTROL shall be utilized to minimize turbidity during sand placement.
- C Placement of Sand: Actual placement of sand shall be allowed after approval of the actual sand sample, gradation and analytical testing and other requirements per specifications are approved by District. The source material will require submittal and ACOE approval per the permit conditions and aligned with the Inland Testing Manual.
- D Sand Fill Material shall not be placed in such a manner as to obstruct flows from beach outfalls and storm drains.
- E Rutted areas along the top of bank shall be filled with sand material to match adjacent grades.

3.2 RESTORATION OF ADJACENT AREAS

- A Contractor shall smooth grade all areas disturbed by his operations and shall remove and dispose of all construction debris outside Tidelands.
- B Contractor to remove any loose and excess sand materials from the laydown and stockpile area including sweeping down to the existing surface prior to leaving the job site.

3.3 ORDER OF WORK

- A Contractor shall make their best effort to make a prompt submittal for the sand fill material and sand sample to the District for approval as described in part 2.1 "MATERIALS" of this section and per APPENDIX C — ARMY CORP OF ENGINEERS PERMIT of the Specifications.
- B Contractor shall submit the remaining submittals listed on APPENDIX B — Register of Required Submittals for District approval.
- C **Contractor is not allowed to place sand until the sand submittals are approved by the Army Corp of Engineers through the District.**

3.4 TRANSPORT OF MATERIAL

- A Use only rubber front-end loader equipment for transporting and placement of sand. The size of vehicle equipment shall fit the Contractor's access shown on the drawings. If the vehicle equipment will not fit, Contractor shall modify the access, see note on the Drawings.
- B All sand material placed on the project site during the workday should be spread over the site by the end of each day.

- C Contractor shall remove all equipment at the work site at the end of every workday, other than the equipment stored at the lay down area. The beach shall be open to the public after end of every workday.
- D Contractor's access route to the project site is indicated on the drawing. Other recommended access shall be approved in advance by the District.

3.5 DUST CONTROL

- A Contractor shall take whatever measures to prevent or minimize dust conditions in connection with the execution of work.
- B Contractor shall apply water to the work site and equipment lay down area as necessary to prevent dust conditions.
- C Contractor shall provide and apply water to the work site and equipment lay down area as necessary to prevent dust conditions and also during placement of sand. Contractor shall provide for the water source and shall be responsible to pay for the water used during and before construction. Contractor will not be allowed to tap into the private residents' water source.

3.6 CLEAN-UP

- A Contractor shall take precautionary measures to prevent construction debris from falling into the bay during construction. Contractor shall immediately remove any construction debris, buoyant or non-buoyant, which fall into the bay.
- B No debris, soil, silt, sand, sawdust, rubbish, cement or concrete washing, oil or petroleum products from construction shall be allowed to enter into or placed where it may be washed by rainfall or run-off into bay.
- C No maintenance or fueling of equipment or vehicle is allowed on the project site.
- D Contractor shall keep the project site clean of all rubbish and debris at all times.
- E Upon completion of work, and prior to final acceptance, the Contractor shall remove from the vicinity of Work all equipment, surplus material, and portable restrooms.

3.7 TURBIDITY MONITORING

- A The Port will carry out turbidity monitoring during the placement of sand. Turbidity is collected once daily from a boat using a water quality meter. See APPENDIX C- Department of the Army Corp Permit of the Specifications.
- B Contractor shall comply with the Port's direction to temporarily stop placement of sand or place additional BMPs for turbidity containment when turbidity limits are exceeded.
- C Contractor to install silt curtain or other means acceptable to the District during placement of soil as a required BMP to fully contain the waterside portion of the site during any shoreline work to avoid turbidity plumes migrating beyond the project limit. Contractor to cease placement if directed by Port's representative.

END OF SECTION

SECTION 7.0 – APPENDICES/EXHIBITS

APPENDICES

APPENDIX A	FORMS
APPENDIX B	REGISTER OF REQUIRED SUBMITTALS
APPENDIX C	ARMY CORPS OF ENGINEERS PERMIT
APPENDIX D	CITY OF SAN DIEGO RIGHT OF WAY PERMIT

EXHIBITS

EXHIBIT A	NOTIFICATION REGARDING ENVIRONMENTAL CONDITIONS
EXHIBIT B	FINAL ENVIRONMENTAL IMPACT REPORT

APPENDIX A

STANDARD COMMUNICATION FORMS

Form 1.....	TIME AND MATERIALS REPORT
Form 2.....	REQUEST FOR INFORMATION
Form 3.....	AS-BUILT DRAWING CERTIFICATION FORM
Form 4.....	BULLETIN (NOT USED)
Form 5.....	PROGRESS ESTIMATE
Form 5A.....	Summary of Value of Contract Work Completed
Form 5B.....	Summary of Contract Work Completed
Form 5C.....	Summary of Change Order Work Completed
Form 6.....	NON-CONFORMANCE REPORT
Form 7.....	PROCUREMENT LOG
Form 8.....	NOTICE TO STOP WORK
Form 9.....	CHANGE ORDER REQUEST
Form 9A.....	Cost Estimate Summary Sheet
Form 9B.....	Cost Estimate for Extra Work, Prime Contractor
Form 9C.....	Cost Estimate for Credits, Prime Contractor
Form 9D.....	Cost Estimate for Extra Work, Sub-Contractor 1
Form 9E.....	Cost Estimate for Extra Work, Sub-Contractor 2
Form 10.....	SUBSTITUTION REQUEST
Form 10A.....	Substitution Request Form
Form 10B.....	Substitution Warranty Form
Form 11.....	PROJECT WARRANTY SUMMARY REPORT
Form 12.....	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
Form 12A.....	Contractor's Recycling And Solid Resources Management Plan
Form 12B.....	Summary Of Solid Waste Disposal And Diversion



TIME AND MATERIALS REPORT

Project Title & Location:					
Contractor:			Contract No.:		WBS No.:
Description of work performed:					
Date:		RFI No:		Bulletin No:	
				C.O.R No:	
CRAFTSMAN/CONTRACTOR		RATE/CRAFT	HOURS	O/T	TOTAL
EQUIPMENT	MANUFACTURER	MODEL #		HOURS STANDBY	HOURS UTILIZED
MATERIALS:					QUANTITY:
<i>This report only verifies the labor, equipment and materials expended during the course of the work. Use of this form does not imply concurrence that the resources expended are in addition to the Contract</i>					
Time Verified By:					Date:
Time Approved By:					Date:
Contractor Representative:					Date:



REQUEST FOR INFORMATION

Project Title:			
Contractor:		Contract No.:	WBS No.:
Date:		RFI No.:	
Submitted To:		Submitted By:	
San Diego Unified Port District Engineering-Construction 3165 Pacific Highway San Diego, CA 92101			
Author:		Co-Author:	
Subject:			
Spec. Sec. No.:		Dwg. No.:	Detail No.:
Note No.:			
Cost Impact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Schedule Impact: <input type="checkbox"/> Yes <input type="checkbox"/> No	
		Code:	
INFORMATION REQUESTED			DATE REQUIRED:
CONTRACTOR'S RECOMMENDATION			
RESPONSE: <i>*This response is to provide guidance and direction to the Contractor. This guidance and direction are not an approval for any additional cost or time impact to the project. If Contractor anticipates any additional cost or time impact as a result of this response, Contractor must submit a Change Order and obtain approval before ordering any material or performing any work related to this response.</i>			
Answered By:			Date Answered:





PROGRESS ESTIMATE

PART A - SUMMARY OF VALUE OF CONTRACT WORK COMPLETED

Estimate No. _____ for the period beginning _____ ending _____

Contractor: _____	Project Title: _____
Address: _____	Location: _____
Progress Payment No: _____	Contract No.: _____ WBS No.: _____
	Scheduled Completion Date: _____
Basic Contract Work Completed to Date: _____	REMARKS:
Change Order Work Completed to Date: _____	
Materials on-hand to Date: _____	
Gross Value of Work Completed to Date: _____	
Less 5% Retention: _____	
Gross Value to Date Less Retention: _____	
Less Previous Payments: _____	
Balance Due this Request: _____	
Add: _____	APPROVED FOR PROCESSING
Less: _____	
Adjusted Amount Due Contractor: _____	
<i>*Please do not write in this shaded area*.</i>	Finance Department
CERTIFICATE OF CONTRACTOR	
<i>I certify that to the best of my knowledge and belief, all items of work for which payment id being requested have been completed in accordance with the terms of the contract, and that no part of the amount requested had been received.</i>	Reviewed & Checked by: _____ Date: _____
	Construction\Project Manager
By: _____ Date: _____	Approval Recommended: _____ Date: _____
	Engineering Manager
Title: _____	Payment Approved: _____ Date: _____
	Chief Engineer



PART B - SUMMARY OF CONTRACT WORK COMPLETED

Estimate No. _____ for the period beginning _____ ending _____

SPEC #



PART C – SUMMARY OF CHANGE ORDER WORK COMPLETED

Estimate No. _____ for the period beginning _____ ending _____

SPEC #



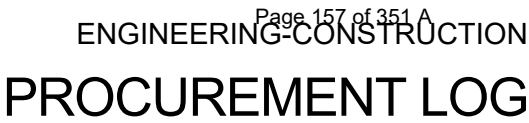
Estimate No. _____ for the period beginning _____ ending _____

SPEC #



NON-CONFORMANCE REPORT

Project Title & Locations:				
Contractor:		Contract No.:		WBS No.:
TO:		FROM:		
		San Diego Unified Port District Engineering-Construction 3165 Pacific Highway San Diego, CA 92101		
Telephone:		Fax No.:		
NCR Number	Date Issued	Inspector	Specification	Drawing Number
YOU ARE HEREBY NOTIFIED THAT THE FOLLOWING WORK DOES NOT CONFORM TO CONTRACT DOCUMENTS AND PAYMENT FOR THIS WORK WILL BE WITHHELD UNTIL CORRECTED:				
LOCATION AND DESCRIPTION:				
CORRECTIVE ACTION REQUIRED:				
CORRECTIVE ACTION TAKEN:				
CONFIRMED BY: _____ Contractor's QC Representative			DATE:	
INSPECTED BY:			DATE:	
RELEASED BY:			DATE:	

[illegible]



NOTICE TO STOP WORK

Notice Date:

Project Title & Location:

Contractor:

Contract No.:

WBS No.:

☐ VIOLATION☐ NO PERMIT - STOP WORK - REMOVE CONSTRUCTION OR OBTAIN PERMIT AND MAKE ANY WORK COMPLY WITH BUILDING LAWS.GENERAL CONDITION ARTICLE 5.2.1
"DISTRICT'S RIGHT TO STOP WORK"
AND ARTICLE 5.2.6 "DISTRICT'S
OBSERVATION OF WORK".☐ CONSTRUCTION NOT IN ACCORDANCE WITH APPROVED PLANS AND PERMIT - STOP WORK - MAKE EXISTING WORK COMPLY WITH APPROVED PLANS AND PERMIT OR REMOVE IT.☐ NO APPROVED SUBMITTALS - STOP WORK - OBTAIN APPROVAL FOR REQUIRED SUBMITTALS. MAKE ANY WORK COMPLY WITH APPROVED SUBMITTALS OR REMOVE IT.☐ STOP WORK - UNTIL AUTHORIZED TO CONTINUE BY SAFETY INSPECTOR.☐ CORRECTIONS REQUIRED☐ CORRECTIONS LISTED BELOW MUST BE MADE BEFORE WORK CAN BE APPROVED.☐ PARTIAL APPROVAL☐ WORK DESCRIBED BELOW HAS BEEN INSPECTED AND IS APPROVED.

WORK AREA/LOCATION	DWG NO./DETAIL	SPEC. SECTION
DESCRIPTION:		

THE ACTIONS OR CORRECTIONS INDICATED ABOVE ARE REQUIRED WITHIN _____ DAYS.

NAME OF INSPECTOR (PRINT)_____
INSPECTOR'S SIGNATURE_____
OFFICE TEL. NO._____
DATE



CHANGE ORDER REQUEST

PART A - COST ESTIMATE SUMMARY SHEET

Project Title & Location:			
Contractor:		Contract No.	WBS No:
Change Order Request No:		Prepared By:	Date:
DESCRIPTION OF WORK:			
REASON FOR CHANGE:			
WORKSHEET	DESCRIPTION	TOTALS	
FORM 9B	Prime Contractor Cost Estimate for Extra Work		
FORM 9C	Prime Contractor Cost Estimate for Credit		
PRIME CONTRACTOR SUB-TOTAL			
FORM 9D	Sub-Contractor 1 Cost Estimate for Extra Work		
FORM 9E	Sub-Contractor 2 Cost Estimate for Extra Work		
	<Add Sub-Contractor Forms if needed.>		
SUB-CONTRACTOR SUB-TOTAL			
TOTAL			
1% BOND			
COR TOTAL			



CHANGE ORDER REQUEST

PART B - COST ESTIMATE FOR EXTRA WORK, PRIME CONTRACTOR

Contractor: _____	Project Title: _____
Address: _____	Location: _____
_____	Contract No.: _____ WBS No.: _____
Change Order Request No: _____	Scheduled Completion Date: _____

MATERIALS						LABOR						EQUIPMENT (Caltrans Labor Surcharge and Equipment Rental Rates)					
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL MATERIAL COST	DESCRIPTION	TOTAL HOURS	BASE RATE	FRINGE BENEFITS / TAXES/ WORKER COMP	TOTAL BASE LABOR	TOTAL FRINGE BENEFITS/ TAXES/ WORKER COMP	DESCRIPTION	MODEL	CODE	HOURS	RATE \$/HR	TOTAL
SUBTOTALS																	
SALES TAX (8.00%)																	
TOTAL DIRECT COSTS																	
MARK-UP AMOUNTS (15.00%) (SALES TAX EXCLUDED) *																	
TOTAL WITH MARK-UP AND APPLICABLE SALES TAX																	
TOTALS FOR EXTRA WORK			MATERIAL			LABOR						EQUIPMENT					

*NOTE: Per General Conditions Article 5.7.5.1.1.5: "Where total direct cost exceeds \$50,000, the markup shall be reduced from 15% to 10%"

PRIME CONTRACTOR, TOTAL DIRECT COST

PRIME CONTRACTOR, TOTAL FOR EXTRA WORK



PART C - COST ESTIMATE FOR CREDIT, PRIME CONTRACTOR

	MATERIALS					LABOR						EQUIPMENT (Caltrans Labor Surcharge and Equipment Rental Rates)							
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL MATERIAL COST	DESCRIPTION	TOTAL HOURS	BASE RATE	FRINGE BENEFITS / TAXES/ WORKER COMP	TOTAL BASE LABOR	TOTAL FRINGE BENEFITS/ TAXES/ WORKER COMP	DESCRIPTION	MODEL	CODE	HOURS	RATE \$/HR	TOTAL		
SUBTOTALS																			
SALES TAX (8.00%)																			
TOTAL DIRECT COSTS																			
MARK-UP AMOUNTS (15.00%) (SALES TAX EXCLUDED) *																			
TOTAL WITH MARK-UP AND APPLICABLE SALES TAX																			
TOTALS FOR EXTRA WORK			MATERIAL			LABOR							EQUIPMENT						

PRIME CONTRACTOR, TOTAL DIRECT COST**PRIME CONTRACTOR, TOTAL FOR CREDITS**



PART E - COST ESTIMATE FOR EXTRA WORK, SUBCONTRACTOR 2

MATERIALS						LABOR						EQUIPMENT (Caltrans Labor Surcharge and Equipment Rental Rates)						
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL MATERIAL COST	DESCRIPTION	TOTAL HOURS	BASE RATE	FRINGE BENEFITS / TAXES/ WORKER COMP	TOTAL BASE LABOR	TOTAL FRINGE BENEFITS/ TAXES/ WORKER COMP	DESCRIPTION	MODEL	CODE	HOURS	RATE \$/HR	TOTAL	
SUBTOTALS																		
SALES TAX (8.00%)																		
TOTAL DIRECT COSTS																		
MARK-UP AMOUNTS (15.00%) (SALES TAX EXCLUDED) *																		
TOTAL WITH MARK-UP AND APPLICABLE SALES TAX																		
TOTALS FOR EXTRA WORK			MATERIAL			LABOR						EQUIPMENT						

SUB-CONTRACTOR 2, TOTAL DIRECT COST

SUB-CONTRACTOR 2, TOTAL FOR EXTRA WORK



SUBSTITUTION REQUEST FORM

A. PROJECT DESCRIPTION

1. Project: _____
2. Architect: _____
3. Contract Number: _____
4. Contractor: _____

B. PROPOSED SUBSTITUTION

1. Specified Product: _____
2. Specification Section: _____
3. Proposed Substitution:
4. Description: _____
5. Manufacturer Name/Rep/Phone: _____

C. CONTRACTOR'S REPRESENTATIONS

1. The proposed product meets or exceeds specification requirements?
☐ Yes ☐ No
2. Will changes be required to building design in order to properly install the proposed product?
☐ Yes ☐ No If Yes, please explain:

3. Does substitution affect drawing dimensions?
☐ Yes ☐ No If Yes, please explain:

4. What affect does the substitution have on other trades?

5. Proposed product is subject to all requirements of specifications, including warranties.
☐ Yes ☐ No

6. Will proposed substitution affect progress schedule or completion of work?
☐ Yes ☐ No If Yes, please explain:



SUBSTITUTION REQUEST FORM

7. Will proposed substitution increase/decrease project cost?

☐ Yes ☐ No If Yes, please explain and indicate total amount of increase/decrease

8. Will maintenance and service parts be locally available for proposed substitution?

☐ Yes ☐ No If Yes, please explain and indicate total amount of increase/decrease

9. Will proposed product meet all requirements or reviewing agencies?

☒ Yes ☐ No If Yes, please explain:

10. Summarize differences in product characteristics between proposed substitution and specified item.

11. Proposed substitution by:

Representative: _____

Company: _____

Address: _____

Phone: _____

D. CONSULTANT'S EVALUATION:

Accepted: _____ Accepted as noted: _____

Rejected: _____ Received too late: _____

By: _____ Date: _____

Remarks: _____

SUBSTITUTION WARRANTY FORM

PROJECT: _____

LOCATION: _____ CONTRACT NO: _____ WBS NO: _____

We propose to provide _____ in lieu of, and as an equivalent to _____ as currently indicated in the Contract Documents.

We agree to assume all costs for testing, research, license fees, royalties, etc. and any modifications to other portions of the work as necessary to accommodate our material(s) and system(s) including all appurtenances required for proper installation and functioning of said material(s) and system(s) and obtaining all governing agency approvals.

We hereby warrant the _____ is the equivalent of _____ in every aspect and will perform satisfactorily under the conditions and use indicated on the Drawings and described in the Specifications.

We are hereby responsible for any costs or modifications (if any) to any other trade or portion of the project as necessary to accommodate the use of the requested substitution whether immediately apparent or discovered at a later date.

Unless indicated otherwise, in writing, there will be no delay in the Project Schedule as a result of this substitution.

Signed: _____ Date: _____
(Manufacturer/Supplier/Other)

Signed: _____ Date: _____
(Subcontractor)

Signed: _____ Date: _____
(General Contractor)

[illegible]

CONTRACTOR'S RECYCLING AND SOLID RESOURCES MANAGEMENT PLAN

Project Title & Location:				
Contract Number:			WBS (Project) Number:	
Contractor:				
Address:				
Phone:			Date Submitted:	
<p>These are procedures to be used for re-using, salvaging, or recycling materials. Indicate the procedures (by number), types of materials, and estimated quantities that will be recycled or disposed in the sections below:</p> <ol style="list-style-type: none"> 1. Hand-wrecking to recover salvageable materials 2. On-site concrete and asphalt crushing for use on-site 3. On-site concrete and asphalt crushing for use off-site (not permitted) 4. Source separation of materials and separately hauling to recyclers 5. Hauling mixed recyclables to a mixed debris recycling facility 6. Other (please describe) 				
RE-USE/SALVAGE/RECYCLING OF MATERIALS				
Type of Material	Procedures to be used (as above)	Facility to be used/ Location	No. of Estimated Quantities	
			Tons	Cubic Yards
ASPHALT/ASPHALT CONCRETE				
CONCRETE				
SOILS (CLEAN)				
GREENS (CLEAN)				
SCRAP METAL				
SALVAGE ITEMS (Describe)				
OTHER (Describe)				
MISC. CONSTRUCTION DEBRIS				

SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION

Project Title & Location:							
Contract Number:				WBS (Project) Number:			
Contractor:							
Address:							
Phone:				Date of Report:			
Type of Material	Name of Facility/Site Where Taken	(a) Disposed in Class II Landfills		(b) Diverted from Class III Landfills by Recycling or Accepted at Class I/pil Landfill as Daily Cover		(c) Disposed in Inert fills (District approved site only)	
		Tons	Cubic Yards	Tons	Cubic Yards	Tons	Cubic Yards
ASPHALT/ASPHALT CONCRETE							
CONCRETE							
METAL							
OTHER SEGREGATED MATERIALS (Describe)							
MISCELLANEOUS CONSTRUCTION WASTE							
COMPANY NAME				DATE OF REPORT:			
NAME OF PERSON COMPLETING FORM: (Please Print):							
TITLE & COMPANY NAME:				DAYTIME PHONE:			
SIGNATURE							
PERIOD COVERED IN THIS REPORT: FROM:				TO:			

APPENDIX B

REGISTER OF REQUIRED SUBMITTALS

Register No.	Description	General Condition Article	Tech Spec. Section	Sub- Section	Required Elements					
					Cut Sheet	Shop Dwg.	Samples	Certification	Warranty	Other
A	Required Prior to NTP									
1	Contractor's Insurance	5.6.1	-	-						X
2	Labor and Material Bond	5.6.2.1.1	-	-						X
3	Performance Bond	5.6.2.1.2	-							X
4	CARB Certificate of Reported Compliance	4.4.4	01 41 00							X
B	Required Prior to or at the Pre-Construction Conference									
1	Start-up Schedule	-	01 32 00	1.6						X
2	Injury Illness Prevention Program (IIPP) a. Fall Protection Plan b. Material Safety Data Sheet	-	01 35 23	1.4						X X
3	Construction Site Security Plan (CSSP)	-	01 35 53	1.6						X
4	Port Storm Water Management Practices (BMPs)	-	01 57 23	1.4						X
5	Recycling and Solid Resource Plan (RSRMP)	-	01 74 19	1.6						X
6	Materials Management and Disposal Plan (MMDP)	-	01 74 19	1.7						
8	Universal Waste Removal Site Specific Plan	-	02 08 20	1.5						X
9	Demolition Plan, Inventory	-	02 41 19	1.5, 1.6						X
C	Required Prior to Start of Work at the Site									
1	Security Awareness Form	-	01 35 53	1.5						X
D	Other Submittals									
1	Schedule of Values	5.3.7.1	01 29 73	1.4						X
2	Contractor Progress Schedule	5.3.7.3	01 32 00	1.7						X
3	Look-ahead Schedule	-	01 32 00	1.7						X
4	Certified Payroll Report	5.3.3.3	01 33 00	1.4				X		
5	Hot Work Permit	-	01 35 23	1.4						X
6	Disposal Manifests	-	01 74 19 01 74 20 02 08 10 02 08 20	1.9 1.8 1.6 3.4				X		X
7	Site Specific Work Plan		02 08 10 02 08 20	1.6 1.5						
8	Shop Drawings	-	13 47 15 13 47 17	1.3		X				
E	Close-out Submittals									
2	Maintenance Data	-	03 35 43	1.5						X

3	Product Warranty Summary Report	-	Appendix A	Form 11					X	
---	---------------------------------	---	------------	---------	--	--	--	--	---	--

APPENDIX C

ARMY CORP OF ENGINEERS PERMIT



DEPARTMENT OF THE ARMY PERMIT

Permittee: Port of San Diego Planning and Greenport (Port); Attn: Eileen Maher

Project Name: Port of San Diego Kellogg Beach Sand Replenishment Project

Permit Number: SPL-2019-00589-RRS

Issuing Office: Los Angeles District

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The authorized project consists of performing beach nourishment activities (minor grading/re-contouring/stockpiling and fill activities associated with sand replenishment) at Kellogg Beach near La Playa beach for a Corps five year beach nourishment permit that allows for annual beach nourishment from suitable upland sources of sand. The beach nourishment work consists of minor grading and fill activities to and from 0 feet (ft.) to 5 ft. Mean Lower Low Water (MLLW) with annual placement of 2,200 cubic yards along a length of 300 ft. (feet) of existing beach shoreline within a 5 ft. width within the intertidal zone. The project will result in a discharge of fill of suitable sandy material within 1,500 square ft. (sf) of non-wetland waters of the U.S. with no eelgrass impacts. Sand will be truck-hauled and stockpiled and directly placed by land-based equipment on the beach, including spreading and wheel compacting with minor grading to the surrounding area. All work will occur during low tide. Allowing for mobilization and demobilization time and barring tidal constraints, the annual sand replenishment activities should be completed within fourteen (14) days following commencement.

The beach nourishment shall strictly use only sand sources from an approved sand source (per the Inland Testing Manual (ITM) requirements) to restore the southwestern shoreline of the Kellogg Beach at the Shelter Island Yacht Basin near Lawrence Street in northern San Diego Bay with imported sand. No other dredged material sources are to be allowed unless otherwise approved by the Corps. Prior to commencement of sand replenishment activities every year, the Port will identify an appropriate upland source of clean, washed sand of appropriate size and composition. Samples will be submitted for laboratory analysis in accordance with guidelines

described in the ITM and results will be provided to Corps and EPA for evaluation per the ITM and the Corps shall provide a timely response as to the suitability of the disposal source and a written determination to the Permittee as to whether a Notice to Proceed to start work is granted.

[X] To construct structures and/or conduct work in or affecting "navigable waters of the United States" pursuant to Section 10 of the Rivers and Harbors Act of 1899,

[X] To permanently discharge fill into 0.034 acre(s) of waters of the U.S. pursuant to Section 404 of the Clean Water Act of 1972, as shown on the attached drawings.

Specifically, you are authorized to:

Construct the authorized beach nourishment project every year or as needed which consists of performing annual beach nourishment activities (hauling, stockpiling, minor grading/re-contouring) using upland sources with fill activities associated with sand replenishment at Kellogg Beach as shown in the Corps permit drawings. The beach nourishment work consists of minor grading and fill activities to and from 0 feet (ft.) to 5 (MLLW) datum with annual placement of 2,200 cubic yards along a length of 300 ft. (feet) of existing beach shoreline within a 5 ft. width within the intertidal zone. The project will result in a discharge of fill of suitable sandy material within 1,500 square ft. (sf) or 0.034 acres of non-wetland waters of the U.S. Sand will be truck-hauled and stockpiled and directly placed on the beach by land-based equipment, including spreading and wheel compacting with minor grading to the surrounding area. All work will occur during low tide.

Project Location: The project is located along northern San Diego Bay on the Kellogg beach shoreline within the city of San Diego and the sand replenishment activities are between Kellogg Street and Lawrence Street and located along the southwestern shoreline of the Shelter Island Yacht Basin, in San Diego County, CA (at: Latitude: 32.7092 N, Longitude -117.237 W).

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends on April 7, 2025. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. A conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

1. Prior to initiating construction in waters of the U.S., the Permittee has submitted to the Corps Regulatory Division a complete set of beach nourishment plans showing all work and structures in waters of the U.S. All plans shall be in compliance with the Final Map and Drawing Standards for the South Pacific Division Regulatory Program dated February 10, 2016 (<http://www.spd.usace.army.mil/Missions/Regulatory/PublicNoticesandReferences/tabid/10390/Article/651327/updated-map-and-drawing-standards.aspx>). The work must comply with the attached permit plans. No work in waters of the U.S. is authorized until the Permittee receives, in writing (by letter or email), Corps Regulatory Division approval of the final plans. The Permittee shall ensure that the project is built in accordance with the Corps-approved plans.
2. Permittee shall ensure that no material is to be placed on any wetlands or eelgrass. Permittee shall ensure that all transported sand is hauled, stockpiled, and graded at the Kellogg beach disposal site per the approved plans above in condition 1. All disposal materials must not contain potentially toxic substances or foreign materials such as petroleum products, tires, trash, or other unsuitable materials.
3. OPERATIONS PLAN
At least 5 calendar days before initiation of any disposal operations authorized by this permit, the Permittee shall submit an Operations Plan to the Corps Regulatory Division (for approval) and CDFW, USFWS, and EPA, with the following information:
 - A) A list of the names, addresses and telephone numbers of the Permittee's project manager, the contractor's project manager, the operations inspector, the disposal operations inspector and the equipment or vehicle used to transport material to the designated disposal site.

B) A schedule describing when the project and each maintenance cycle is planned to begin and end.

C) A debris management plan to prevent unauthorized disposal of debris, trash, or other unsuitable materials. The debris management plan shall include: sources and expected types of debris if known, debris separation and retrieval methods and equipment to be used, debris disposal location(s), and debris disposal methods (e.g., recycling, landfill, hazardous/toxic/radioactive materials/munitions disposal sites, etc.).

4. NOTICE TO PROCEED

The Permittee shall not commence hauling, stockpiling, or beach nourishment operations unless and until the Permittee receives a Notice to Proceed, in writing (letter or email), from the Corps Regulatory Division.

5. INSPECTIONS

Upon request, the Permittee and its contractor(s) shall allow inspectors from the Corps Regulatory Division (may include other Corps Divisions), EPA, and(or) the U.S. California Department of Fish and Wildlife (CDFW) to inspect all phases of the operations. Upon request, the Permittee and its contractor(s) retained to perform work authorized by the permit or to monitor compliance with this permit shall make available to inspectors from the Corps, EPA, and(or) CDFW the following: disposal operations inspectors' logs, any analyses of the characteristics of disposal material, or any other documents related to disposal operations.

6. NON-COMPLIANCE NOTIFICATION

If non-compliance of the permit occurs, the Permittee shall report the details of the permit non-compliance to the Corps Regulatory Division within twenty-four (24) hours. If the Permittee retains any contractors to perform any activity authorized by this permit, the Permittee shall instruct all such contractors that any permit non-compliance of any permit condition must be reported to the Permittee immediately who must then report to the Corps Regulatory Division.

7. POST-CONSTRUCTION REPORTING

The Permittee shall submit a post-disposal/project completion report to the Corps Regulatory Division within 60 calendar days after completion of the annual maintenance project to document compliance with all general and special conditions in this permit. The report shall include all information collected by the Permittee, the operations inspector and the disposal operations. One post-construction report (instead of separate reports) should be submitted for all activities conducted under the permit. The report must describe whether or not all general and special conditions were met. The report shall include:

- A) Project Name and Corps file number (eg. SPL-1980-12345-wtf).
- B) Start date (month/day/year) and completion date of disposal operations.
- C) The disposition and total cubic yards of all material disposed or discharged at each site or location.
- D) Disposal method (e.g., truck hauling, front end loader, clamshell, dragline, etc.).
- E) Mode of transportation.

F) A field survey drawing of the project area. The survey drawing shall be signed by the Permittee certifying that the data are accurate.

8. COMMENCEMENT NOTIFICATION: The Permittee shall notify the Corps Regulatory Division of the date of commencement of work in waters of the United States no less than 5 calendar days prior to commencing work, and shall notify the Corps of the date of completion of operations at least five (5) calendar days prior to such completion.

9. Pursuant to Appendix C of the Corps regulations under the National Historic Preservation Act , in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Archeology Staff within 24 hours (Danielle Storey at 213-452-3855 OR Daniel Grijalva at 760 602-4834). The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13 and/or Appendix C. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted.

10. Permittee shall ensure that at the conclusion of the project and each disposal cycle, all temporary structures, equipment, and trucks shall be removed and any adjacent beach areas impacted by the project shall be restored to pre-construction conditions to the maximum extent practicable.

11. Coastal Zone Management Act (CZMA): This permit is contingent upon compliance with the Coastal Zone Management Act (CZMA) consistency certification by the Port of San Diego per the Port's Coastal Development Permit and the Port Master Plan CZMA determination based on Port action dated March 5, 2005 under WBS P0081-1.2 and subsequent Port CZMA confirmations. The Permittee shall abide by the terms and conditions of the above and any future CZMA consistency certifications.

12. This permit is contingent upon compliance with the Section 401 water quality certification issued by the California Regional Water Quality Control Board – San Diego Region dated March 13, 2020 (R9-2019-0141:858446:MP). The Permittee shall abide by the terms and conditions of the above certification.

13. The Permittee is prohibited from disposing material in navigable waters of the United States that has not been tested and determined by the Corps Regulatory Division, in consultation with the U.S. Environmental Protection Agency (EPA), to be suitable for disposal in bay waters. Sampling and testing of previously tested sediment or previously nourished areas is required after three years from the date of initial sediment sampling and testing unless the Corps deems that conditions warrant another testing duration be formulated with EPA consultation. This time limit is subject to change at the discretion of the Corps Regulatory Division if any event causes previously determined suitable material to become potentially unsuitable. The applicant must demonstrate the proposed

nourishment materials are chemically and physically suitable for disposal in bay waters according to the provisions of the Inland Testing Manual (ITM) and the Corps Regional Guidance Letter (RGL) 06-02, as appropriate. If the material does not meet the physical and chemical criteria for unconfined disposal in ocean waters, the proposed material shall be disposed at a Corps approved upland disposal location. The applicant shall submit to the Corps Regulatory Division and EPA a draft testing Sampling and Analysis Plan (SAP) unless otherwise approved by the Corps in consultation with EPA. Sampling may not commence until the final testing SAP is approved, in writing, by the Corps Regulatory Division, in consultation with EPA. Further the SAP Results (SAPR) must also be reviewed and approved by the Corps in consultation with EPA and the Permittee must receive a written authorization to proceed.

14. Beach Nourishment:

Permittee shall submit prior to initiation of construction for Corps review and approval:

- A) A schedule describing when the beach nourishment project would begin and end.
- B) A debris management plan to prevent disposal of debris at beach nourishment location(s). The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.
- C) The Permittee shall delineate the perimeter of the beach nourishment area during beach nourishment operations, and monitor the area to protect the public from construction hazards and equipment.

15. Within 45 calendar days of completion of authorized work in waters of the U.S., the Permittee shall submit to the Corps Regulatory Division a post-project implementation memorandum including the following information:

- A) Date(s) work within waters of the U.S. was initiated and completed;
- B) Summary of compliance status with each special condition of this permit (including any noncompliance that previously occurred or is currently occurring and corrective actions taken or proposed to achieve compliance);
- C) One copy of "as built" drawings for the entire project. Electronic submittal (Adobe PDF format) is preferred. All sheets must be signed, dated, and to-scale. If submitting paper copies, sheets must be no larger than 11 x 17 inches; and
- E) Signed Certification of Compliance (attached as part of this permit package).

16. INTERFERENCE WITH NAVIGATION

During disposal operations the permitted activity shall not interfere with the public's right to free navigation on all navigable waters of the United States.

17. Incidents where any individuals of fish, whale, abalone, sea turtle, or marine plant species listed by NOAA Fisheries under the Endangered Species Act or a marine mammal appear to be injured or killed as a result of work or discharges of fill in navigable waters of the United States authorized by this permit shall be reported to NOAA Fisheries, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Los Angeles District of the U.S. Army Corps of Engineers at (760) 602-4831. The finder should leave the plant or animal/marine mammal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals

involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure, or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

(x) Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).

(x) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data.** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Eileen Maher

Apr 10, 2020

PERMITTEE

DATE

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

April 10, 2020

Sallie Diebolt
Chief, Arizona Branch
Regulatory Division

DATE

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEEEE

DATE

APPENDIX D

CITY OF SAN DIEGO
RIGHT OF WAY PERMIT



Approval

12/15/20 10:04 am

Page 1 of 1

L64A-005

THE CITY OF SAN DIEGO
Development Services Department
1222 1st Avenue, San Diego, CA 92101-4154

Project Information

Project Nbr: 681382 **Title:** Const Change to PTS 667430
Project Mgr: Kakos, Dany (619)446-5248

Dkakos@sandiego.gov



Approval Information

Approval Nbr: 25 00310 **Type:** Construction Change - Eng. **Status:** Issued



Issued: 12/15/2020 10:03 am **Issued By:** Kakos, Dany

Permit Holder: Peterson, Shane - Port of San Diego

Completed:

Completed By:

Owner Occupied: ☐

Overridden: ☐

Extension Qty: 0

Extended By:

Cancel Reason:

Scope: Construction Change to PTS 667430, Approval #2437141 to place additional cubic yards of sand into the bay.

Precancel Status:

Land Doc Type:

Recorded Map No.:

Recorded Date:

Job Location (2800 1/3 LAWRENCE ST)

Address

2800 1/3 LAWRENCE ST

Assessor Parcel

Fee Worksheet

<u>Fee</u>	<u>Quantity</u>	<u>Unit</u>	<u>Category</u>
Records-EngGrad & Public Imprv	1.00	Each	Issuance Fees
Records-No Plan Permits/Other	1.00	Each	Issuance Fees



SITE ADDRESS 2800 1/3 LAWRENCE ST

DISCRETIONARY
PROJECT Page 186 of 351 A
BUILDING
PROJECT NO: _____
JOIN ID NO: _____
PROJECT
TRACKING NO: 667430

NOTES

1. FOR INSPECTION PLEASE CALL (858) 627-3200 24 HOURS PRIOR TO STARTING ANY WORK.
2. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A R.O.W. PERMIT HAS BEEN ISSUED.
3. THIS CONSTRUCTION PLAN IS NOT VALID UNLESS A PERMIT IS ATTACHED.
4. UPON ISSUANCE OF A R.O. W. PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS UNLESS APPROVED BY A TRAFFIC CONTROL PERMIT FROM THE DEVELOPMENT SERVICES DEPARTMENT.
5. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE CITY OF SAN DIEGO DOES NOT AUTHORIZE THE PERMIT HOLDER OR OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
6. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT /DENT/FICA TION NUMBER ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TOLL FREE (800) 422-4133, TWO DAYS BEFORE YOU DIG.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING AND LOCATING ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE WHILE MAINTAINING THE FOLLOWING CLEARANCES, UNLESS OTHERWISE SPECIFIED ON PLANS. (NOT APPLICABLE)
 - WATER MAIN: MAINTAIN A 5 FEET MINIMUM HORIZONTAL SEPARATION
 - SEWER MAIN: MAINTAIN A 10 FEET HORIZONTAL SEPARATION
 - STORM DRAINS: MAINTAIN A 5 FEET MINIMUM HORIZONTAL SEPARATION
 - MAINTAIN A 1 FOOT VERTICAL SEPARATION WHEN CROSSING MAINS AND STORM DRAINS
 - ANY DEVIATION FROM CLEARANCE NOTES ABOVE MUST HAVE PRIOR APPROVAL FROM THE CITY ENGINEER.
 - ANY CITY UTILITIES CROSSING PROPOSED LINES SHALL NOT BE ENCASED IN SLURRY, IF ENCOUNTERED CITY UTILITY SHALL BE SLEEVED WITH A SPLIT DUCT.
8. "PUBLIC IMPROVEMENTS SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, CONTRACTOR SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OF-WAY, SATISFACTORY TO THE PERMIT ISSUING AUTHORITY.
9. DEVIATIONS FROM THESE SIGNED PLANS WILL NOT BE ALLOWED UNLESS A CONSTRUCTION CHANGE IS APPROVED BY THE CITY ENGINEER OR THE CHANGE IS AUTHORIZED BY THE RESIDENT ENGINEER AS A FIELD CHANGE.
10. CONTRACTOR SHALL REPAIR OR REPLACE ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION, WITHIN 5 DAYS OF FINISHING (NOT APPLICABLE)
11. PRIOR TO SITE DISTURBANCE, CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE CITY OF SAN DIEGO, CONSTRUCTION MANAGEMENT AND FIELD ENGINEERING DIVISION (858) 627-3200, (NOT APPLICABLE)
12. CONTRACTOR SHALL PERFORM ONLY SITE SURVEY AND UTILITY MARK OUT SERVICES PRIOR TO THE PRE-CONSTRUCTION MEETING. (NOT APPLICABLE)
13. CONTRACTOR SHALL IMPLEMENT AN EROSION CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
14. CONTRACTOR SHALL HAVE EMERGENCY MATERIAL AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHERE FLOW MAY GENERATE EROSION AND SEDIMENT POLLUTION. (NOT APPLICABLE)
15. MANHOLES, VAULTS AND PULL BOX COVERS SHALL BE LABELED WITH THE "NAME OF COMPANY" AND HAVE A SLIP RESISTANT LID WITH A MINIMUM STATIC COEFFICIENT OF FRICTION OF 0.5.(NOT APPLICABLE)
16. METHOD OF EXCAVATION: 3" DIAMETER BORING TO ACCOMMODATE 2" DIAMETER CONDUIT PIPE. NO TRENCHING SHALL BE CONDUCTED WITHIN TREE ROOT ZONES. (NA)
17. TREE PROTECTION: A PRE-CONSTRUCTION MEETING SHALL BE REQUIRED PRIOR TO ANY GROUND DISTURBANCE OR COMMENCEMENT OF WORK TO ESTABLISH TREE PROTECTION MEASURES AND STRATEGIES FOR ROOT PRUNING WITHIN THE BORING AREA. NO ROOTS 6" OR GREATER IN DIAMETER SHALL BE CUT WITHOUT CONSULTING WITH THE CITY ARBORIST-HORTICULTURIST CONTACT: SERGIO ARIAS AT (619) 527-8036 SARAS@SANDIEGO.GOV (NOT APPLICABLE)
18. PERMIT HOLDER/OWNER SHALL COMPLY WITH PART 2 OF THE CURRENT CITY OF SAN DIEGO STORM WATER STANDARD MANUAL AND SECTION 1000 AND 1001 OF THE CITY SUPPLEMENT TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (THE WHITE BOOK).
19. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11"x17") FOR APPROVAL PRIOR TO STARTING WORK. IT SHALL BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER, DEVELOPMENT SERVICES DEPARTMENT, 101 ASH STREET, SAN DIEGO, (619) 446-5150. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM OF FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE. (NOT APPLICABLE)

681382

APPROVAL (FOR CITY USE ONLY)

City of San Diego
DEVELOPMENT SERVICES
ENGINEERING DIVISION

☐ LDR - ENG. BUILDING REVIEW
☐ LDR - FLOOD PLAINS
☒ LDR - DRAINAGE & GRADES
☐ DSD - STORM WATER REVIEW

PRINT NAME: Dany Kakos
SIGNATURE: Dany Kakos
DATE: Dec 10, 2020

SHEET INDEX

SHEET	DESCRIPTION
1	TITLE SHEET
2	LEGEND, VICINITY MAP, WORK TO BE DONE
3	CONSTRUCTION PLAN

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	AFFECTED / ADDED SHEETS	APPROVAL NO.	PROJECT NO.
CUBIC YARDS OF SAND	12/7/2020	PAGE 3/3	2437141	667430

APPROVED BY: _____

DATE: _____

SHEET 1 OF 3

PREPARED FOR: Placement of Sand within ROW at Lawrence st
NAME: Port of San Diego
ADDRESS / PHONE: 3165 Pacific Highway, San Diego CA 92101
(619) 686-8288

PREPARED BY: Ani Mehra
NAME: Port of San Diego, 3165 Pacific Highway, SD CA
ADDRESS / PHONE: (619) 686-8288 OFFICE (619) 310-2053 CELL

APPROVAL NO.

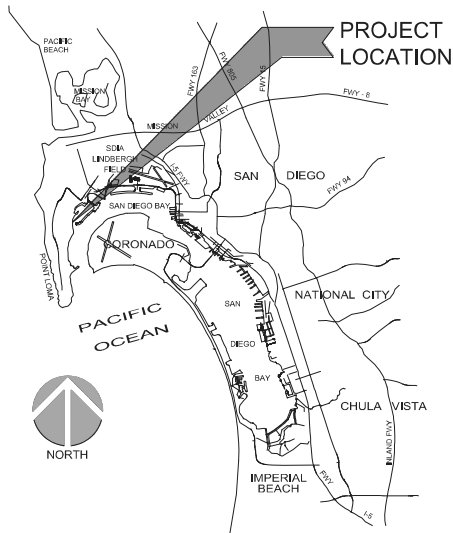
2437141

2500310

SITE ADDRESS 2800 1/3 LAWRENCE ST

DISCRETIONARY
PROJECT Page 187 of 351 A
BUILDING
PROJECT NO:
JOIN ID NO:
PROJECT
TRACKING NO: 667430

VICINITY MAP



WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF SAN DIEGO.

STANDARD SPECIFICATIONS:

DOCUMENT NO.	DESCRIPTION
PWPI010119-01	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), 2018 EDITION
PWPI010119-02	CITY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (WHITEBOOK), 2018 EDITION
PWPI010119-04	CITYWIDE COMPUTER AIDED DESIGN AND DRAFTING (CADD) STANDARDS, 2018 EDITION
PWPI030119-08	CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES REVISION 4 (CA MUTCD REV4), 2014 EDITION
PWPI030119-05	CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS 2018 EDITION

STANDARD DRAWINGS:

DOCUMENT NO.	DESCRIPTION
PWPI010119-03	CITY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2018 EDITION
PWPI010119-06	CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS 2018 EDITION

LEGEND:

DESCRIPTION

STANDARD DRAWING

SYMBOL

APPROVED BY: Dany Kakos

DATE: 12/10/2020

SHEET 2 OF 3

PREPARED FOR: Placement of Sand within ROW at Lawrence st
NAME: Port of San Diego
ADDRESS / PHONE: 3165 Pacific Highway, San Diego CA 92101
(619) 686-6200

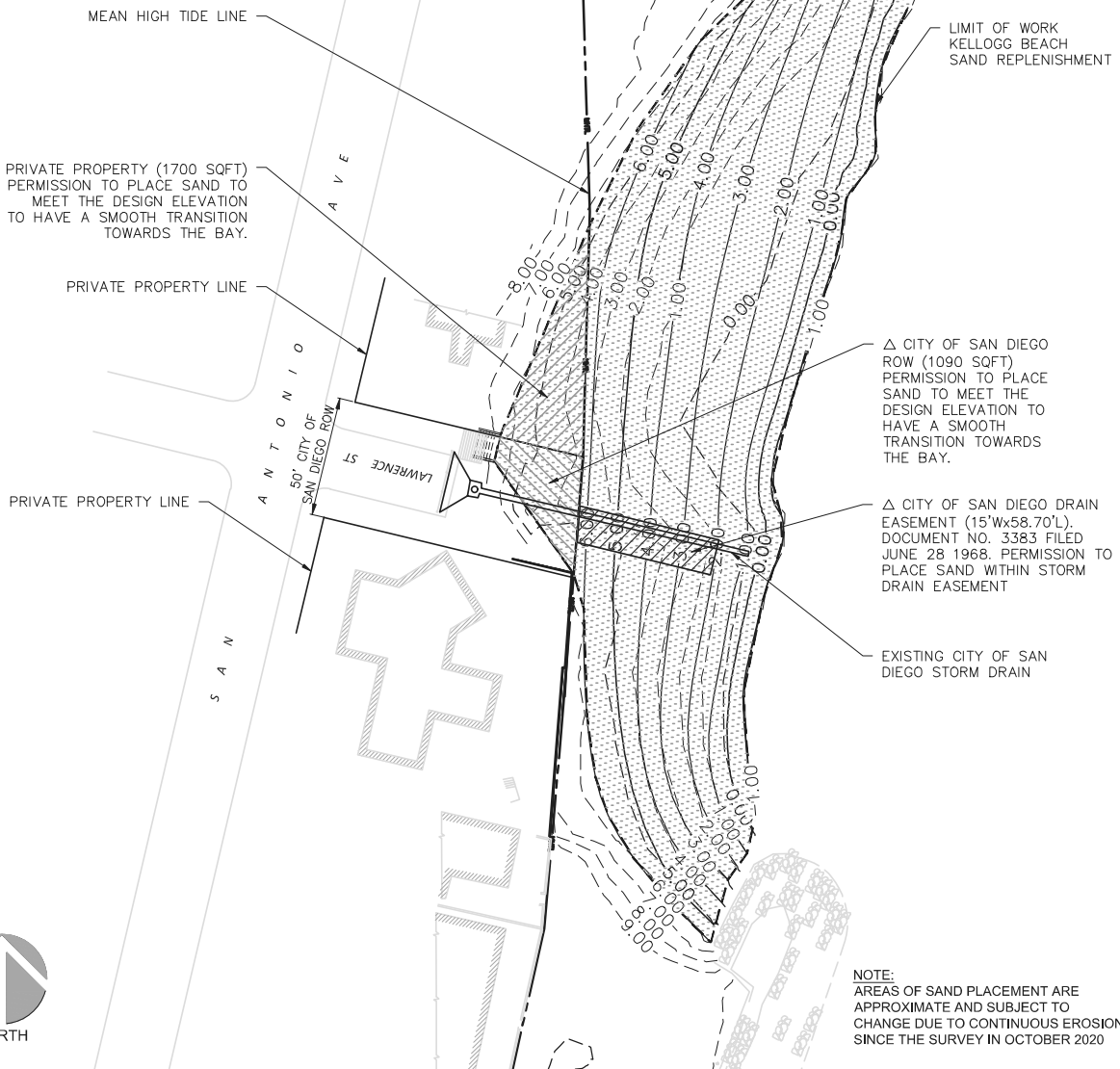
PREPARED BY: Ani Mehra
NAME:
ADDRESS / PHONE: Port of San Diego, 3165 Pacific Highway, SD CA
(619) 686-6288 OFFICE (619) 310-2053 CELL

APPROVAL NO.

2437141

GENERAL NOTES

△ THIS PROJECT INVOLVES THE PLACEMENT OF APPROXIMATELY 2200 CUBIC YARDS OF SAND TOTAL INCLUDING APPROXIMATELY 70 CUBIC YARDS WITHIN THE CITY RIGHT OF WAY AND APPROXIMATELY 15 CUBIC YARDS WITHIN THE STORM DRAIN EASEMENT.



NOTE:
AREAS OF SAND PLACEMENT ARE APPROXIMATE AND SUBJECT TO CHANGE DUE TO CONTINUOUS EROSION SINCE THE SURVEY IN OCTOBER 2020

APPROVED BY: Dany Kakos

DATE: 12/10/2020

SHEET 3 OF 3

PREPARED FOR: Placement of Sand within ROW at Lawrence st
NAME: Port of San Diego
ADDRESS / PHONE: 3165 Pacific Highway, San Diego CA 92101
(619) 686-6200

PREPARED BY: Ani Mehra
NAME: Ani Mehra
ADDRESS / PHONE: Port of San Diego, 3165 Pacific Highway, SD CA
(619) 686-6288 OFFICE (619) 310-2053 CELL

APPROVAL NO.

2437141

EXHIBIT A

NOTIFICATION REGARDING ENVIRONMENTAL CONDITIONS

NOTIFICATION REGARDING ENVIRONMENTAL CONDITIONS

Contractor is hereby notified by the San Diego Unified Port District, a public body, corporate and politic, duly organized and existing under the laws of the State of California (the "District") that:

1. Certain Environmental Conditions (a) may exist at, under, on or near (i) the work site and (ii) property which is contiguous, upgradient or otherwise in the vicinity of the project site ("the Surrounding Property") and (b) may be encountered during activity undertaken pursuant to Work, as defined in the specification.
2. For purposes of this Notification, the term "Environmental Conditions" means (a) any environmental conditions, circumstances or other matters of fact, pertaining to, relating to or otherwise affecting the environment, including without limitation any natural resources (including flora and fauna), soil, surface water, ground water, any present or potential drinking water supply, subsurface strata or the ambient air, and relating to or arising out of the presence, use, handling, storage, treatment, recycling, generation, transportation, release, spilling, leaking, pumping, pouring, emptying, discharging, injecting, escaping, leaching, disposal (including, without limitation, the abandonment or discarding of barrels, containers and other closed receptacles and fill materials containing any hazardous materials, hazardous wastes or toxic substances), dumping or threatened release of hazardous materials, hazardous wastes or toxic substances and (b) the exposure of any persons (including, without limitation, lessees, licensees, permittees or other users of the Work Site and/or the Surrounding Property) to hazardous materials, hazardous wastes or toxic substances, or the exposure of other natural persons within or outside the boundaries of the Work Site and/or the Surrounding Property to hazardous materials, hazardous wastes or toxic substances related to or otherwise arising from operations, acts, omissions or other conduct at the Work Site and/or the Surrounding Property (as the case may be) (the "Environmental Conditions").
3. Information relating to Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property, developed as a result of sampling, testing and analysis undertaken from time to time by the District, District tenants, third-party contractors and/or others, may be contained in certain of the District's files (the "District Files"). Subject to reasonable confidentiality assurances from Contractor, the District will make the District Files available for review. The District has not undertaken to conduct, and the District Files do not represent, a comprehensive analysis of Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property.
4. Information relating to Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property may be contained in the files of other governmental entities or agencies, including without limitation the San Diego Regional Water Quality Control Board, the San Diego Department of Health Services, the San Diego Air Pollution Control District, the San Diego Fire Department, the City of San Diego, the Centre City Development Corporation, the California Department of Toxic Substances Control, the California Environmental Protection Agency, and Region IX of the United States Environmental

Protection Agency (the "Agency Files). The Agency Files are readily available to the Contractor.

5. The District's knowledge and files regarding Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property are not complete. The District has encouraged Contractor to review all readily available information relating to such Environmental Conditions, including (a) the EIR/RAP/RIFS, etc., if available, (b) the District Files, and (c) the Agency Files (collectively, the "Readily Available Information") to ascertain to the fullest extent possible the nature and existence of Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property. Contractor is responsible for ascertaining any information contained in the Readily Available Information.
6. Neither the District nor Contractor makes any representation or warranty, express or implied, in this Notification, regarding (a) the presence, extent, impact or consequences, whether foreseeable or unforeseeable, of any Environmental Conditions at, under, on or near the Work Site and/or the Surrounding Property, or (b) the suitability of the Work Site in any respect for any purpose intended by Contractor.

San Diego Unified Port District

EXHIBIT B

FINAL ENVIRONMENTAL IMPACT REPORT

150

(156)

Clerk

DOCUMENT NO. 12179
FILED AUG 20 1979
MICROFILM NO. 122
OFFICE OF THE CLERK



Final Environmental Impact Report

La Playa Beach Restoration Shelter Island

August 1979

La Playa Beach Restoration
(Final Env. Impact Report)

FINAL
ENVIRONMENTAL IMPACT REPORT
(UPD #78102-EIR-6)

La Playa Beach Restoration Shelter Island

Project by
ENGINEERING DEPARTMENT

Report by
SEA SCIENCE SERVICES
P.O. Box 7246
San Diego, California 92107



SAN DIEGO UNIFIED PORT DISTRICT
P.O. Box 488
San Diego, California 92112

August 1979

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
I Project Summary and Major Consequences	1
II Project Description	5
III Environmental Setting	9
Geography	9
Beach Usage and Access	11
Traffic Circulation	13
Parking	14
Oceanography	15
Tides	15
Currents	16
Winds	17
Waves	17
Water Quality	21
Pollution	23
Biological Setting	26
Previous Work	26
Biological Studies of the Project Area	27
Intertidal Habitats	28
Subtidal Habitats	29
Organisms of Special Concern	31
Geology	36
Beach Morphology and Sediment Characteristics	36
Sediment Transport	39
History of Littoral Drift along La Playa Beach	40

TABLE OF CONTENTS (continued)

<u>SECTION</u>		<u>PAGE</u>
IV	Environmental Impacts	45
	Significant Environmental Effects	45
	Impacts on Circulation	45
	Short-Term (Construction) Impacts	45
	Long-Term Impacts on Beach Usage and Traffic Circulation	48
	Oceanographic Impacts	50
	Biological Impacts	52
	Geological Impacts	54
	Unavoidable and Irreversible Significant Environmental Effects	56
	Mitigation Measures Which Could Minimize Any Significant Effects	58
	Growth Inducing Impacts	59
	Short-Term Use and Long-Term Productivity	59
V	Alternatives to the Proposed Project	61
VI	References	65
VII	A. Agencies and Organizations Consulted	67
	B. Identification of Preparer(s) of the EIR and Certification By Consultant	69
VIII	Tables	71
IX	Public Review	87
	Initial Distribution	87
	Comments Recieved and Response*	91
	<u>Appendices</u>	139
	A. Initial Study	A-1

*This section added on blue paper

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	La Playa Beach Restoration Vicinity Map	2
2	Project Map	6
3	Water Depths and Some Selected Sampling Stations	10
4	Long Term Wind Conditions North Island Naval Air Station	18
5	Wave Exposure	19
6	La Playa Beach Profiles	30
7	Biological Sampling Stations	34
8	La Playa Beach Aerial View	37

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	Summary of Traffic Observations Made in the Vicinity of La Playa Beach, March and April 1979	72
2	Observed Parking on Streets Adjacent to the La Playa Beach Restoration Project, March 1979	73
3	Heavy Metal Concentrations in Sediments Collected from Southwestern Yacht Club Station in Municipal Yacht Harbor	74
4	Coliform Bacteria Counts From Selected Stations in Northern San Diego Bay	75
5	List of Hard Substrate Intertidal Organisms Found in La Playa Beach Project Area	76
6	List of Organisms (Infauna) Collected From Intertidal Beach Sands in La Playa Beach Restoration Area, March 10, 1979	78
7	Results of Subtidal Invertebrate Survey La Playa Beach, April 7, 1979	79
8	List of Organisms (Infauna) Collected From Subtidal Bottom Sediments in La Playa Beach Restoration Area, March 18, 1979	80
9	Results of Beach Seine Catch La Playa Beach, March 25, 1979	82
10	List of Fauna Caught in Fish Trap Set in La Playa Beach Project Area	83
11	Results of Intertidal Clam Sampling Survey, La Playa Beach, March 25, 1979	84
12	History of Developments Affecting Littoral Drift and Erosion Along the La Playa Beach Shoreline	85

SECTION I

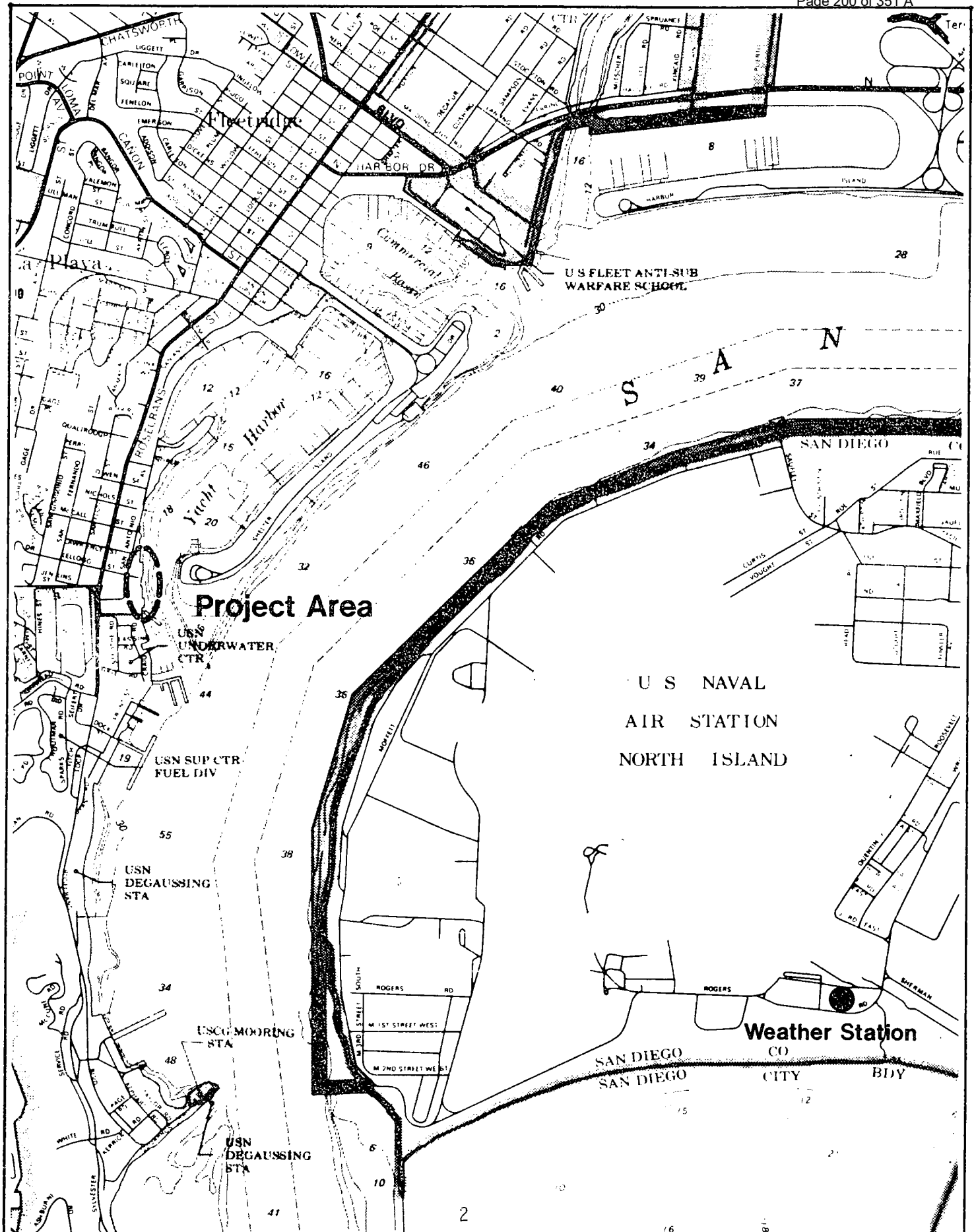
PROJECT SUMMARY AND MAJOR CONSEQUENCES

The San Diego Unified Port District (SDUPD) is proposing to construct a rock groin in the La Playa Beach area in northern San Diego Bay (Figure 1). An 0.8 acre intertidal area adjacent to the groin would be filled with imported sand. The project is designed to control shoreline erosion and to widen an eroding beach.

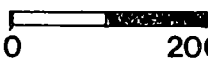
The proposed groin would be about 350 feet long and 9 feet high and 45 feet wide at the base. It would extend across the existing, eroding beach from the present shoreline embankment to a point 15 to 25 feet beyond the mean lower low water (MLLW) line. About 600 cubic yards of beach sand, gravel, and debris would be excavated from the groin site in order to prepare a proper foundation for the structure. The groin would be composed of about 6,500 tons of stone and gravel. About four thousand cubic yards of sand would be used to widen the beach on the north side of the groin.

The periodic maintenance for the project is expected to require the replenishment or relocation of perhaps 500 to 2,000 yards of sand every one to two years.

The more important consequences of the project include 1) the creation of about 0.8 acres of dry sand beach, 2) the protection of several hundred feet of shoreline from wave-induced erosion, 3) the temporary disruption of parking on Kellogg and/or Lawrence Streets during 25 to 50 percent of the expected 8-week construction period, 4) the temporary and intermittent disruption of beach usage during the construction



scale



planning department

Figure 1
LaPlaya Beach Restoration
Vicinity Map

Date 10-79

Drp	Chk
-----	-----

Base

No. 111/1011

78102-6
DEIR6/79
UPD5/79
VICINITY
PROJECT
WEATHSTN

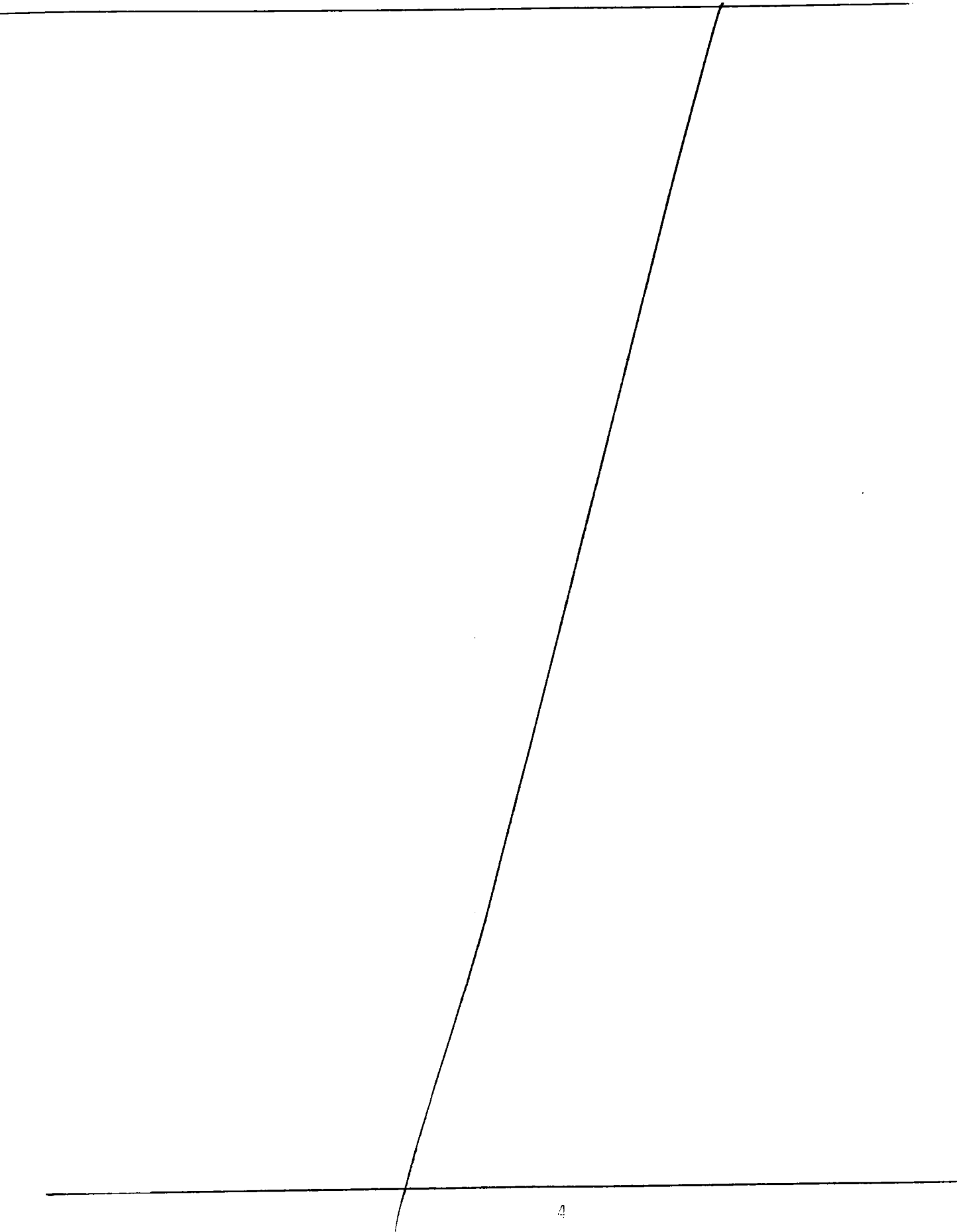


period, 5) the loss of about 0.8 acre of intertidal biological habitat, 6) the loss of most of the non-mobile organisms living within this habitat, 7) the creation of about 350 linear feet of steep, intertidal rocky shoreline habitat, and 8) the periodic short-term disruption of normal beach activities and intertidal habitats by future beach maintenance programs.

Studies of beach usage and traffic circulation have led to the conclusion that the project will not result in: a marked increase in the number of beach users; a chronic shortage of parking spaces on nearby streets; nor frequent traffic congestion on arteries approaching the beach. An investigation of the organisms and habitats in the area suggests that the project impacts will be mostly of a temporary or minor nature. The implementation of the project will not result in the permanent loss of primary producers (sargassum weed) or harm nearby eel grass beds. The loss of very small areas of low tide flat will not seriously impact Bay populations of flatfish, clams, birds, sargassum weed, and other organisms (invertebrates) which utilize these flats for dwelling or feeding. The project will not release significant amounts of toxic materials into the water, nor will it result in any widespread or prolonged decrease in water quality.

Littoral drift studies indicate that the project will not result in increased erosion along the shore, nor will it result in excessive rates of deposition in areas where sediment accumulation would be undesirable.

The following EIR is focused on the project impacts on littoral drift, marine organisms, and traffic circulation.



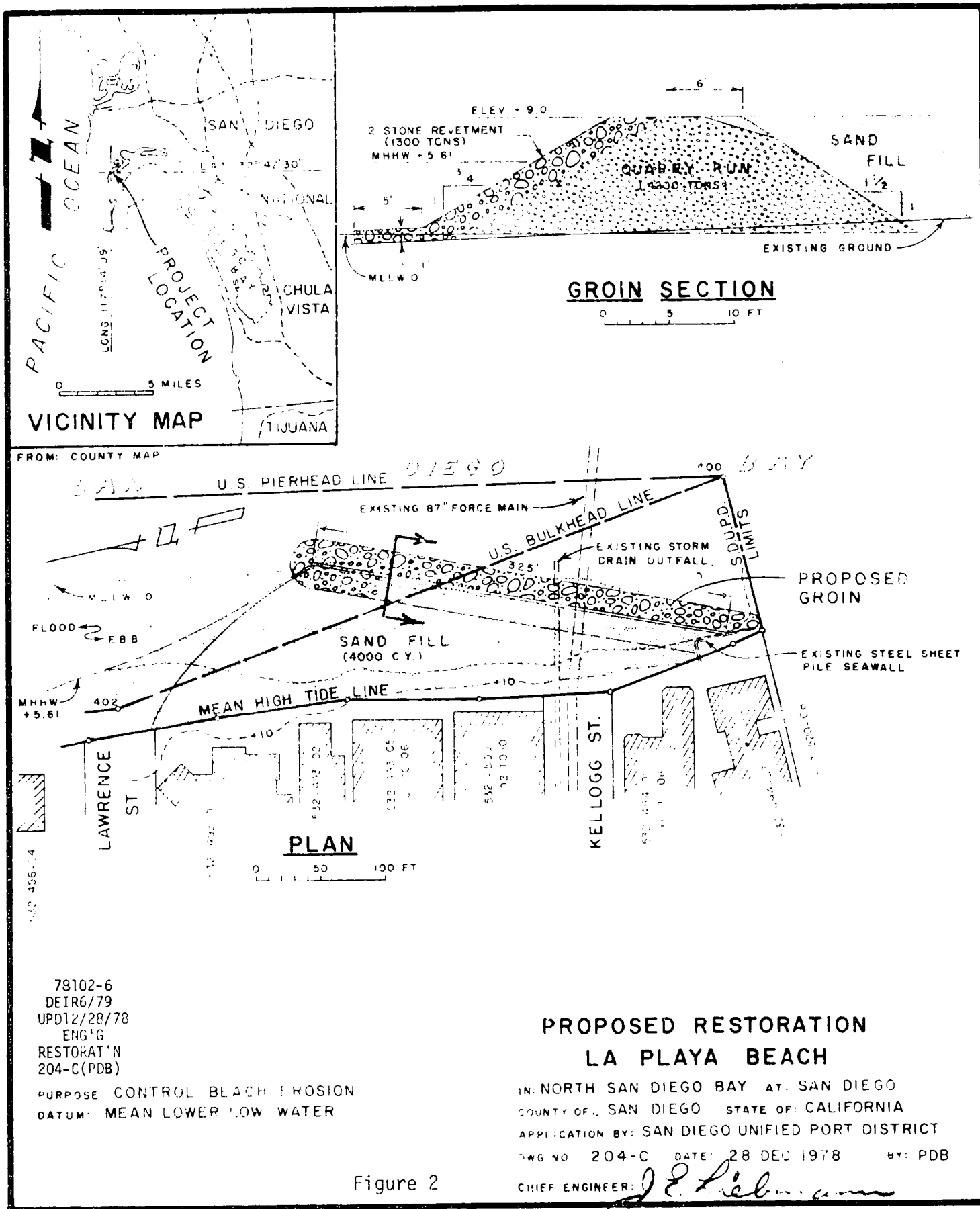
SECTION II

PROJECT DESCRIPTION

The San Diego Unified Port District proposes to construct a 350 foot long, 45 foot wide (at the base) rock groin diagonally to the shoreline at La Playa Beach. This construction would be located near the foot of Kellogg Street in the Shelter Island area of San Diego Bay (Figure 1). The project is designed to restore an eroding beach and to stabilize the shoreline. A triangular area about 0.8 acre (35,000 square feet) adjacent to the northwest side of the groin would be backfilled with sand to an elevation of about 9 feet above mean lower low water (MLLW), i.e., slightly above the level of the highest tides. The tip of the rock groin would extend bayward about 125 feet from the mean higher high water (MHHW) line, but only about 25 feet from the MLLW line (Figure 2).

The construction of the groin would begin with the excavation of beach sediment, rock, and other debris from a foundation trench dug to MLLW. This excavated material (about 600 cubic yards) would be stockpiled temporarily on the beach to the west and north. The groin would be constructed of 1) 1,000 tons of gravel used as a filter blanket; 2) a core of 4,200 tons of quarry rock; and 3) 1,300 tons of a 2-foot thick stone layer used to face the exterior and north end of the structure. The filter blanket would be used to prevent or retard the passage of sand through the groin; the filter blanket might not be required for this project.

The source for the required rock and sand, and methods of transport used in bringing these materials to the project site, would be left to the option of the contractor. It is most likely that the rock would be brought



Project Map

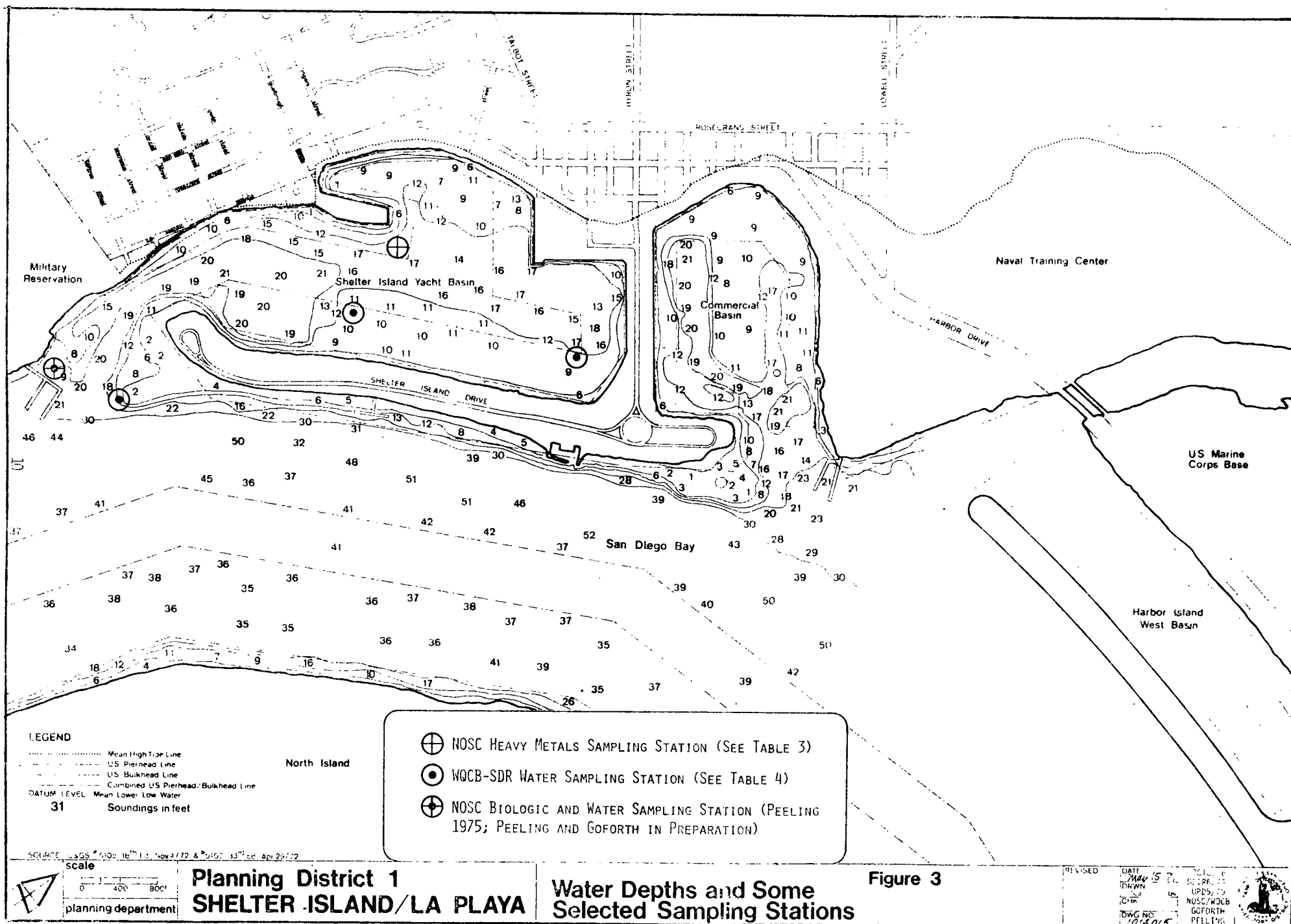
in by trucks carrying 10- to 20-ton loads. It is possible, however, that the contractor might choose to bring the rock by barge from Catalina Island. In this case, the rock would be unloaded directly onto the beach; no trucking would be required.

The backfill would include about 4,000 cubic yards of imported sand as well as the 600 cubic yards of material excavated from the groin trench. It appears most likely that the contractor would use trucked-in river sand for the backfill. Each truck bringing in the sand would probably carry a 10-cubic-yard load.

About 520 to 1,050 truckloads of rock and sand would be required for project implementation. The trucks would use Kellogg Street or Lawrence Street, or both for entering and leaving the area. The project would require about two months for completion.

The project would also include a sand replenishment or redistribution program as needed, utilizing trucks and/or other earth-moving equipment. Because littoral drift along La Playa Beach is predominantly in the direction of the Yacht Basin, a slow but continuous erosion of the backfilled material would be expected to take place. Past rates of northerly sand transport have been estimated to be 1,000 to 2,000 cubic yards per year. The replenishment/redistribution program would include removal of accumulated sand from northerly segments of the shoreline, and the addition of sand to the eroded portions. If the littoral drift rate were 1,000 cubic yards per year, and replenishment of the La Playa Beach were to be carried out once every two years, then one might expect the sand redistribution program to involve the transport of about 200 truckloads (10 cubic yards each) of sand during each replenishment effort. A portion of the replenishment material could be redistributed by skiploader along

the beach, if tide conditions permit. This would reduce the necessary amount of imported sand. The volume of imported sand to be brought in by truck or barge is not known at this time, but is estimated to be less than 1,000 cubic yards per year.



SECTION III ENVIRONMENTAL SETTING

GEOGRAPHY

The La Playa Beach site is located on the eastern shore of Point Loma at the north end of San Diego Bay. Point Loma is a 6 mile long, 300-400 foot high peninsula which offers considerable wind and wave protection to the northern portion of San Diego Bay. The Bay is about 14 miles long and has a width varying from 1,600 to 14,000 feet. The site is located adjacent to the entrance to the Municipal Yacht Harbor (MYH)*, a mile long, partially enclosed basin created by the construction of the Shelter Island peninsula (Figure 3). La Playa Beach is a small, fairly isolated stretch of sand which borders a residential area in the City of San Diego. It is about 2,200 feet long, and has a maximum width of about 160 feet. Most of the beach is narrower, and at high tide the northern one third of the beach is completely submerged. Because of the relatively steep foreshore slopes, the beach width does not increase greatly at low tide, except in the eroded area at the foot of Kellogg Street.

To the south, the La Playa Beach is bounded by a University of California, Scripps Institution of Oceanography (SIO) ship-support facility which separates the beach from the Naval Oceanographic Systems Center (NOSC). The north end of La Playa Beach terminates against the slips and other facilities belonging to the Southwestern Yacht Club. To the east the Beach faces the Municipal Yacht Harbor, and to the west it adjoins a residential

* also known as the Shelter Island Yacht Basin

area which is slowly being converted from large single family residences to apartments and/or condominiums.

The Municipal Yacht Harbor has an estimated area of 190 acres, and average and maximum depths of about 13 and 21 feet, respectively, below the mean lower low water (MLLW) level. The basin was formed during the period 1934 to 1950 by the construction of the Shelter Island peninsula, and the dredging of adjacent portions of the Bay. The Yacht Harbor now has slips and mooring facilities for about 2,200 small craft. The northern and eastern shores of the basin are largely occupied by various yacht clubs and marinas.

Although a large number of public agencies exercise control over one aspect or another of activities carried out in the project area, the City of San Diego has the principal jurisdiction over the terrestrial areas landward of the Beach, and the San Diego Unified Port District (SDUPD) is responsible for many of the governmental concerns related to the Beach and adjacent offshore areas. The dividing line separating the two principal jurisdictions is the mean high tide line as determined in 1918.

BEACH USAGE AND ACCESS

La Playa Beach is known to provide visitors with a wide variety of uses: sunbathing, swimming, strolling, fishing, jogging, boating, etc. However, swimming is not allowed in the main channel of the Municipal Yacht Harbor and scuba diving is prohibited in all areas of the Bay.

Most of the beach users live or work in the immediate vicinity. Those who live west of Rosecrans Street often drive to the beach even though they are within walking distance. Quantitative data are not available for beach usage. However, intermittent observations during the late

winter and spring as well as accounts given by users suggest that the Beach is very lightly used during the winter, especially during weekdays and periods of inclement weather. During the spring, one may expect 50 to 100 persons per day to use the Beach on weekends. Weekday use will probably remain less than 50 persons per day. On some summer and holiday weekends the Beach is reported to be quite crowded.

Since the La Playa Beach faces to the south, the winter exposure is better than on other nearby beaches. Also the Beach is well protected from the prevailing westerly winds and sea breezes by the Point Loma ridge. For these reasons this Beach may be somewhat warmer during the winter than others in the vicinity. Other characteristics of La Playa Beach which attract users are the absence of surf, clear water, and the view of the large ships and small craft entering and leaving the harbor. Some users find the beach orientation particularly attractive. Because views across the water are to the eastward and southward beach users do not need to look into the afternoon sun, as they do from most other beaches in the San Diego area.

Although the beach is reported to be very crowded on summer weekends and holidays, it seems likely that during most periods it is less crowded than the more popular ocean beaches to the north. It is likely that present beach usage is considerably limited by access problems. The beach is not well known to the majority of San Diego area beach users, it is not visible from any main thoroughfare, and it is accessible only from Rosecrans Street. Parking spaces in the area are limited and bus service along Rosecrans is infrequent. Furthermore, the Beach has no rest room facilities. The nearest sources for refreshment or drinking water are about one mile away. For these reasons the San Diego Unified Port District

(SDUPD) and most local residents consider the Beach useful primarily as a neighborhood or family recreational area. The District has no plans for the expansion of public facilities in the Beach area.

Traffic Circulation

La Playa Beach is accessible via Rosecrans Street, a main thoroughfare from the north, and three residential streets: Kellogg, Lawrence, and McCall (Figure 1). Rosecrans Street is the only main artery providing access to La Playa Beach and a number of other areas and facilities on the east side of Point Loma. Owens and Perry Streets provide access to the northern part of La Playa Beach, a considerable distance from the project site. Kellogg, Lawrence, and McCall streets are each about 25 feet wide. They are connected by San Antonio Avenue, a 30-foot-wide residential street.

The Comprehensive Planning Organization estimates about 11,000 ADT (average daily trips) for Rosecrans Street in the vicinity of the Kellogg Street intersection (personal communication, R. Baker, Caltrans). However, the remaining residential streets in the vicinity of the project site are not heavily used. Limited traffic counts prepared for this study on successive Thursdays and Sundays during late March and early April indicate a weekday average of 15 to 22 vehicle trips per hour on Kellogg and Lawrence Streets, and a Sunday average of 22 to 23 trips per hour (Table 1). Weekday traffic counts on Lawrence Street are about 50 percent greater than counts made on Kellogg Street during similar periods. It is assumed that these data are representative of normal, non-summer weekday and weekend usage.

Parking

All of the residences in the immediate vicinity of the project have off-street parking. In addition there are 103 parking spaces east of Rosecrans Street along San Antonio Avenue, and on the three cross streets leading to the Beach. No parking is allowed on the north side of McCall Street. Limited parking surveys made during late March and early April, 1979, on Kellogg and Lawrence Streets, and on San Antonio Avenue (south of Lawrence Street) determined that the average hourly parking on weekdays was 7 vehicles on Kellogg, 7 on Lawrence, and 10 on San Antonio. Average parking space utilization rates ranged from 19 to 27 percent of capacity, and maximum utilization ranged from 24 to 38 percent (Table 2). Average parking on weekends increased to 10 vehicles on Kellogg Street, to 15 vehicles on both Lawrence Street and San Antonio Avenue. Maximum parking on weekends increased to 12 vehicles on Kellogg Street, to 24 vehicles on Lawrence Street, and to 34 vehicles on San Antonio Avenue. The weekend utilization of total on-street parking capacity for these three streets averaged 39 percent (on an hourly basis) and maximum utilization amounted to 68 percent of the total number of parking spaces.

About half of the weekday parking could be attributed to local residents, and about half to military personnel who were unable to park on NOSC property because of inadequate insurance. Private vehicles belonging to military employees must meet minimum insurance requirements in order to be allowed access to military property.

Increased weekend utilization of the Lawrence Street beach resulted in increased parking counts. The weekend increase in parking on Kellogg Street was not found to be significant. Beach users were probably reacting

adversely to the deterioration of the beach at the foot of Kellogg Street. No data were collected on parking on McCall Street, or on that segment of San Antonio Avenue to the north of Lawrence Street.

Weekday traffic counts recorded only 4 vehicle trips per day were made to the Beach. At 1300 hours on Sundays the number of parked cars exceeded the average weekday number (24) by 25 on the same streets. This observed difference suggests that 25 to 29 of the parked vehicles on Sundays were utilized for beach access. It is estimated that the total Sunday Beach usage involves 35-60 vehicles.

The average vehicle requires a parking space about 8 feet wide for adequate clearance by moving vehicles. If vehicles are parked on both sides of a 25-foot-wide street, a zone only 9 feet wide is left for moving traffic; this is obviously inadequate for passing vehicles. Clearly, Lawrence and Kellogg Streets could become highly congested when utilized extensively for parking.

OCEANOGRAPHY

Tides

The tides in San Diego Bay are classified as the "mixed type," characterized by marked variations between the heights of the two high tides and two low tides that occur every day. Near the Bay entrance the mean tidal range (i.e., the elevation difference between the mean high and mean low water levels) is about 3.7 feet. The range between the mean higher high water (MHHW) and mean lower low water (MLLW) is 5.3 feet. The extreme range of tides within the Bay is 9.5 feet. The highest tidal levels that occur each year are about 7.8 feet above MLLW (Browning et al., 1973).

The tidal prism is that volume of water which can be contained between any two horizontal planes which correspond to various tidal levels. The volume of water between the MHHW and MLLW levels in San Diego Bay is about 96 million cubic yards (U.S. Army Corps of Engineers, 1975). The ratio of the tidal prism to the volume of the entire Bay below MLLW is about 1 to 3. This suggests that on the average, the Bay water is exchanged for ocean water within three tidal cycles. Actually the waters near the Bay entrance are exchanged more frequently, and waters more distant from the entrance are exchanged less often.

The mean tidal prism of the Municipal Yacht Harbor is estimated to be about 28 percent of the volume of the basin below the mean low water level. This suggests that on the average, the waters in the basin are completely renewed over four tidal cycles (50 hours). However, it is most likely that the waters near the Harbor entrance are exchanged more often, and those near the closed end, less frequently.

Currents

Tidal currents in the Bay entrance alternate in direction; velocities range up to 3.0 knots (National Oceanic & Atmos. Admin., 1978). Current velocities in the Municipal Yacht Harbor have not been measured. However, tidal modeling studies carried out by the U.S. Army Corps of Engineers (1970) have indicated that for average tidal ranges, current velocities in the Yacht Harbor do not exceed 1/4 knot, and are usually much less. Slightly higher velocities might be expected to occur during the spring tidal periods (not modeled). Beach users report that vigorous tidal currents have never been observed in the Yacht Harbor. The Bay model

studies suggest that the tidal currents in the Yacht Harbor circulate in a clockwise direction.

Winds

Wind is responsible for some of the larger waves which occur in the Bay.

Anemometer records from North Island indicate that winds are predominantly from the northwest and west (Figure 4). Only winds from these directions exceed 21 knots during significant portions of the year.

In the La Playa Beach area winds from westerly directions are blocked or greatly reduced by the Point Loma ridge. Winds from the south in excess of 5 knots occur only about 7 percent of the time; only about 1 percent of the time do these winds exceed 10 knots.

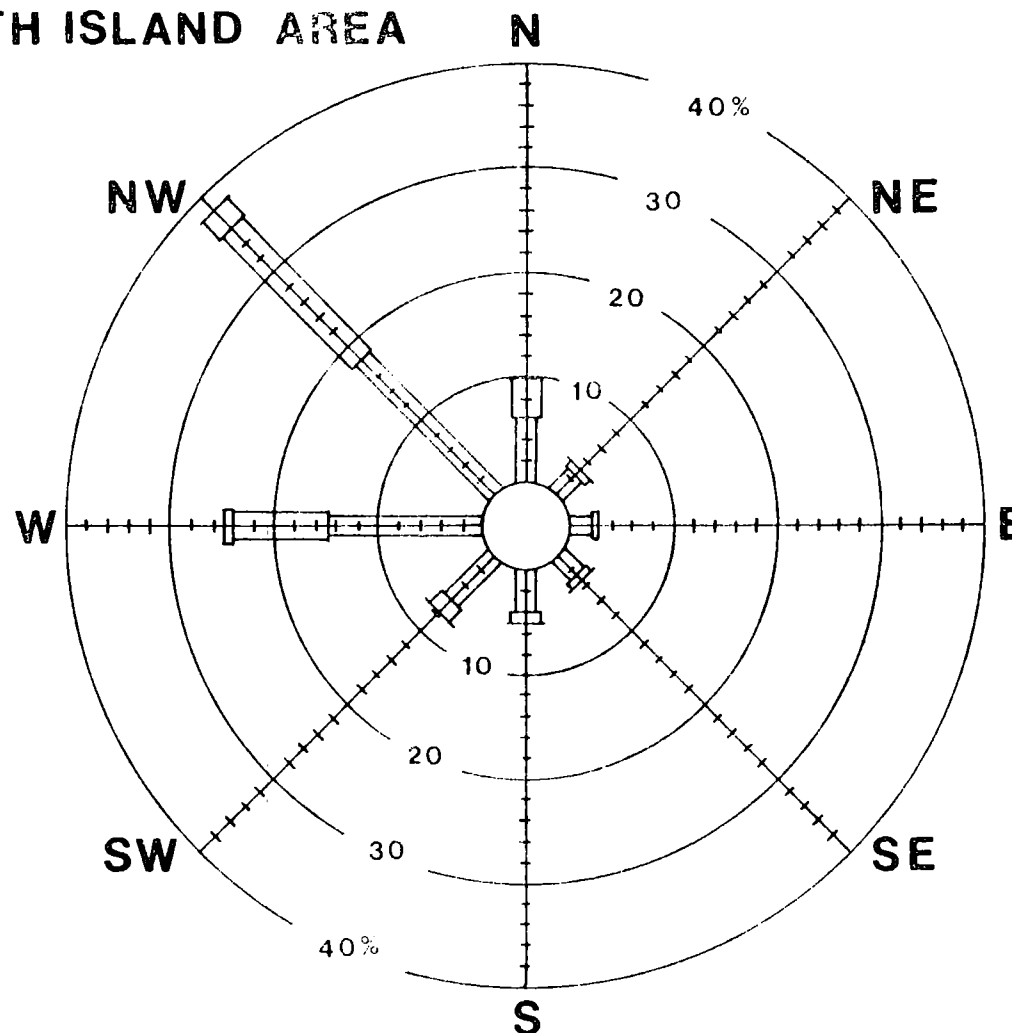
Waves

San Diego Bay is well protected from the approach of ocean waves by the Point Loma and Silver Strand-Coronado-North Island peninsulas. The only waves which can enter San Diego Bay must approach from the south or southsoutheast (Figure 5). Because of strong refractive affects in waters deeper than 25-50 feet, relatively long-period waves (5 to 15 seconds) generated in distant areas of the open ocean and approaching from the south, do not penetrate very far into San Diego Bay. The energy in these waves is dissipated along the shores on both sides of the Bay well to the south of the Yacht Harbor entrance.

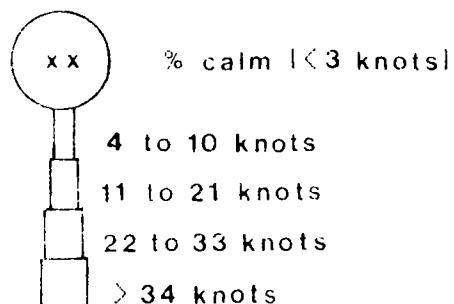
Short-period waves in San Diego Bay are generated by local winds and by vessels underway. The height of the wind waves is dependent primarily on the wind velocity, duration, and the fetch (distance over water available

WIND SPEED FROM STATED DIRECTIONS SAN DIEGO AND NORTH ISLAND AREA

BASED ON 166886 SAMPLES
FROM 1963 TO 1973



WIND SPEED SCALE



Wind rose summarizing long-term wind conditions recorded at North Island Naval Air Station. Modified from Sonu et.al, 1978 (See Figure 5 for anemometer location.)

scale

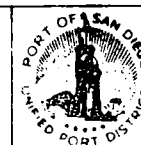
planning dept.

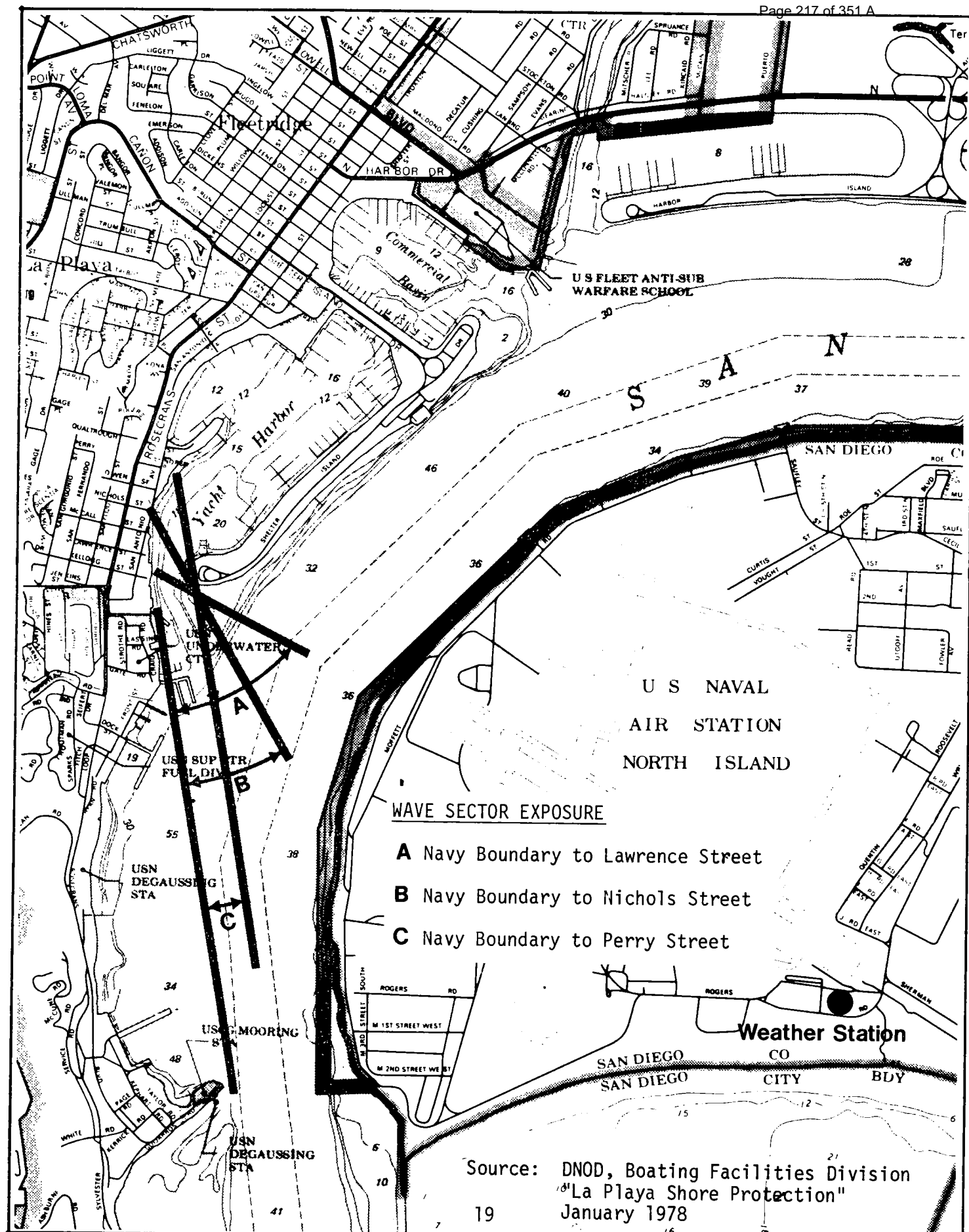
Figure 4

Long-Term Wind Conditions North Island Naval Air Station

date 11/15/79
drawn by JS
base
no

78102-6
DEIR6/79
UPD5/79
SONU+
NOSC
TETRATECH





for wave generation). The size of wakes (or waves) produced by passing vessels depends upon the size and speed of the vessel and the hull configuration. Presumably, the energy transmitted in the wake waves is roughly proportional to the energy required to drive the vessel.

The Municipal Yacht Harbor is protected from most waves generated in the Bay by the Shelter Island Peninsula. The only waves that can enter the Harbor are short-period waves moving from the south and southeast (Figure 5). Short-period waves are not significantly refracted except when passing through waters less than 5 to 15 feet deep. For this reason short-period waves generated outside of the Harbor may approach the La Playa Beach shoreline with only slightly diminished energy; this is especially true at high tide.

The only significant wind waves entering the Municipal Yacht Harbor are those generated by local winds from the south and southeast. When these winds exceed velocities of 10 to 15 knots for several hours they generate short-period, 1.5 to 5.0 second waves with mean heights believed to range from 0.7 to 1.5 feet.

Such waves have not been carefully studied. However, it is believed that they do not occur frequently. The North Island wind records suggest that southerly winds favorable for the generation of these waves occur less than 1 percent of the time. For eight months during 1975-76, Dr. Richard Seymour of Scripps Institution of Oceanography recorded waves near the shore about 1/2 mile south of the project area (Seymour, 1977; and Seymour and Hanes, 1977). Only twice during this period did he record wind waves of significant height. These waves were generated by small local storms which lasted about 3 and 7 1/2 hours. The waves generated were characterized by periods of 2 to 5 seconds, and mean heights of about one foot.

Waves of similar or somewhat lower heights may be generated by large vessels passing along the main ship channel or rapidly moving small craft. However, the harbor police require that small craft actually inside the Harbor reduce speeds to a minimum so as to greatly reduce the size of the wakes generated.

The available information on waves in San Diego Bay suggests that waves of significant height (more than 0.5 feet high) are not common in the Municipal Yacht Harbor. The highest waves which do occur may ordinarily be 1.0 to 1.5 feet high. These are generated by 1) infrequent local southerly wind storms of short duration, and 2) by passing ships. The height of all waves entering the Harbor decreases rapidly with increasing distance to the northward.

Short-period wind and wake waves entering the shallow waters of the Yacht Harbor are refracted in the same manner as the long-period waves entering San Diego Bay. For this reason, the height of waves breaking along the shore within the Harbor decreases rapidly with increasing distance away from the entrance.

The shoreline at the foot of Kellogg Street is exposed to waves arriving from a much broader sector than segments of the La Playa Beach further to the north, in the vicinities of Lawrence, McCall and Owens Streets. Figure 5 illustrates the decreasing angles of wave exposure of several sections of the shoreline in the project vicinity. This decrease in wave exposure also contributes to the rapid northward diminishment of wave energy expended along the shoreline.

Water Quality

Water quality is high in most portions of the northern end of San Diego Bay because of rapid tidal flushing. This is particularly true

for areas in close proximity to the Bay entrance. At the entrance, habitats are flooded about 50 percent of the time with high quality seawater supplied by the incoming tide. During the remaining periods these habitats are washed by ebb current waters which consist of a mixture of seawater and Bay water (near the Bay entrance) which may be of a quality only slightly lower than the open ocean waters.

Flushing rates in nearly enclosed basins, such as the Municipal Yacht Harbor, are less rapid than in the main channel of the north Bay. Consequently, the waters in these basins may be of lower quality. However, the entrance areas to the partly enclosed basins are flushed almost as thoroughly as adjoining Bay areas. For this reason, fairly high water quality may be expected in the project area which is located adjacent to the entrance to the Municipal Yacht Harbor and in close proximity to the Bay entrance.

Because of the rapid flushing of the project area waters, one would expect the water quality characteristics such as temperature, salinity, dissolved oxygen (DO), and nutrient content to be about the same as in the nearby coastal waters. However, small variations from open ocean conditions can be anticipated. Water temperature ranges in the project area should be slightly greater than in the open ocean. Salinities might be a little lower than in coastal waters during the winter, particularly following periods of heavy rainfall. Occasionally DO values might be slightly less than those characteristic of the waters outside of the Bay, and nutrient concentrations might be higher or lower. Data on water quality in the Municipal Yacht Harbor and other areas of the north Bay have been collected by the Regional Water Quality Control Board - San Diego Region (RWQCB-SDR) and by NOSC personnel (Peeling; and Peeling and Goforth, in preparation) and others. In general, this data and other information (U.S. Army Corps

of Engineers, 1975; RWQCB-SDR, unpublished data) tend to support the expectations described above.

Pollution

Although the condition of the waters and sediments in the project area are considered to be of high quality, there is evidence that some areas of the Municipal Yacht Harbor are receiving toxic materials and other wastes which may tend to degrade the bottom habitats and overlying waters. There are two significant sources of material which may adversely affect water quality and bottom sediments: urban water runoff; and heavy metals derived from antifouling paints and cathodic protection devices (Peeling, 1975). It is pertinent to discuss these sources even though it is concluded here that neither the waters nor the sediments in the project area have been seriously degraded.

Street runoff occurs only during the rainy season and may be limited to a few hours or few days at one time. The runoff may carry silt and clay, oil and grease, organic wastes, bacteria, and perhaps lead (derived from automobile exhausts) and pesticide residues. Whatever portion of these constituents that remains in suspension for several days is likely to be flushed out of the Municipal Yacht Harbor basin into the open ocean where it will be widely dispersed. That portion which settles to the bottom is likely to remain in the Bay floor sediments until removed by organisms or dispersed by dredging or erosion. Although there is an abundance of silt and clay on the floor of the Municipal Yacht Harbor, there is little additional evidence of serious pollution by street runoff. Occasional high coliform bacteria counts reflect the contributions from winter runoff (Table 4).

The analysis of San Diego Bay sediments for heavy metals has shown that in many areas of the Bay the sediments contain higher than normal

concentrations of copper, lead, zinc, and other metals (Peeling, 1975; U.S. Army Corps of Engineers, 1975). Recent studies have shown that the Bay waters contain abnormally high concentrations of heavy metals (Zirino et al., 1978; Kenis et al., 1978). Near the Bay entrance copper and zinc concentrations in seawater have been found to increase markedly with the falling tide, and to decrease with the incoming tide. During one tidal cycle copper values varied from 0.7 to 3.5 parts per billion (ppb). Copper concentrations observed during one survey of heavy metals in the Yacht Harbor waters increased in a northerly direction (i.e., with increasing distance from the main Bay channel) from 0.5 to 1.3 ppb. Another survey found that copper concentrations in the Municipal Yacht Harbor waters ranged up to 7 ppb, a value higher than that found anywhere else in San Diego Bay (unpublished data from H. W. Goforth and M. Salazar; and Zirino et al., 1978). Zinc concentrations in the Municipal Yacht Harbor waters have been found to be five times greater than in open ocean waters.

Concentrations of heavy metals in the parts per million ranges are known to be detrimental to marine organisms. However, little if any research has been carried out to determine the effect of these metals in concentrations of a few parts per billion. Thus any adverse effects which may result from the presence of heavy metals in the Harbor waters cannot be positively established at this time.

The analysis of bottom sediments collected from Southwestern Yacht Club piers show that these sediments are also contain copper, zinc, and other heavy metals (Table 3; Peeling, 1975; and Peeling and Goforth, in preparation).

The heavy metals found in the waters and bottom sediments in the Municipal Yacht Harbor can be attributed to the solution and sluffing of metals and metallic compounds from antifouling paints and cathodic protection

devices used on the 2,200 or more small craft that are moored in the Yacht Harbor. All of these small craft are well maintained. In most cases the owners coat the craft with the highest quality antifouling paints, which may contain copper concentrations as high as 60 percent (as determined by inspection of paints sold by local marine hardware stores). Most of the time the vessels are tied to the dock. The metals in the paint slowly go into ionic solution, and minute particles of the paint continually flake off into the water. Any flakes that become loosened while the vessel is docked, may fall off during the first few hundred yards of travel, once the vessel leaves the slip.

Any heavy metals remaining in solution or suspension for two to three days or more are likely to be carried out of the Yacht Harbor (and out of the Bay) by tidal currents. However, those heavy metal ions or flakes that become attached to particles of silt and organic debris may settle to the bottom. For this reason, the very fine grain bottom sediments are likely to contain higher than normal concentrations of heavy metals. This is especially true for any fine sediments located in close proximity to the small craft slips.

Clay and silt are normal components of most estuarine sediments. Nevertheless, they may be considered pollutants in some clear water habitats that are normally characterized by sand or rock bottoms. Excessive rates of sedimentation of silt and clay may be highly detrimental to aquatic organisms which have become adapted to "clean sand" bottoms.

The proximity of the project area to the Bay entrance and the known historic occurrence of sandy beaches in the area suggests that before the area was disturbed by various developments, silt and clay may not have been prominent components in the nearshore sediments. If this view is accepted,

then one may consider the presence of silt and clay layers on the Harbor floor to be indicative of some degree of habitat degradation. In addition, the presence of discolored reducing layers in the subsurface beach sediments suggests the excessive supply of organic material.

BIOLOGICAL SETTING

Previous Work

A large number of studies have been made of the organisms and biological habitats in various segments of San Diego Bay (Peeling, 1975; Browning et al., 1973). Many of these studies were concerned with the major biological impacts resulting from development and/or waste disposal projects. These studies report a large variety of marine organisms are found in the Bay.

Extensive biological sampling has been carried out by NOSC personnel at a station located about 500 feet south of the project area (Peeling, 1975; and Peeling and Goforth, in preparation; Figure 3).

Although biological surveys have not been conducted previously in the vicinity of the proposed groin, eel grass (Zostera marina) beds are known to exist near the project area (i.e., just south of the south end of Shelter Island). These eel grass beds provide an attractive habitat for spiny lobsters and numerous other organisms (Robilliard and Porter, 1976). The presence of shell material on the beach suggested the possibility of a rich mollusc population, and preliminary qualitative inspection of the area had revealed the common occurrence of several species of flatfish in the shallow waters close to the Beach.

Biological Studies of the Project Area

The habitats in the project area and the surrounding vicinity include: 1) an intertidal sand beach with small areas of hard substrate material (rock, pipe, and other structures), 2) a narrow intertidal rocky (riprap) area at the south end of the Beach, 3) a sand, silt, and clay subtidal zone, and 4) the waters overlying the seafloor adjacent to the project area. Habitats more distant from the groin site, which could be affected by project disturbances include the waters and Bay floor of the Municipal Yacht Harbor, and shoal waters and bottom areas bordering the south end of Shelter Island, and adjacent to the Point Loma shoreline south of the project.

All of these habitats have been disturbed one or more times during the last 50 years by dredging, filling, and excessive erosion or deposition related to various developments, and by various waste discharges. Despite such disturbances, these habitats support healthy and diverse communities which are commonly considered worthy of protection. The rapid recovery of these disturbed wildlife communities may be attributed to 1) favorable tidal flushing characteristics of areas close to the Bay entrance, and 2) the short-term nature of many of the more recent disturbances.

The organisms dwelling in the project area habitats are known from limited studies carried out in connection with the preparation of this EIR. In addition, certain inferences can be made regarding project area populations from data collected by NOSC personnel, and others investigating nearby areas (Peeling and Goforth, in preparation).

A total of 105 species of invertebrates and 12 species of fishes were noted in the area. Not all of the species, however, were actually

in the site that will be utilized for the groin and the sand fill. In addition to the species collected or observed, another 15 species of fishes might be expected in the area. This estimate is based upon catches made by NOSC personnel at collecting stations about 1,000 feet to the south of the project area.

Intertidal Habitats

The La Playa Beach intertidal habitat is about 30 to 150 feet wide and has a length of about 2,200 feet. The biological investigations described here have been limited to the 900-foot segment south of McCall Street. The intertidal zone consists of poorly sorted medium to coarse sand. The eroded area at the south end of the Beach is characterized by the scattered occurrence of rock, riprap (concrete and asphalt), and a variety of steel and concrete structures which provide a fixed substrate for the various organisms which require stable surfaces. One of the main structures is the 2.5-foot-diameter Kellogg Street drainpipe which extends about 80 feet across the beach. At the south end of the beach the sand grades rapidly into a stone and riprap seawall which provides erosion protection for the Scripps Institution of Oceanography docking facilities.

Brief qualitative studies of the organisms inhabiting the hard substrate in a 100-yard-long area at the south end of the La Playa Beach have determined the presence of 29 species of marine animals and plants (Table 5). Quantitative studies of intertidal organisms inhabiting the unconsolidated sands between Kellogg and McCall Streets have determined the presence of 20 species which did not pass through a 0.5 mm screen (Table 6). The limited abundance and diversity of these species is attributed to the unstable character of this high-energy environment.

The rapid changes in shoreline over a period of a few years and the low dissolved oxygen concentrations in the subsurface layers (as indicated by hydrogen sulfide discoloration) may also contribute to the sparsity of organisms (Figure 6).

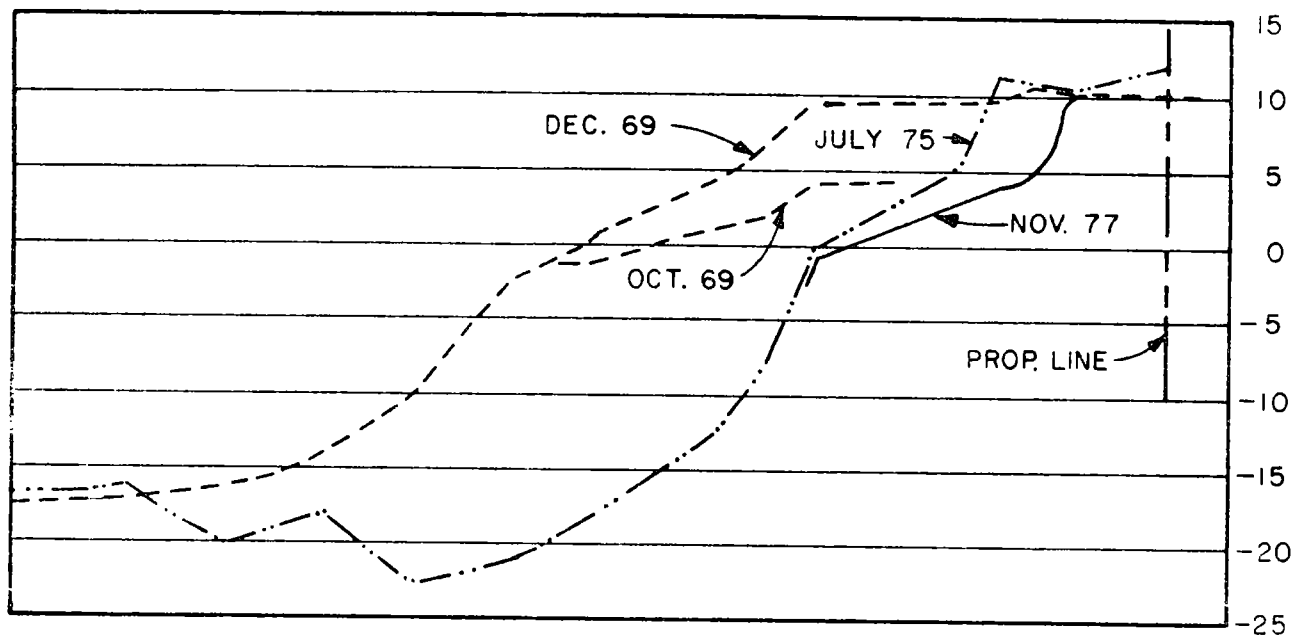
The sargassum weed and several species of clams found in the lower portions of the intertidal zone might be considered among the more valuable organisms occurring in this habitat; both of these groups extend downward into the upper subtidal zone. The distribution of these organisms is described in more detail in a following section.

Subtidal Habitats

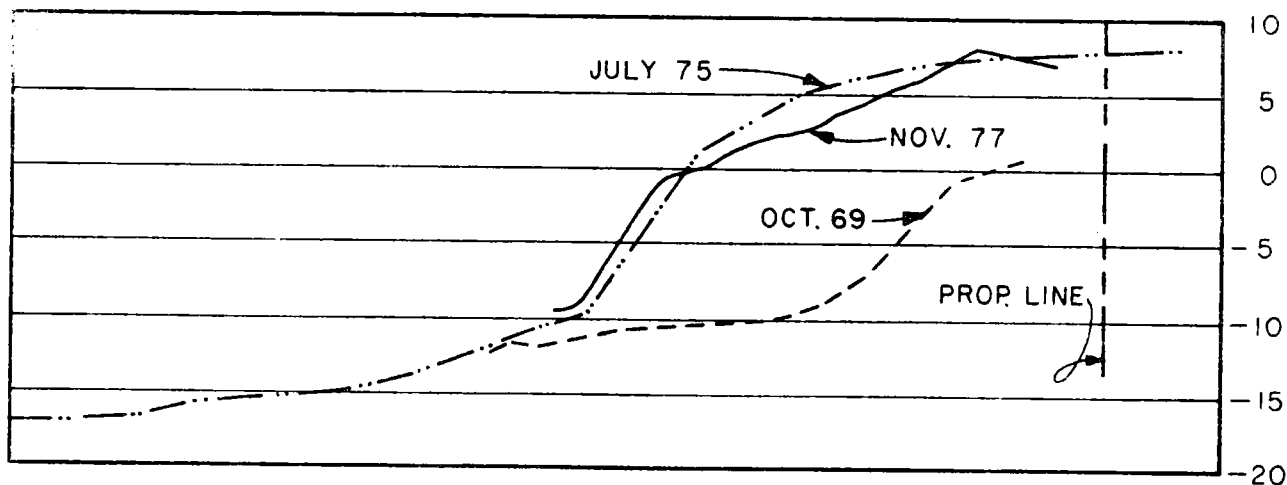
The subtidal habitats are characterized by depths ranging from -1 to about -21 feet (MLLW). Slopes are fairly steep between -3 feet and -17 feet (see Figure 6). The fine sand, silt, and clay content of the surface sediment increases rapidly with increasing depth and distance from shore. At depths of 20 feet the clay and silt content of the surface layer probably exceeds 80 percent. Just below the -2 foot contour there is sufficient clay on the sediment surface to create dense clouds of turbidity whenever a diver comes in contact with the bottom.

Sixty species of invertebrates were found in four samples collected from the top 4 inches of seafloor in depths ranging from 6 to 21 feet (Table 7). Over half of these species were polychaete worms. Twelve species of invertebrates and 4 species of fishes were observed by divers swimming traverses along the Bay floor in depths ranging from 0 to 15 feet.

A beach seine and fish trap were also used to collect data on fishes in the area. Three species of fish (topsmelt, grunion, and staghorn



CROSS SECTION STA. 568 + 00



CROSS SECTION STA. 563 + 00

DATUM = M.L.L.W.

SCALE:
 HORIZ. 1" = 50'
 VERT. 1" = 12.5'

Source: DNOD "La Playa Shore Protection", January 1978

30

scale

planning dept.

Figure 6
**La Playa Beach
 Profiles**

date 7/15/79
 dwp dtk
 base
 no

78102-6
 DEIR6/79
 UPD5/79
 DNOD1/78
 LAPLAYA
 RESTORAT'N



sculpin) were caught in the beach seine (Table 9) and 5 species of fishes and one juvenile lobster were caught in the trap (Table 10). Diving observations also recorded four species of fish; the diamond turbot was the most commonly observed species. Fishermen interviewed on the beach report they caught mostly croaker.

Organisms of Special Concern

Several species or groups of organisms are thought to be of particular concern in the area. These include the larger primary producers, i.e., the plants which may provide an abundance of food and shelter for other organisms, and clams, and flatfishes, which constitute a recreational resource.

Eel grass beds are not found in the vicinity of the La Playa Beach shoreline. The absence of eel grass may be attributed to the sparsity of stable shallow water areas (less than 5 feet deep) and to moderate turbidity, and the abundance of clay and fine silt in the subtidal sediments.

A number of small sargassum (Sargassum sp.) beds and individual plants scattered along the shoreline provide both food and shelter for a variety of fishes and invertebrates. Individual plants may range to 5 feet in height and small sargassum beds, most conspicuous at low tide, may exceed 10 feet in length. The plants are highly concentrated in the vicinity of the Kellogg Street drainpipe and the protective rock structures which mark the boundary with the Scripps facilities. Moderate growths are found to the north and south of the Kellogg Street drainpipe for a distance of 150 feet. Also, individual plants are found intermittently along the shore north of Kellogg Street for a distance of 1,000 feet.

The sargassum weed is also found in great abundance off the Scripps facilities to the south of La Playa Beach and around the southern shore of Shelter Island (600 to 1,200 feet to the east of the project site). The sargassum weed requires a hard stable substrate, and sufficiently clear water to permit light penetration to Bay floor areas where the young plants can settle. Light penetration probably limits the successful settlement depth in the La Playa Beach area to about -5 feet (MLLW). Elsewhere in the Bay the sargassum may be more or less abundant because of differences in water clarity, light penetration, and substrate characteristics.

In the south La Playa Beach area the sargassum holdfasts are attached to stone and rubble that has been brought into the area to provide shore protection, and has subsequently been scattered by erosion and wave action. Some of the sargassum holdfasts are attached to rocks that have been completely covered with sediment. Aerial photographs show that there were no sargassum plants in the La Playa Beach area in 1975. The growth of the sargassum may have been promoted by the erosion of the shoreline, the development of a low tide terrace, and the scattering of riprap by wave action.

Four species of clams have been found in the intertidal zone: the common littleneck clam, the rough sided littleneck clam, the Washington clam and the jackknife clam (Table 11). About 70 percent of the individuals collected were common littleneck clams. Most of the clams collected were of subadult or juvenile size.

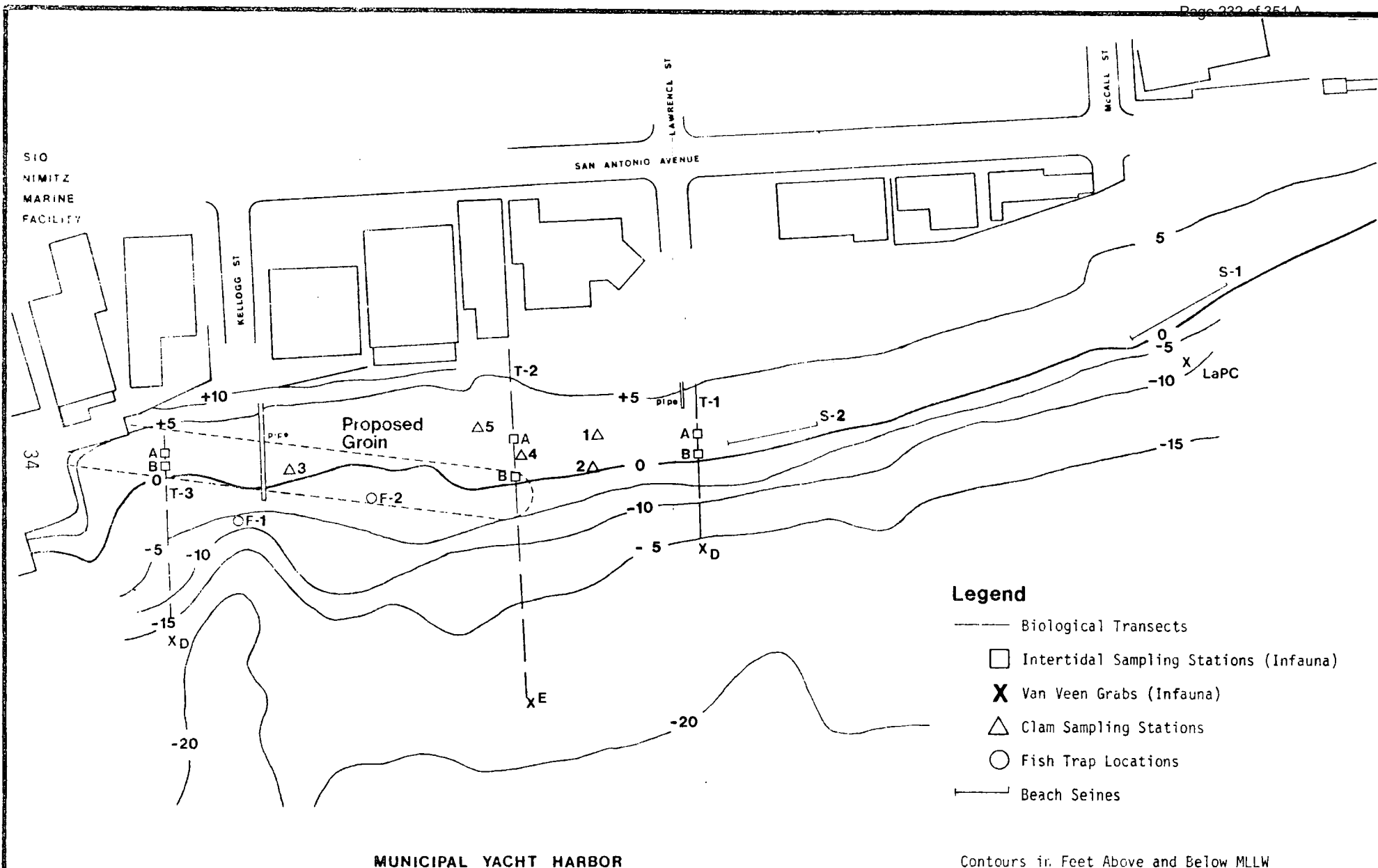
None of the common littleneck clams were large enough to meet the size (1 1/2") specified by the Department of Fish and Game (1977) for legal collection. The absence of adult clams in the area may be due to

the recent formation or instability of the habitat. Frey (1971) reports that a littleneck clam bed at San Onofre required 5 years to rebuild its population following the destruction of the clams by sediment burial. Harbor police personnel stationed since 1957 on the south end of Shelter Island, about 200 yards to the east of the project site, report that they have not observed clam diggers on La Playa Beach.

Estimates of clam populations on La Playa Beach have been made from data obtained from the transect sampling of infauna, qualitative observations, offshore sampling with a van Veen grab, and from five large intertidal samples obtained at low tide with a shovel.* Each of the latter samples covered an area of 4.0 square feet (Table 11 and Figure 7). Areas awash were avoided, and areas characterized by very coarse gravel (cobbles and boulders) were not sampled because of the difficulty in obtaining quantitative results. The area occupied by the clams is probably limited by the -1.5 foot and +1.5 foot contours (MLLW), the Scripps Institution of Oceanography sea wall, and a line about 300 feet to the north where the low tide flat terminates. If one uses the average clam density found (0.7 clams/square foot, or 7.5 per square meter), then one can calculate a possible clam population of about 7,000 individuals. It is believed that the actual number of clams would be much lower, because of decreased population densities near the margin of the area.

Littleneck clam beds have been described from San Onofre containing a minimum of 25 legal-size clams per square meter and ranging up to 150 legal clams per square meter. Total clam densities (including legal and sublegal sizes) are estimated to be double these amounts. In the San Onofre area the 115 foot wide low tide flat along a mile length of beach was estimated to contain 4.5 million legal-size clams.

* from the top 0.8 feet of sediment



Legend

- Biological Transects
- Intertidal Sampling Stations (Infauna)
- X Van Veen Grabs (Infauna)
- △ Clam Sampling Stations
- Fish Trap Locations
- Beach Seines

MUNICIPAL YACHT HARBOR

Contours in Feet Above and Below MLLW

scale approx.

 planning dept.

Figure 7
Biological Sampling Stations

date 2/15/79	chk	78102-6 DEIR6/79 UPD5/79 SEASCIENCE BIOSURVEY	
drawn KS			
base			
no			

Littleneck clams are reported to be found throughout the state on the outer coast wherever there is an intertidal bed of cobbles, particularly near the mouths of creeks and in the cleaner sand and sandy mud areas of bays and lagoons (Frey, 1971).

The data reviewed in the present study suggest that immature clams are common in the project area, especially where extensive erosion has taken place, and where riprap has been scattered. However, the clam population in the La Playa Beach area is much smaller than other areas that have been used for clamming, the clam densities are much lower, and the size of the individual clams are smaller. Therefore, it is concluded that these clams do not, at present, constitute a valuable recreational resource. The area is not critical to the survival of any clam species.

Diving observations suggest that diamond turbot, immature California halibut, and round stingrays commonly feed in the shallow waters of the project area. During one 30-minute diving survey along 800 feet of beach, 18 flatfish were counted. These included 9 diamond turbot (estimated length 4 to 8 inches), 1 California halibut (length 8 to 10 inches), 3 round stingrays and 5 other flatfish, not identifiable because of rapid motion and/or high turbidity. If one assumes that half of the larger flatfish were observed in a zone about 15 feet wide, then one can calculate a density of one turbot per 670 square feet, or one flatfish (including stingrays) per 330 square feet. The latter figure is equivalent to about 130 flatfish per acre. This suggests about 100 flatfish might be found in an 0.8 acre subtidal area (equal to the intertidal area that would be lost to the project). This does not indicate a particularly abundant flatfish population, nor that the shallow offshore zone is utilized extensively as a flatfish nursery area.

GEOLOGY

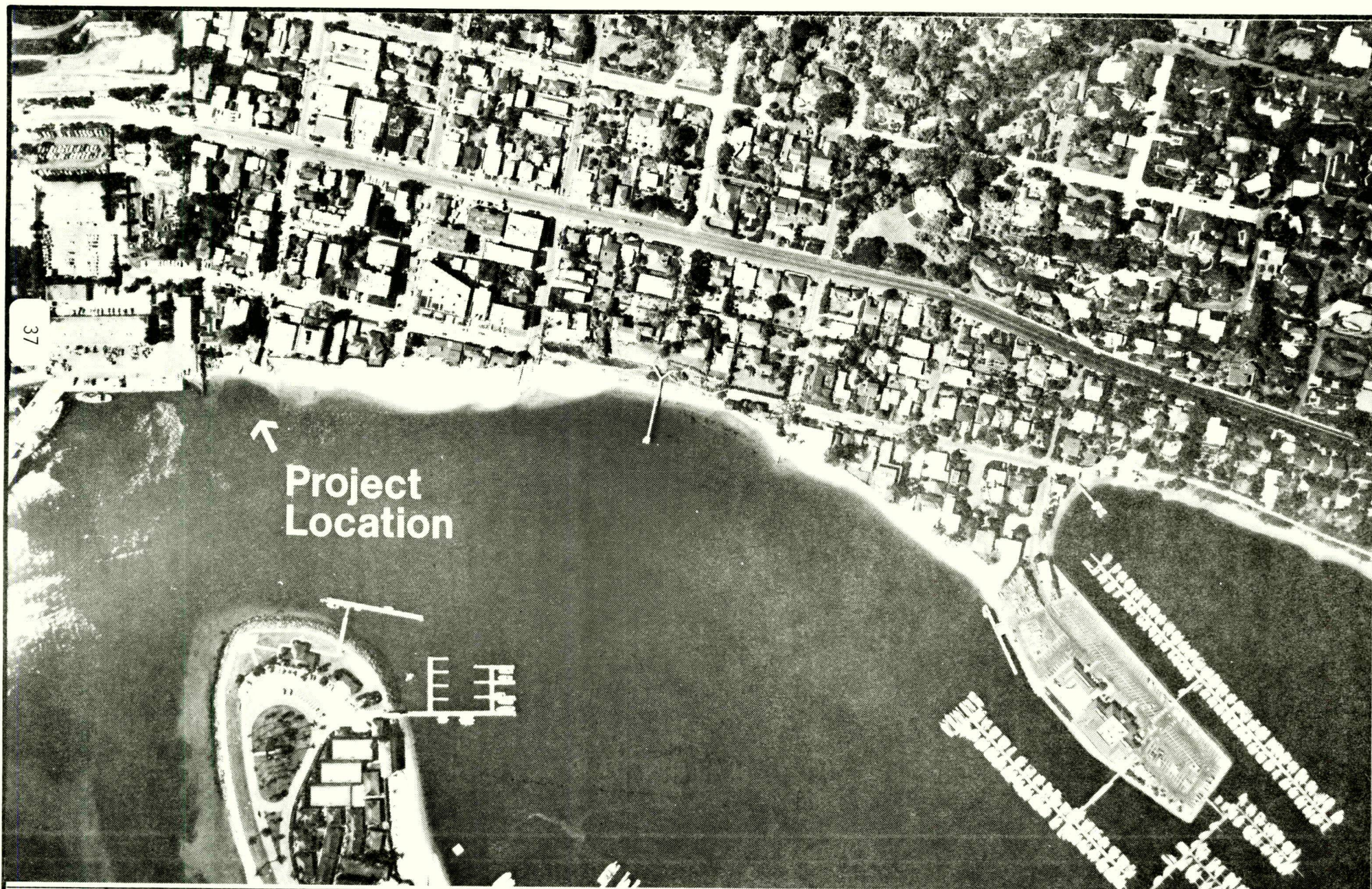
The sediments and morphology of the Beach and nearshore zone in the project area have been investigated, along with the waves which are responsible for moving the sand and shaping the deposits. Historical maps and aerial photographs have been examined in order to determine the character of the shoreline changes during the last 130 years.

This investigation has led to the conclusion that the sediments are being transported only by waves and that the Beach sands now move only in a northerly direction. Rates of northerly transport are highest at the south end of the Beach, and decrease rapidly with distance to the northward. Sediments are no longer being naturally supplied to the southern end of the La Playa shoreline.

For these reasons one may expect that, without protection, the southern portion of La Playa Beach will continue to erode until most of the sand has been removed. Initially segments of the Beach further northward will be widened by the accumulation of the northward transported sand. Eventually, however, the zone of erosion will expand further and further to the northward. Some of the northward transported sand will be lost from the intertidal zone into deeper water.

Beach Morphology and Sediment Characteristics

The width and morphology of the existing beach at La Playa varies considerably from one segment to another. The beach is widest near Lawrence Street where a 150 foot wide berm (dry sand area) has developed. The foreshore slope joins the berm with a steeper submerged slope below depths of about -1.0 feet MLLW (Figure 6 and 8).



	scale - approx.		<p>Figure 8</p> <p>La Playa Beach Aerial (February 1975)</p>	<p>date <u>May 17, 79</u></p> <p>drawn <u>RS</u> chk</p>	<p>78102-6 DEIR6/79 UPD5/79 COE1909 2/18/75</p>	
	<p>0 400'</p> <p>planning dept.</p>			<p>base</p> <p>no</p>		

Southward of Lawrence Street the berm width decreases rapidly to a point where it tapers out completely. There is no berm at all along the southern 400 feet of beach in the Kellogg Street area. At low tide, a relatively wide low tide flat is exposed. At high tide the Bay waters lap against an eroding sandbank and various protective structures. A sheet-steel pile structure installed adjacent to the property at the south end of the Beach appears to be fairly successful in controlling erosion. Other protective structures (sandbags, gravel bags, stone, asphalt and concrete riprap, concrete filled bags, and concrete parking bars) have been less successful. Much of the components of these structures have been scattered over the low tide flat for a distance of 200 feet. Although such debris may enhance the habitat qualities for certain organisms (sargassum, littleneck clams, barnacles, crabs, etc.) it probably reduces beach usage. The asphalt riprap is unsightly, and the presence of sharp angular gravel (spilled from gravel bags) discourages the barefoot use of the beach foreshore.

About 200 feet north of McCall Street the beach berm is replaced by an erosional bank, and the beach is almost completely submerged at high tide.

Beach sand grain sizes range from very coarse to fine, and some silts and clays are present in the subsurface layers. Berm areas are generally covered with well-sorted fine to medium sands, while the foreshore sands are usually much coarser. Near the south end of the beach the coarse sand has a significant shell content, and the beach is partially covered with gravel, stone, and riprap.

Below the lowest tidal level, the sediments become finer, and the silt and clay content increases markedly.

Sediment Transport

The morphology and texture of the beach deposits, and observations of wave configuration and fetch indicate that sediment is being transported in the longshore direction to the northward and, to a lesser extent, in the offshore direction. The erosion of the beach in the vicinity of Kellogg Street has undercut or undermined shore protection devices, as well as portions of the Kellogg Street drainpipe. At the same time erosion has widened the low tide terrace, thus improving the intertidal habitats.

Continued erosion will extend the terrace further to the northward. The absence of a low tide terrace and the presence of steep offshore slopes in the Lawrence Street area suggest that the shoreline has been prograding eastward. The main source of supply would be the sands eroded from the Kellogg Street area.

The abundance of fine silts and clays on the Harbor floor indicates the sand transport does not take place more than 1-2 feet below the intertidal zone. Apparently tidal currents do not play a significant role in transporting sand-size sediments. At any given time the zone of wave-induced transport is fairly narrow, but shifts up and down the beach face with the tide.

Since the Municipal Yacht Harbor is too small, and prevailing winds are too weak to generate waves within the Harbor, the only source of waves capable of transporting significant quantities of sand must come from the south or southeast. Because long-period waves are rapidly refracted, only short-period waves are likely to enter the Yacht Harbor. These may be waves generated by strong southerly winds which might occur only a few times per year, or similar waves generated by vessels underway in the main channel. Although the wake waves may involve only a small number of

crests (perhaps 10 to 20) at one time, they would arrive uniformly throughout the year.

Regardless of origin, the small waves occurring during high tide periods are likely to be refracted less than similar waves occurring at low tide. For this reason, the high tide waves may be characterized by higher rates of expenditure of energy. Because the waves approach the beach from the south, they will break at an angle to the beach, imparting a northward movement to the waters in the surf zone and to any sand grains stirred up by the breaking waves. Because of refraction, and decreasing exposure with increasing distance northward, the energy available for inducing sand transport along the La Playa Beach shoreline decreases rapidly with distance from the Yacht Harbor entrance. This decrease apparently has caused the accumulation of sand, and the bayward bulge in the shoreline in the Lawrence Street area. This accumulation, in turn, has resulted in the offshore movement of sand, and the construction of the relatively steep offshore slopes.

History of Littoral Drift along La Playa Beach

The history of littoral drift along La Playa Beach has been described by the Department of Navigation and Ocean Development (1978). One hundred years ago short-period waves generated by local winds approached La Playa Beach from the northeast as well as the southeast. These waves caused the transport of sands along La Playa Beach in both northerly and southerly directions. A shifting sandbar did offer some protection from northerly wind waves, especially during periods of low tide. The beach sediments were derived from the San Diego River and from stream and cliff erosion along the eastern side of Point Loma.

The diversion of the San Diego River flow into Mission Bay during the latter half of the nineteenth century may have reduced the sand supply from the north. Construction of the Zuniga Jetty in the early 1900s decreased the exposure of La Playa Beach to short-period waves generated by southeasterly winds. A more significant event was the completion of Shelter Island and the peninsula connecting it to the mainland. This completely protected the beach from all waves arriving from northerly directions. Shortly after 1950, the waters of the Municipal Yacht Harbor were dredged to -21 feet. This altered refraction patterns in the Harbor, increased the bottom slopes, and probably created conditions conducive to offshore transport in some areas.

During this period, rates of littoral transport from the south were not substantially diminished, except in areas to the north of Kellogg Street. However, the construction of berthing facilities on the eastern shore of Point Loma, south of the project area resulted in the placement of structures, and the dredging of basins which totally blocked all northward sand transport. The continued littoral drift north of these structures caused shoreline erosion. Periodically such erosion was mitigated by placing large quantities of dredge spoil on the shore. Over a period of years the dredge-spoil sediment was carried northward by littoral currents or transported bayward down artificially steepened slopes. Whenever the northward supply of sand to any particular segment of beach was inadequate to replace the sand lost by northward drift, the shoreline receded. Subsequently beachfront property owners constructed groins and seawalls to provide protection against beach erosion. Frequently the construction of groins caused accelerated erosion of the beaches to the northward. These events are summarized in Table 12.

A brief analysis of the littoral history of the La Playa Beach area has led to the following conclusions which are considered useful in preparing predictions for the impact of the project on littoral drift and beach morphology

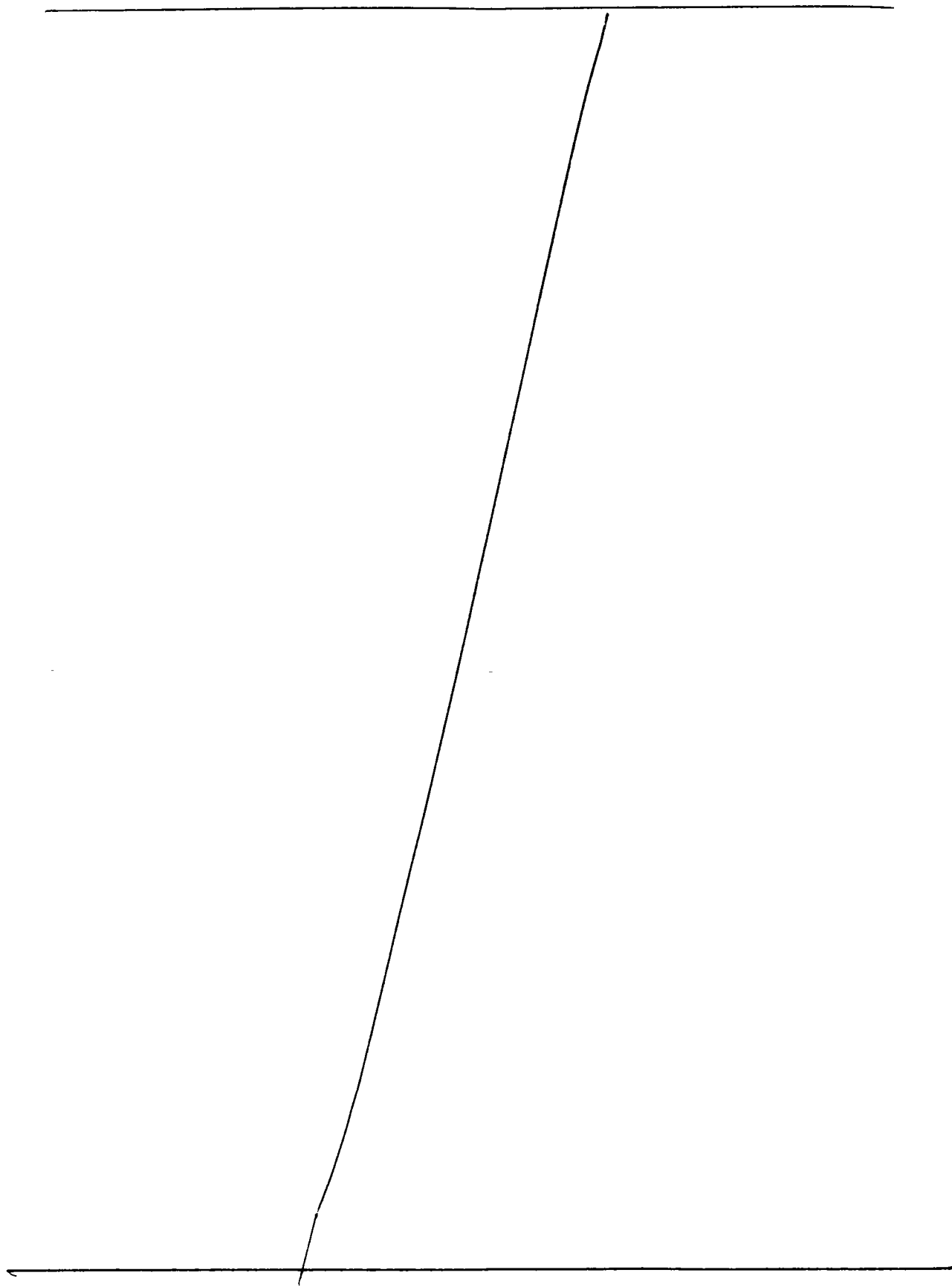
- 1) at present significant rates of sand transport take place only in the northerly direction
- 2) total rates of sand transport (to the north and south) are probably less now than they were 100 years ago; however, net rates of transport (to the north) may have increased or decreased
- 3) because of decreasing exposure, wave energy available for littoral transport along La Playa Beach must decrease rapidly in a northerly direction
- 4) sand transport takes place more rapidly at high tide than at low-tide
- 5) littoral transport induced by wind waves takes place only during a relatively few days each year
- 6) wake-generated waves cause significant rates of northward littoral transport
- 7) littoral transport does not take place below the -2 foot contour

The frequency and magnitude of sand maintenance programs will depend in part on the rate of northward littoral drift in the project area. The drift rate depends upon the degree of exposure to waves, and on the frequency of occurrence of these waves. It is very difficult to make accurate or even rough determinations of the drift rate because:

- 1) accurate measurements of sand lost by littoral drift or trapped by structures interrupting littoral drift have not been made,

- 2) previous historical rates of littoral drift no longer apply due to recent developments in the area,
- 3) the degree of exposure, and thus the drift rate, changes rapidly with distance along the beach,
- 4) the relative roles of wind waves and wake waves in energizing the littoral drift is not known, and
- 5) the number and regularity of local wind storms occurring each year which generate short-period, northward moving waves that reach La Playa Beach is unknown.

The Department of Navigation and Ocean Development (1978) has estimated littoral drift rates to be about 500 to 1,000 cubic yards per year in the Kellogg Street area. Previous losses estimated to be 1,500 to 2,000 cubic yards per year have been attributed, in part, to offshore transport.



SECTION IV

ENVIRONMENTAL IMPACTS

SIGNIFICANT ENVIRONMENTAL EFFECTS

Impacts on Circulation

Short-Term (Construction) Impacts

It is anticipated that the groin would not be constructed during the summer season. The project would seriously disrupt beach usage south of Lawrence Street (and probably also in the Lawrence Street area) for a period of 4 to 8 weeks. The project would begin with the importation of excavation equipment (bulldozers, skip loaders, trucks, drag lines, and/or cranes) necessary for excavating the groin foundation, and for transporting the excavated material northward along the beach.

Once the foundation trench has been excavated, trucks would begin hauling the filter blanket, the quarry rock, and the 2-foot stone to the beach. Some material would be implaced by dumping it directly from hauling trucks. Part of the material, however, would require placement with cranes or other nonhauling equipment. It would probably be necessary to adjust the work schedule according to the tides. Certain vehicles would not be able to operate on low-lying areas of the beach during periods of high tide.

Once the groin is finished, the sand may be delivered and dumped as rapidly as it can be transported.

During the 4- to 8-week construction period, the working area of the beach would not be suitable for normal beach uses. However, some use

could be made of the beach outside of working hours. It appears unlikely that recreational activities on the beach area north of Lawrence Street would be significantly altered by the construction operations.

The project would require about 6,500 tons of rock and 4,000 cubic yards of sand to be transported into the La Playa Beach area. The total weight of required rock and sand is about 13,000 tons. Unless the rock is brought in by barge, which seems unlikely, all of the material would be transported into the area by truck. The trucks would probably use Kellogg Street and/or Lawrence Street for access to the Beach.

Several characteristics of the proposed rock- and sand-transporting operation would depend on factors which are left to the discretion of the contractor, unless otherwise specified. The contractor's options include the source of the sand and rock, the number of trucks used, the size of the trucks and haul loads, the use of different trucks for sand and rock, and the type of equipment used for placement of the rock and sand. Despite these uncertainties, a reasonable estimate of impacts can be made, based on the knowledge of similar projects and information provided by potential contractors. Some contractors have suggested that the rock and sand would be hauled in 25-ton loads (equivalent to about 15.4 cubic yards of sand) in the same vehicles (personal communication, R. Zinser). This would mean that the transport of all rock and fill material would require only 520 trips. Other sources suggest that different trucks are likely to be used for hauling the sand and rock. The sand could be carried in 10-cubic-yard (16.2 ton) loads, while the rock would be carried in 10- to 20-ton loads (personal communication, G. Ferver). The larger rock sizes may be carried in lighter loads. If lighter loads are carried, as many as 1,050 truckloads could be required.

Some contractors estimate a rate of transport of 1,600 to 1,800 tons of rock or sand per day. At this rate, only 4 to 5 days would be required to move the rock and another 4 to 5 days would be needed for transporting the sand. Although the sand fill might be moved at this rate, slower rates are estimated for the transport of the rock, allowing time for careful placement. Thus, it seems likely that hauling the rock and sand would require an estimated 12 to 18 days.

Some contractors might choose to transport construction material 10 hours per day; others might prefer an 8-hour day. If 1,600 tons were transported in one day in 25-ton loads, 64 trips would be required. This would average 8 loads per hour during an 8-hour period, or one load every 7.5 minutes. If lighter loads were carried, more trips per day would be required to achieve the same daily transport rate.

Because of the large size of the trucks and the narrow width of Kellogg and Lawrence Streets, it would be necessary during hauling hours to eliminate all parking on the streets used for direct access to the beach. With parking eliminated, it should be possible for passenger vehicles to pass the trucks without difficulty.

If a number of hauling trucks were to enter the Point Loma area as early as 0700 hours (7:00 am), they would increase the congestion which occurs on Rosecrans Street every weekday morning between 0650 and 0715 outside of the gates of the military base at the south end of Rosecrans.

It is expected that the intensive use of Kellogg and/or Lawrence Streets by the heavy trucks would result in some damage to the pavement. Presumably, such damage would be repaired by either the contractor or the City of San Diego maintenance crews shortly after the project has been completed.

In conclusion, it is forecast that intermittently during a 4- to 8-week period, 520 to 1,050 truckloads of rock and sand would be brought to the beach on weekdays during an 8- to 10-hour period each day. Loaded trucks might arrive as frequently as one every seven minutes. During the hauling hours it would be necessary to ban all parking on the streets east of Rosecrans which would be utilized by the trucks.

In the unlikely event that the rock is brought to the site by barge instead of truck, the disruption of the traffic and parking would be reduced about 50 percent. A crane may be used to offload the rock onto the beach, or the barge might dump the rock on the harbor bottom, where it would be recovered with a drag line. This latter method would cause: 1) the severe disruption of biological communities; 2) marked increases in turbidity; and 3) considerable degradation of water quality. The use of barges would also partially close the Yacht Harbor entrance during the operating period. This should affect only deep-draft vessels entering or leaving the Municipal Yacht Harbor at low tide.

Long-Term Impacts on Beach Usage and Traffic Circulation

It is expected that the restoration of the Kellogg Street beach area would result in increased beach usage. This additional usage would generate increased traffic flow and would result in increased on-street parking, especially during the summer and on weekends. However, because of the limited accessibility of the La Playa Beach, and the lack of services and amenities, the increased usage might be substantially less than expected from the similar enlargement of other beach areas.

The Traffic Engineering Department of the City of San Diego estimates peak beach usage generates about 35 ADT per acre (personal

communication with P. Sanford). Thus, the 0.8 acre increase in beach area would generate an additional 28 ADT during peak periods. If one assumes that vehicles arriving at the beach have an average occupancy of 2.0 to 3.5 persons each, then one would expect the increased usage to range from 56 to 98 persons per day.

It is assumed that the additional 28 ADT would create a demand for 28 additional parking spaces. If the non-summer peak usage requires 49 parking spaces in the area east of Rosecrans Street, and the existing summer parking demand is estimated to be 74 vehicles (1.5×49), then the additional traffic generated by the project would increase the demand for parking to 102 spaces which is one space below the present capacity (see Table 2). If the actual demand should exceed capacity, additional parking spaces may be found within 1,000 feet of the beach on the residential streets west of Rosecrans. Because of the limited accessibility of the beach, and its neighborhood or family character, it seems quite probable that the increase in beach usage would generate less than 28 additional ADT, and that actual demand for off-street parking east of Rosecrans would not exceed capacity.

Because the streets providing direct access to the beach are quite narrow, they may easily become congested whenever parking is at or near capacity. However, it appears that even the addition of 28 ADT (5.6 trips per hour, during a 5-hour period) to the observed weekend averages is not likely to increase the number of trips to more than 30 per hour. It is believed that the normal summer beach traffic can utilize the existing streets without causing serious congestion.

The periodic redistribution and/or replenishment of sand on the beach may affect beach usage and traffic circulation to a limited extent.

These operations, which may be necessary every two years, would require the transport of sand from the north end of the beach to the south end, and also the importation of limited amounts of sand. It is conservatively estimated that every two years 1) 1,000 cubic yards of sand would require redistribution, and 2) 1,000 cubic yards of sand would be imported into the area. About half of these amounts might be transported or redistributed if the replenishment/redistribution operation was conducted every year. The supply of 1,000 cubic yards of sand would require the implacement of about 100 truckloads of material on the beach. This would take 2 to 10 days (depending on the number of trucks used) and would disrupt parking on Lawrence or Kellogg Streets. The redistribution of 1,000 cubic yards of sand would require the use of 1 to 3 earth-moving vehicles (in addition to trucks) and might take an additional 2 to 10 days. Thus beach usage would be disrupted for a period of 4 to 20 days. The disruption period would be reduced if less sand is lost from the area by littoral drift or by offshore transport. In any case, if the replenishment project is carried out during the winter, the impacts on beach usage would not be significant, and impacts on traffic flow would be minor.

Oceanographic Impacts

The project would not have significant impact upon winds, tides, tidal flushing, or current flow. The high tide area of the Municipal Yacht Harbor will be decreased by about 0.8 acres. This would result in a 0.42 percent decrease in the tidal prism. The decrease in the subtidal volume of the Yacht Harbor would be negligible. Therefore, the rate of flushing will be decreased by about 0.12 percent. The impact upon flushing of San Diego Bay will be much less.

The groin construction would result in a very slight increase in current velocities passing through the Yacht Harbor entrance.

The proposed groin would reflect waves approaching the shore more efficiently than the existing beach. The orientation of the groin suggests that waves reflected by the structure would approach the Shelter Island shoreline further south than waves reflected by the present shoreline. Most of the southern margin of Shelter Island is well protected by riprap. For this reason the impact on wave reflection is considered to be negligible, and possibly beneficial.

The project would not have a significant long-term impact upon water quality. However, the disturbance resulting from the excavation of the groin foundation trench and from the placement of large quantities of rock and sand in the intertidal zone would increase the turbidity in the area during the period of construction. Increased turbidity adversely affects organisms in a variety of ways (U.S. Army Corps of Engineers, 1975; Browning, et al, 1973). However, the short-term turbidity increase would not be likely to cause a greater turbidity disturbance than would result from heavy winter rains. Certainly the disturbance would be much less than that produced by most Bay dredging projects. In any case, it is believed that tidal flushing would rapidly disperse the turbid waters into the Municipal Yacht Harbor on the flood tides, and out to sea on the ebb tides.

It is believed that any degradation of water quality resulting from the dredging of the foundation trench sediments would be negligible. This belief is based upon 1) the small amount of material to be dredged, 2) the fact that much of the spoil would be excavated from above the water level, 3) the material removed would be stockpiled, largely above water level, 4) the sediment to be excavated is largely composed of sands and gravels

which generally do not tend to concentrate highly toxic wastes, 5) the considerable distance between the excavation site and heavy metal sources, 6) the location of the project site in an area characterized by rapid flushing, and 7) the probable recent age of the deposits to be removed. Most of the sediment to be excavated was placed in the area following the 1974 construction of the force main sewage pipeline.

Biological Impacts

The project would result in several biological impacts. These would include

- 1) the loss of existing habitats in the groin and fill site areas,
- 2) the destruction of many non-mobile organisms living in these habitats, and the displacement and early death of mobile organisms that may escape from them,
- 3) the creation of new intertidal and subtidal sandy substrate habitats, and
- 4) the construction of new rocky (hard substrate) habitats.

The project would result in the loss of about 35,000 square feet (0.8 acre) of existing intertidal and subtidal habitat area. Most of this area is characterized by a sandy substrate, but it does include small zones containing rock, gravel, and riprap. Probably less than 5 percent of the habitats that would be lost are subtidal; most of the area that would be lost is intertidal. The lost habitat area would be replaced by a dry sand beach, a narrow segment of intertidal sand, and a 350 foot long, 9 foot high rocky embankment, that will support those intertidal organisms that prefer a rocky substrate. Erosion north

of the proposed groin would create a small low tide flat, but this may be periodically disturbed by the beach maintenance program.

Most of the invertebrates now dwelling in the area of the groin and fill sites would be destroyed by burial or dredging and involuntary displacement. Those organisms sufficiently mobile to escape from the project area would have to find new habitats in order to survive. Because most intertidal habitats are already occupied, the displaced organisms are likely to face an early death.

The intertidal and subtidal habitats created would probably be populated by juveniles and adults moving from nearby areas. Organisms occupying the intertidal zone of the new sand beach would simply migrate southward from the existing, undisturbed areas. New soft substrate subtidal areas would be populated by faunas from nearby bay floor areas.

Sargassum plants might be expected to flourish on the lower exposed surface of the new groin. These plants would eventually replace all of the sargassum lost to the project construction. Within a year or two, following construction, the new groin would be expected to support a variety of organisms that prefer hard substrate habitats. The expected populations of these organisms would be much greater than populations now living along this segment of beach. The rocky groin may support some species not presently found in the area. The species that would inhabit the groin might be expected to be about the same as those found 1) on the pilings and rocks of the SIO facility which borders the southern edge of the project area, and 2) on the rocks protecting the south end of Shelter Island, about 600 feet to the east.

The nearest eel grass beds that may be effected by the project area are at least 700 feet to the eastward. Since these beds are

not directly down current from the project area, and the predicted turbidity is temporally and geographically limited, it is believed that they would not be significantly disturbed by the project.

The impacts that would result on the sargassum beds, include complete destruction of existing beds, and the creation of large rocky substrate areas which have the potential for supporting much larger beds. Two to three years after the completion of the project, one would expect the sargassum beds in this area to be more plentiful than they are at the present time.

The project will result in the loss of a juvenile clam bed containing an estimated 7,000 clams, and the loss of small feeding areas used by flatfish during periods of high tide.

Geological Impacts

Implementation of the proposed project would provide the shoreline protection desired at the foot of Kellogg Street. The fill material placed on the north side of the proposed groin would be well protected from the northward drift. However, any steep sand slopes created near the end of the groin would erode until they were not much steeper than the existing foreshore slopes. This would create a small shallow, northeast facing cove near the end of the groin.

North of the groin the beach face would continue to be eroded by the northward littoral drift. This would result in the slow development of a low tide terrace similar to that now present at the foot of Kellogg Street. If the erosion is unchecked, the low tide terrace would continue to widen at the expense of the dry sand area. Because rates of littoral drift in the Lawrence Street area are substantially less than in the

vicinity of Kellogg Street, sand losses will be relatively slow. The sand moving northward may tend to temporarily widen the beach in the McCall Street area. This could result in the permanent loss of some sand to deep water deposition.

In accordance with project maintenance plans, substantial sand losses between Lawrence Street and the proposed groin would be remedied by a maintenance program. The lost sand would be replaced by the relocation of any substantial quantity of sand that may have drifted to the north, or it might be replaced by imported sand.

It is assumed that the sand maintenance program would take place every 1-2 years, during the non-summer months. The program would result in some short-term disruptions of beach usage, intertidal habitats, and possibly parking on Lawrence Street.

Several large (2.5 feet ID) street drains discharge runoff on to La Playa Beach, or into the nearshore waters. Those drains at the end of Lawrence and McCall Streets are largely filled with sand. Erosion has exposed the Kellogg Street drainpipe sufficiently so that it has become a habitat for organisms that settle on hard substrates. Also, the Kellogg Street drain acts as a groin, restricting the flow of sand along the beach. The proposed project would be designed so as to have no long-term impact upon the drainpipe. The groin would be built in such a way that the existing drain (or an equivalent replacement) would pass right through it. The project would have no impact upon the discharge from the drain.

Any increase in beach width in the Lawrence and McCall Street areas would enlarge the sand deposits which are presently clogging the drains at the end of these streets. Correspondingly, a decrease in beach width would tend to alleviate sand blockage. One may anticipate both increases

and decreases in beach width in the vicinity of these drains, whether or not the project is implemented. For this reason, the impact of the project on the drainage pipes is considered to be of little significance.

A number of 4- to 6-inch patio and yard drains presently discharge onto the beach in the project area. Presumably these drains discharge significant quantities of water only during and immediately following periods of substantial rainfall. Implementation of the project would probably raise the sand level high enough to bury some or all of these pipes. This would reduce the rate at which waters might be discharged through them. However, it is expected that the drainpipes would continue to function as long as they did not become clogged with trash and other debris.

UNAVOIDABLE AND IRREVERSIBLE SIGNIFICANT ENVIRONMENTAL EFFECTS

The loss of 0.8 acre of intertidal habitat may be considered a significant impact by some persons and/or groups; others would not consider the loss of this small area of San Diego Bay to be significant. For example, it has been the administrative position of the U.S. Fish and Wildlife Service that any loss of intertidal area, no matter how small, is significant on the basis that past losses of intertidal areas in the Bay have already been excessive, that all future losses will be cumulative, and that any loss could eventually result in the marked diminishment, or the total loss of existing intertidal habitats in the Bay.

The argument considering the 0.8 acre loss as not substantially adverse is based in part on the comparison with previous losses, and an assessment of the extent of similar areas remaining in the Bay. Since 1873 about 4,000 acres of the original approximately 5,000 acres of intertidal habitat of the Bay have been lost to filling activities. Probably 2,000 to

3,000 acres of the original 5,000 acres were intertidal sand flats or mud flats (Browning et al., 1973; Corps of Engineers, 1975). The proposed project would result in the loss of only 0.026 to 0.040 percent of previous losses of intertidal areas.

In 1970 San Diego Bay included approximately 614 acres of mud flats and sand flats (Browning et al., 1973). Thus the filling of the 0.8 acre would result in the loss of 0.13 percent of the intertidal mud flat and sand flat area of the Bay.

The California Environmental Quality Act (CEQA) Guidelines (1978) list 24 conditions which, if present, could indicate that the project would normally have a significant effect on the environment. Those impacts which might apply to this project include:

- 1) substantial affects on "a rare or endangered species of animal or plant or the habitat of the species";
- 2) substantial interference "with the movement of any resident or migratory fish or wildlife species"; or
- 3) substantial diminishment of "habitat for fish, wildlife or plants."

However, no rare or endangered species or their habitats are known to be on the project site. Also, it is unlikely that the project would have a substantial effect on off site rare or endangered species. The project's location and configuration do not indicate the potential for substantial interference with the movement of fish or wildlife. The loss of 0.8 acre (0.13 percent) of the existing 614 acres of intertidal mud flat/sand flat does not appear to substantially diminish the habitat. If these conclusions are accepted, then the project impacts would not qualify as significant under the CEQA guidelines.

Technically the loss of the intertidal area is not irreversible. However, once the groin and fill are in place it would seem most unlikely that either would be removed during the next 50 to 100 years.

The remaining impacts are either not significant, avoidable, or reversible. Traffic impacts are considered temporary, or otherwise not significant. Impacts upon water quality are temporary and not significant. Impacts upon sargassum weed, flatfish feeding areas, clam populations, and other invertebrates are sufficiently limited that they too may be considered not significant. Changes in the littoral processes in the area should be considered beneficial or too minor to be of significance.

MITIGATION MEASURES WHICH COULD MINIMIZE ANY SIGNIFICANT EFFECTS

The loss of intertidal areas could be mitigated by creating areas of similar size elsewhere along La Playa Beach, in the Municipal Yacht Harbor, or in the Bay. By removing a portion of the existing dry sand area of La Playa Beach, one could create a new intertidal flat area. This would result in the loss of an equal area of dry beach, which would be contrary to one of the objectives of the project--beach restoration. Alternatively, one might use imported sand to build an intertidal flat seaward of the present shoreline; this would result in the loss of an equal area of subtidal habitat. Also, one could combine the two methods of intertidal-area creation by using the dry sand removed to extend the intertidal habitats further toward deep water. This would reduce the loss of dry sand and subtidal habitats.

Several other measures might be considered for mitigating impacts not judged to be potentially significant. Potential short-term localized increases in turbidity could be reduced by specifying that the silt and

clay content of imported sands should not exceed some minimal value. Parking problems might be minimized by scheduling the project during non-summer months. Traffic congestion could be reduced by scheduling the hauling of rock and sand so that not more than one or two trucks were present in the project vicinity during periods of maximum traffic flow on Rosecrans Street.

GROWTH INDUCING IMPACTS

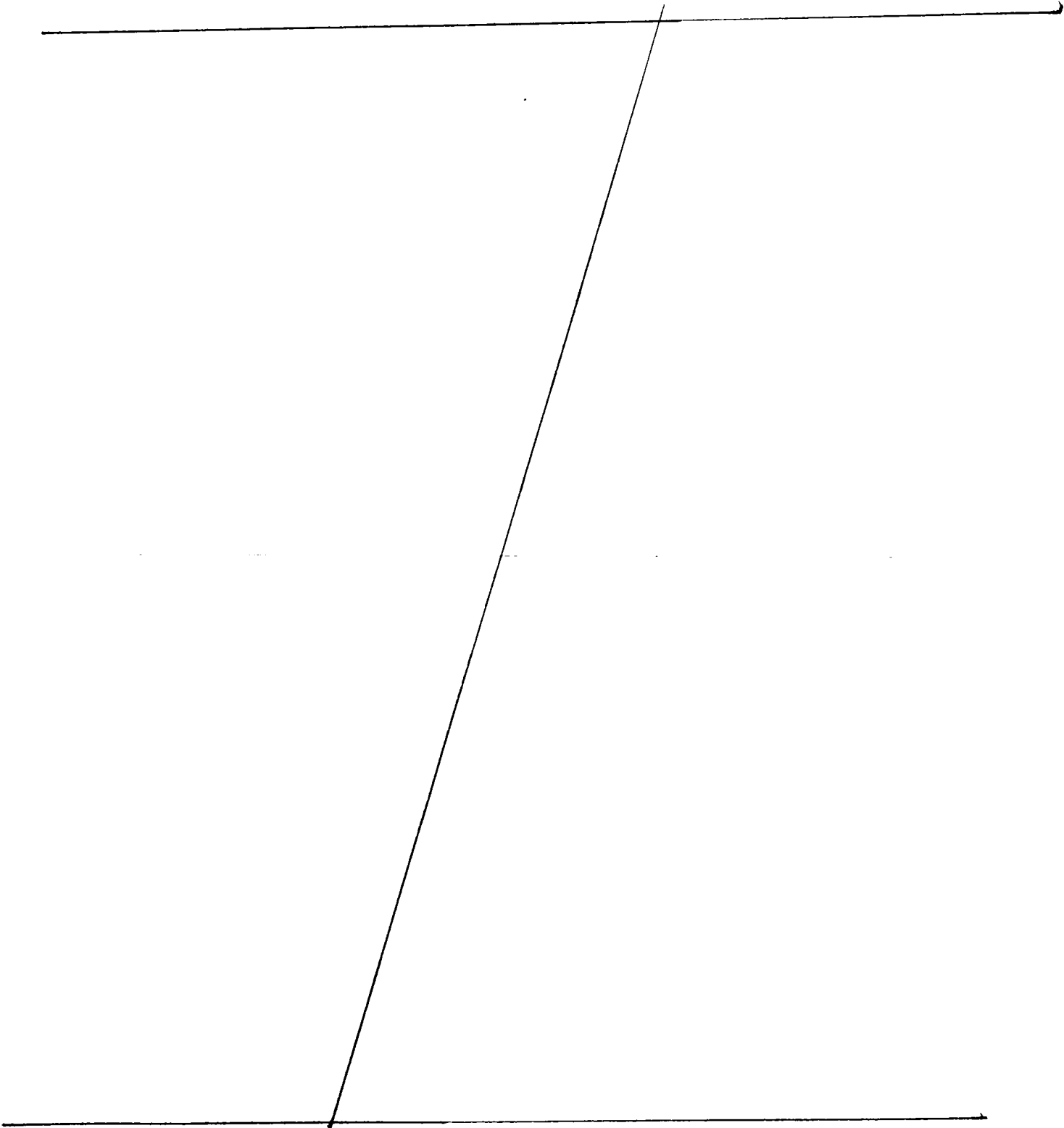
Since the project does not significantly increase housing or long-term employment, it is not considered to have significant growth inducing impacts.

SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

With respect to recreation and other human uses, the project does not require any sacrifice of long-term productivity in order to enhance short-term usage. The project does, however, require sacrifices in short-term usage in order to increase the long-term productivity of the project site.

With respect to marine organisms, the project might result in a very small loss of long-term productivity. This is not necessarily the case, however, because the hard substrate habitats created might be more productive than the sandy substrate habitats lost. Probably, any change in productivity could be considered insignificant.

09



SECTION V

ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed project include: 1) the continuous supply of sand to the south end of the Beach in order to replace the sand carried northward by littoral drift; 2) armoring the entire shoreline with rock or other material to prevent property losses; 3) the construction of groins perpendicular to the shoreline to retard littoral drift and maintain beach areas; 4) the use of detached breakwaters for beach protection, and 5) no action.

Continuous beach nourishment has been suggested by the Department of Navigation and Ocean Development (1978) to restore and maintain the Beach and provide protection from erosion. This would require bringing in sand every year or two in somewhat greater amounts than the volumes that would be periodically imported and/or redistributed as part of the proposed project. If the present rate of sand loss at Kellogg Street is 2,000 cubic yards per year, then one would need to bring in that amount of sand each year. The northward moving sand can be expected to widen the beach, which would gradually impinge on the Yacht Harbor. The progradation of the shoreline off Lawrence or McCall Streets would result from northward decreasing rates of sand transport. The periodic redistribution of sand along the beach would reduce the imported sand requirements, and the deposition rate near the Southwestern Yacht Club. In either case, the intertidal flats developed in the vicinity of Kellogg Street would be lost. Some disruption of beach usage and intertidal habitats would occur during each maintenance period. More frequent maintenance periods would be

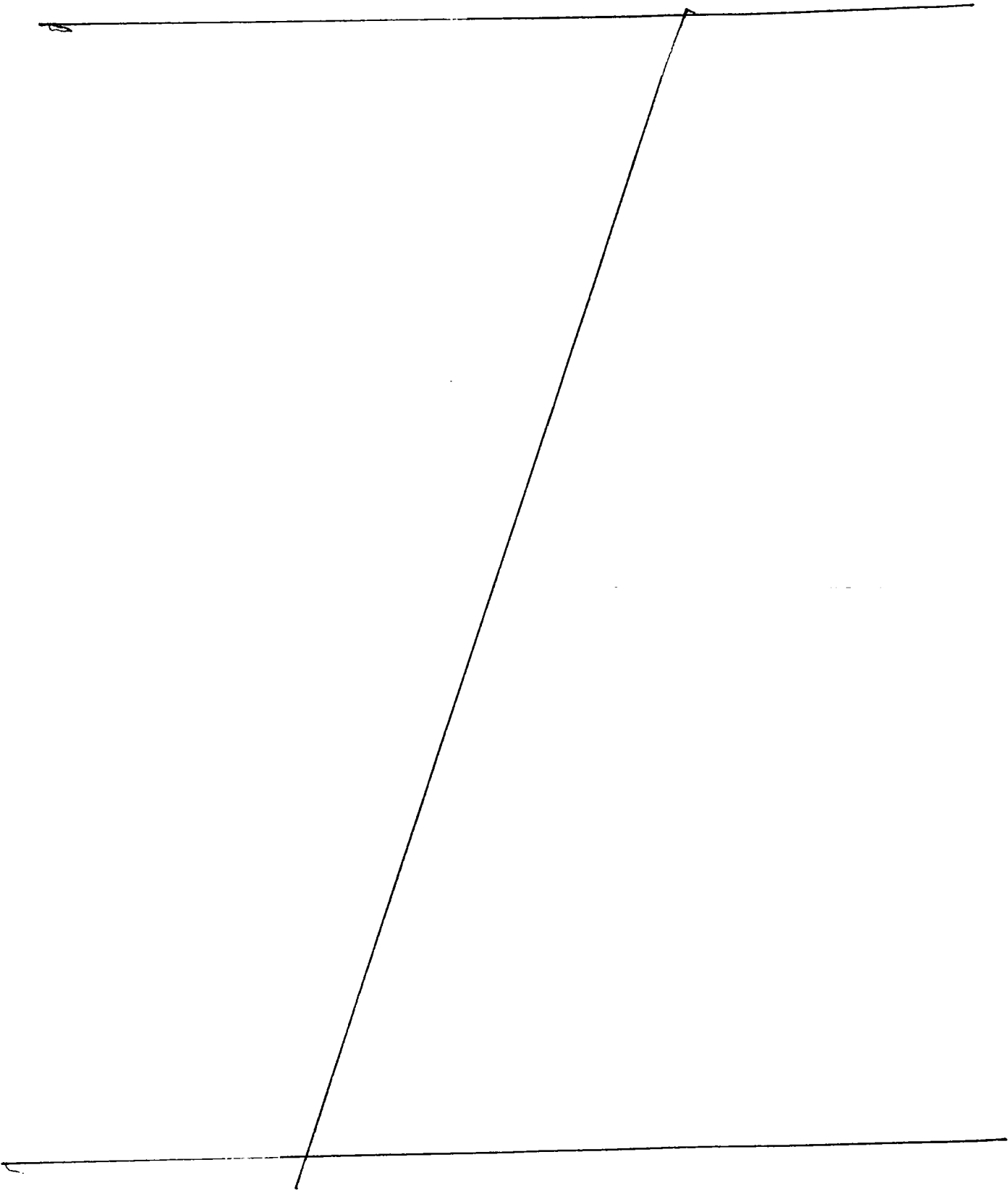
required for this alternative than for the proposed project in order to prevent the erosion of the bank in the Kellogg Street area.

Armoring the entire La Playa Beach shoreline with rock has also been proposed (Department of Navigation and Ocean Development, 1978). This is an accepted method of erosion control, but the protective structure might be considered unattractive and perhaps dangerous to children and swimmers. If the protective structure was placed some distance bayward of the private property line, the intervening area could be filled with sand to create a permanent beach. The importation of the necessary rock (or other structural materials) would temporarily disrupt traffic and parking. The continued erosion of the existing beach, seaward of the proposed structure would result in the expansion of the low tide terrace unless the structure was placed near the present bayward edge of the berm. This expansion would enhance the intertidal habitats, and clam populations. Eventually, if unprotected, most of the existing dry sand area would be lost to these habitats. The entire beach would be submerged at high tide. Beach usage would be expected to diminish considerably.

Another conventional alternative would be to construct a number of short groins perpendicular to the shoreline. The Department of Navigation and Ocean Development (1978) suggests that these would work most efficiently if they were spaced about 100 feet apart. However, these would divide the beach up into segments which might discourage beach usage. This method would result in some destruction of organism and loss of habitat, but new habitats would be created. The net change in intertidal habitat would depend upon the length of the groins and the volume of imported sand utilized in the project. Temporary disruptions of parking would occur during the construction period.

The Department of Navigation and Ocean Development (1978) recommends the construction of one 100-foot groin and three 100-foot-long detached breakwaters to protect the shoreline from erosion and to give it a cusped configuration. The resulting impacts would be similar to those generated by the construction of multiple groins, except that the beach would not be compartmentalized. Beach usage would depend upon whether the project resulted in an increase or decrease in beach area. The project could be designed to achieve either objective.

The no action alternative would also result in a number of impacts. Erosion of the Beach would become more severe in the Kellogg Street area, and would continue to impact the beach further to the northward. The length of the wide low tide terrace would continue to increase (at the expense of dry sand areas). Clam populations and eel grass beds would expand, and sandy substrate intertidal populations would increase. A decrease in dry sand areas would result in decreased beach usage. Usage of the beach would also be discouraged by the dispersal across the low tide flat of various materials (rock, riprap and gravel, and other debris) which might be brought into the area in order to check the bank erosion.



SECTION VI

REFERENCES

- Browning, Bruce M., John W. Speth, and Wendell Gayman, 1973, The natural resources of San Diego Bay, their status and future, Dept. of Fish and Game, Coastal Wetlands Series-#5, 105 pp., with appendices.
- Dept. Navigation & Ocean Development, 1978, Report on shore protection for La Playa Beach, San Diego, State of California, Resources Agency Report, 33 pp.
- Frey, H. W., (edit.), 1971, California's living marine resources and their utilization, State of California, Dept. of Fish and Game, 148 pp.
- Fisackerly, G. M., 1974, San Diego Bay model study, U.S. Army Engineer Waterways Experiment Station, Technical Report H-74-12, 21 pp. plus tables and plates.
- Kenis, P., A. Zirino, C. Clavell, 1978, Automated anodic stripping voltammetry for the analysis of copper, zinc, lead and cadmium for environmental monitoring, Naval Ocean Systems Center, Technical Report 243 (NOSC TR 243), 19 pp.
- National Oceanic and Atmospheric Administration, 1978, Tidal Current Tables, 1979, Pacific Coast of North and South America and Asia, U.S. Dept. of Commerce, National Ocean Survey, 254 pp.
- Peeling, Thomas J., 1975, A proximate biological survey of San Diego Bay, California, Naval Undersea Center, San Diego, California, NUC TP 389 rev. 1, 83 pp.
- _____, and H. W. Goforth, in preparation, Environmental survey data for San Diego Bay, Marine Environmental Management Office, Naval Ocean Systems Center.
- Robilliard, Gordon A., and Preston Porter, 1976, Transplantation of eel grass in San Diego Bay, report prepared for Undersea Science Dept., Naval Undersea Center (NUC TN 1701), by Woodward-Clyde Consultants, 36 pp.
- Seymour, Richard J., 1977, Estimating wave generation on restricted fetches, J. Waterway, Port, Coastal and Ocean Division, ASCE 12924, No. WW2, pp. 251-265.

- Seymour, Richard J., and Daniel M. Hanes, 1977, Performance analysis of a tethered float breakwater, University of California Sea Grant College Program, Institute of Marine Resources, University of California, La Jolla, California, Sea Grant Publication No. 55, IMR ref. 77-102, 154 pp.
- Sonu, Choule, J., D. R. Patterson, M. T. Czerniak, 1978, Littoral transport study, Naval Air Station, North Island, San Diego, California, contract No. TC 3206, prepared for Ferver Engineering Co., San Diego, California, by Tetra Tech, 38 pp.
- U.S. Corps of Engineers, 1975, Final environmental statement, San Diego Harbor, San Diego County, California, prepared by U.S. Army Engineer District, Los Angeles, California, approx. 150 pp. with appendices and maps.
- Zirino, Alberto, S. H. Lieberman, and C. Clavell, 1978, Measurement of Cu and Zn in San Diego Bay by automated anodic stripping voltammetry, Environmental Science & Technology, vol. 12, no. 1, pp. 73-77.

SECTION VII

A. AGENCIES AND ORGANIZATIONS CONSULTED

FEDERAL

U.S. Army Corps of Engineers
 Los Angeles District
 Environmental Branch
 Mr. Russell Belmer
 Geology Branch
 Mr. David Lukesh

U.S. Environmental Protection Agency
 Enforcement Branch
 Mr. Cris Vais

U.S. Fish and Wildlife Service
 Southern California Area Office, Laguna Niguel, CA
 Mr. Ralph C. Pisapia

U.S. National Marine Fisheries Service
 Southwest Region, Terminal Island, Long Beach, CA
 Mr. Gerald V. Howard

U.S. Navy
 Naval Ocean Systems Center, San Diego, CA
 Mr. H. W. Goforth
 Mr. M. Salazar
 Mr. Peter Seligman

STATE OF CALIFORNIA

Department of Fish and Game
 Marine Resources Region, Long Beach
 Mr. Rolf E. Mall
 Mr. Richard Nitsos
 San Diego Branch Office
 Mr. John Duffy

Department of Navigation and Ocean Development, Sacramento, CA
 Mr. John Habel

Department of Transportation, San Diego, CA
 Mr. R. Baker

STATE OF CALIFORNIA (continued)

Regional Water Quality Control Board, San Diego, CA
San Diego Region

Mr. Peter Michaels

Coastal Region Commission, San Diego, CA

Mr. Michael Kennedy

Mr. Kent Floro

Mr. John Pedroarena

State Lands Commission, Long Beach, CA

Mr. Robert Gale

CITY OF SAN DIEGO

Planning Department

Environmental Quality Division

Mr. Bill Roberts

Engineering Department

Mr. William Barnes

Traffic Engineering Department

Mr. P. Sanford

Mrs. P. Lamb

Mr. Jim Meehan

Mr. Robert Ferrier

Utilities Department

Mr. Richard W. King

Mr. Harry Hom

OTHER GROUPS

San Diego Unified Port District

Environmental Management Department

Mr. Tomas E. Firlé

Mr. Michael V. Needham

Planning Department

Mr. Fredrick Trull

Engineering Department

Mr. Joachim E. Liebmann

Mr. Donald Forrest

Harbor Police

Chief Ed Taylor

Captain Donald Hadley

Marine Operations

Mr. William Garret

OTHER GROUPS (continued)

Ferver Engineering Company
Mr. Greer W. Ferver

Zinser Contractors
Mr. Robert Zinser

Conrock Company
Mr. Douglas Watkins

B. IDENTIFICATION OF PREPARER(S) OF THE EIR
AND CERTIFICATION BY CONSULTANT

This Draft Environmental Impact Report was prepared by Sea Science Services of San Diego under contract to the San Diego Unified Port District.

Individuals participating in the impact analysis and their qualifications and field of specialization are listed below:

Wendell Gayman, B.S. Geology, Registered Geologist (State of California),
Marine Geologist, Oceanographer

Louis Rae, Ph.D. Urban Planning

Jonathan Brindle, B.A. Urban Planning

Robert Fenner, B.S. Biology, Ichthyology, Marine Invertebrates

SECTION VIII
TABLES

Table 1

Summary of Traffic Observations Made in the Vicinity of
La Playa Beach, March and April 1979

<u>Date & Time</u>	<u>Kellogg Street</u>		<u>Lawrence Street</u>	
	<u>No. of trips</u>	<u>Average trips/hr</u>	<u>No. of trips</u>	<u>Average trips/hr</u>
Thursday, March 22 (0700-0900, 1100-1300 1400-1800)				
inbound	68			
outbound	<u>54</u>			
total (8 hours)	122	15.2		
Sunday, March 26 (1100-1300, 1600-1800)				
inbound	55			
outbound	<u>36</u>			
total (4 hours)	91	22.7		
estimate 8 hours	182			
Thursday, March 28 (0700-0900, 1100-1300 1400-1800)				
inbound			90	
outbound			<u>89</u>	22.3
total (8 hours)			179	
Sunday, April 1 (1100-1300, 1600-1800)				
inbound			51	
outbound			<u>42</u>	
total (4 hours)			93	23.2
estimate 8 hours			186	

Table 2

OBSERVED PARKING ON STREETS ADJACENT TO
THE LA PLAYA BEACH RESTORATION PROJECT, MARCH 1979

Streets	No. of spaces	On-Street Parking					
		Observed weekday average*		Observed weekend average**		Predicted summer weekend usage without project***	
		# vehicles	% capacity	# vehicles	% capacity	# vehicles	% capacity
1. Kellogg	29	7 (11)	24 (38)	10 (12)	34 (41)	15 (29)	52 (100)
2. Lawrence	37	7 (9)	19 (24)	15 (24)	41 (65)	22 (37)	59 (100)
3. McCall	13	-	-	-	-	(13)	(100)
4. San Antonio S. of Lawrence	37	10 (13)	27 (35)	15 (34)	52	(37)	(100)
N. of Lawrence	23	-	-	-	-	(23)	(100)
Total streets 1, 2, & 4 (max. or demand)	103	24 (33)	23 (32)	40 (70)	39 (68)	60 (105)	58 (102)
Parking space deficit							0
6. Rosecrans (between Kellogg & McCall Streets)	42						
GRAND TOTAL	145						

* March 22 and 29 (Thursdays), four 2-hour periods each day between 0700 and 1800 hours

** March 26 and 31 (Sundays), two 2-hour periods each day, 1100-1300 and 1600-1800 hours

*** Assume peak summer usage 1.5 times observed normal usage

Table 3

HEAVY METAL CONCENTRATIONS IN SEDIMENTS COLLECTED FROM
SOUTHWESTERN YACHT CLUB STATION IN MUNICIPAL YACHT HARBOR*

Date	Concentration (parts per million by weight)								
	As	Cd	Cr	Cu	Fe	Pb	Ni	Zn	Hg
Jan. 23, 75	<.05	0.9	36	73	36,800	45	1.9	159	2.4
Mar. 12, 75		<1	42	78	26,000	70	24	136	2.1
1974-75(?)		2.11	70	233	35,400	63.7	18.6	178	.49

* from Peeling and Goforth (in preparation); see Figure 3 for location.

Table 4
COLIFORM BACTERIA COUNTS FROM SELECTED STATIONS
IN NORTHERN SAN DIEGO BAY

<u>Location</u>	<u>Date</u>	<u>Total Coliform*** (MPN/100 ml)</u>	<u>Tide</u>
NOSC Sta. #2*	Oct. 9, 1974	37	flooding
NOSC Sta. #2*	Dec. 31, 1974	306	ebbing
A**	May 3, 1979	7	-
31-B**	May 3, 1979	17	-
30-C**	May 3, 1979	17	-

* from Peeling and Goforth, in preparation; see Figure 3 for location of sampling station

** data supplied by San Diego Regional Water Quality Control Board; see Figure 3 for station locations

*** maximum concentrations allowable by San Diego Regional Water Quality Control Board: 1000 MPN/100 ml for water contact sports, and 70 MPN/100 ml for shellfish utilized for human consumption

Table 5

LIST OF HARD SUBSTRATE INTERTIDAL ORGANISM
FOUND IN LA PLAYA BEACH PROJECT AREA***

PHYLA & CLASS	Species	Common name	On sea wall	On rocks south of Kellogg St. drain pipe			On drain pipe	On rocks north of Kellogg St. drain pipe		
				high	medium	low		high	medium	low
ALGAE	<u>Sargassum cf agarhianum</u>	sargassum				A**				
	<u>Chlorophyta</u>	green algae				C**	C			C
PORIFERA	<u>Demospongiae</u>	orange encrusting sponge					C			
BRYOZOA	<u>Cryptosula pallasiana</u>	red encrusting bryozoa			A*		A			
ANNELIDA										
POLYCHAETA	<u>Serpulidae</u>	calcareous tube worm			C*					C
ECHINODERMATA	<u>Pisaster ochraceus</u>	ochre sea star				R**				
MOLLUSCA										
GASTROPODA	<u>Collisella limatula</u>	file limpet			R					
	<u>Collisella scabra</u>	rough limpet	C	C	C	C				
	<u>Crepidula onyx</u>	onyx slipper shell				C	C			
	<u>Littorina planaxis</u>	flat periwinkle	R							
	<u>Littorina scutulata</u>	checkered periwinkle		C*						
	<u>Lottia gigantea</u>	giant owl limpet				C				
	<u>Mitrella carinata</u>	keeled dove shell				C*				
	<u>Serpulorbis squamata</u>	worm tube mollusc				A	C			
PELECYPODA	<u>Mytilus californianus</u>	California mussel				R*				
	<u>Mytilus endulis</u>	bay mussel				C*	C			
	<u>Saxidomus nuttalli</u>	Washington clam				R*				

Table 5 (continued)

PHYLA & CLASS	Species	Common name	On sea wall	On rocks south of Kellogg St. drain pipe			On drain pipe	On rocks north of Kellogg St. drain pipe		
				high	medium	low		high	medium	low
ARTHROPODA										
CRUSTACEA										
	<u>Balanus</u> sp.	barnacle		C						
	<u>Balanus glandula</u>	Pacific acorn barnacle			C	C				
	<u>Chthalamus fissus</u>	small acorn barnacle	A	A	A	C	C		C	
	<u>Hemigrapsus nudus</u>	purple shore crab				C*				
	<u>Hemigrapsus oregonensis</u>	yellow shore crab		R*	C*					
	<u>Ligia occidentalis</u>	common rock louse					A			
	<u>Pachygrapsus crassipes</u>	striped shore crab		R*						
	<u>Pagurus</u> sp.	hermit crab			R*					
	<u>Pagurus samulis</u>	blue clawed hermit crab			C*	C*				
	<u>Tetraclita squamosa</u>	thatched barnacle			C	C	A			
CHORDATA										
UROCHORDATA										
	<u>Styela clava</u>	sea squirt				C	C			
	<u>Styela plicata</u>	sea squirt					R			R

* Nestled between rocks

** A - abundant C - common R - rare

*** Surveys carried out March 11, 1979

LIST OF ORGANISMS (INFAUNA) COLLECTED FROM INTERTIDAL BEACH SANDS
IN LA PLAYA BEACH RESTORATION AREA, MARCH 10, 1979

Class/Species	Number of organisms in sample and in parenthesis, number per sq m								Mean density (organisms/m ²)
	T1A	T1B	T2A	Station T2B	T3A	T3B	LaP1	LaP2	
Polychaeta									
<u>Capitella capitata</u>							4(220)		28
<u>Capitellidae</u>		1(55)					2(110)		21
<u>Dorvilleidae</u>		1(55)							7
<u>Haploscoloplos elongatus</u>		1(55)		2(100)			10(550)	13(714)	179
<u>Glycera rouxii</u>				1(55)					7
<u>Glyceridae</u>							1(55)		7
<u>Notomastus tenuis</u>							2(110)		14
<u>Paraonides platybranchia</u>		13(714)	.5(27)				14(769)		189
<u>Pseudomalacoceros maculata</u>				81(4451)			3(165)	4(220)	605
<u>Scolecopsis acuta</u>				1(55)	3(165)		1(55)		14
<u>Scoloplos armiger</u>				2(210)					14
<u>Syllidae</u>		1(55)							7
Crustacea									
<u>Callinassa californiensis</u>						1(55)			7
<u>Excirolana chiltoni</u>			1.5(82)		3(165)			1(55)	38
<u>Gammaridea amphipod</u>							1(55)		7
<u>Orchestoidea corniculata</u>	1.5(82)								10
<u>Sphaeromatidae</u>				2(110)					14
Gastropoda									
<u>Barleeia sp.</u>							1(55)		7
<u>Olivella biplicata</u>								1(55)	7
Nemertea				1(55)					7
Shannon-Wiener Species Diversity Index	D = 10.1								

Table 7
RESULTS OF SUBTIDAL INVERTEBRATE SURVEY,
LA PLAYA BEACH, APRIL 7, 1979

<u>Species</u>	<u>Common Name</u>	<u>Abundance*</u>
A. Observations between Lawrence Street and Scripps Institution of Oceanography facilities**		
COELENTERATA		
<u>Cerianthus</u> sp.	burrowing sea anemone	A (in spots)
<u>Corymorpha palma</u>	mudflat hydroid	C
ANNELIDA		
POLYCHAETA		
Spionidae tubes	polychaetes	A
<u>Diopatra ornata</u> tubes	parchment tube worm	C
MOLLUSCA		
<u>Navanax inermis</u>	striped sea slug	R
<u>Protothaca staminea</u>	smooth littleneck clam	R
ARTHROPODA		
<u>Callinassa burrows</u>	ghost shrimp	A
<u>Cancer gracilis</u>	rock crab	R
<u>Pagurus samulis</u>	blue clawed hermit crab	R
CHORDATA		
UROCHORDATA		
<u>Styela plicata</u>	sea squirt	C
B. Species observed between Lawrence and McCall Streets***		
COELENTERATA		
<u>Cerianthus</u> sp.	burrowing sea anemone	A
MOLLUSCA		
<u>Chione undatella</u>	wavy chione	R
<u>Olivella biplicata</u>	purple olive	R

* A - abundant C - common R - rare

** Survey carried out by scuba divers observing between 0930 and 1000 hours; visibility 3 to 4 ft; tide level was about 2.2 to 2.6 ft (close to MSL) and dropping; depths surveyed range from -1.0 to -13 ft MLLW.

*** Similar dive carried out between Lawrence and McCall Streets; visibility 2 to 3 ft below 3 ft thick clearer surface layer; depths surveyed range from 0 to -8 ft

Table 8

LIST OF ORGANISMS (INFAUNA) COLLECTED FROM SUBTIDAL BOTTOM SEDIMENTS
IN LA PLAYA BEACH RESTORATION AREA, MARCH 18, 1979

Class/Species	Number of organisms in sample and in parenthesis, number per sq m				Mean density (organisms/m ²)
	Station				
	LaPC	T1D	T2E	T3D	
Polychaeta					
<u>Ampharetidae</u>		3(80)	1(27)	2(53)	40
<u>Ampharete</u> sp.			1(27)	3(80)	27
<u>Amphinomidae</u>				1(27)	7
<u>Anaitides williamsi</u>				1(27)	7
<u>Apoprionospio pygmaeus</u>		2(53)		3(80)	33
<u>Armandia bioculata</u>	2(53)		1(27)		20
<u>Brada pleuribranchiata</u>	1(27)	4(107)	15(401)	2(53)	147
<u>Cistenides californiensis</u>			1(27)		7
<u>Cossura candida</u>		1(27)	9(241)	20(534)	201
<u>Dorvillea articulata</u>	5(134)	1(27)			40
<u>Emida bifoliata</u>				1(27)	7
<u>Euchone limnicola</u>	35(935)	25(688)	143(3882)	156(4169)	2399
<u>Glycera</u> sp.	4(107)				27
<u>Glycera americana</u>			1(27)		7
<u>Glycera rouxii</u>				1(27)	7
<u>Gyptis</u> sp.				1(27)	7
<u>Haploscolopelos elongatus</u>	7(989)	25(688)	37(989)	98(2619)	1361
<u>Lumbrineris</u> sp.				1(27)	7
<u>Lumbrineris minima</u>	8(214)	10(267)	22(588)	23(615)	421
<u>Mediomastus</u>	9(241)	150(4009)	92(2459)	91(2432)	2285
<u>Nephtys cornuta franciscana</u>			2(53)		13
<u>Nereis</u> sp.			3(80)		20
<u>Notomastus tenuis</u>			4(107)	4(107)	54
<u>Paraprionospio pinnata</u>			1(27)	1(27)	14
<u>Platynereis bicanaliculata</u>	8(214)				54
<u>Polydora</u> sp.	8(214)	8(214)	11(294)	6(160)	221
Polynoidae	1(27)				7
<u>Prionospio h. newportensis</u>	127(3394)	190(5078)	50(1336)	29(775)	2646
<u>Pseudomalacoceros pigmentata</u>				2(53)	13
<u>Scoelelepis acuta</u>				1(27)	7
<u>Spiophanes missionensis</u>	1(27)	1(27)		2(53)	27
<u>Tharyx</u> sp.	3(80)	2(53)	17(454)	18(481)	267
<u>Tharyx monilaris</u>		1(27)		1(27)	14
Gastropoda					
<u>Haminoea vesicula</u>	3(80)	1(27)		2(53)	40
Pelecypoda					
<u>Chione undatella</u>	1(27)				7
<u>Geukinsia demissa</u>			2(53)	1(27)	20

Table 8 (continued)

Class/Species	Number of organisms in sample and in parenthesis, number per sq m				Mean density (organisms/m ²)
	Station				
	LaPC	T1D	T2E	T3D	
Pelecypoda (cont.)					
<u>Laevicardium subtratum</u>	4(107)	1(27)	3(53)	1(27)	60
<u>Luciniscia nuttalli</u>				1(27)	7
Lucinidae			1(27)		7
<u>Lyonsia californica</u>	13(347)				87
<u>Macoma yoldiformis</u>		1(27)	6(160)	1(27)	54
<u>Tellina carpenteri</u>				2(53)	13
Crustacea					
Ostracoda	2(53)	4(104)			40
Tanaidacea	1(27)				7
Cumacea		2(53)	1(27)	1(27)	27
Amphipoda					
<u>Caprella californica</u>	68(1817)				454
<u>Corophium</u> sp.	1(27)				7
<u>Gitanopsis vilordes</u>	7(187)				47
<u>Podocerus</u> sp.	76(203)				508
<u>Oedicerotidae</u>	7(187)	1(27)		5(134)	87
<u>Rudilemboides stenoprapadus</u>	37(989)	30(802)	8(214)	22(588)	648
Unidentified Gammaridea	21(561)	1(27)			147
Isopoda					
Sphaeromatidae	4(107)				27
Decapoda					
Carida shrimp post larva	1(27)				7
<u>Cragon</u>		1(27)			7
<u>Majidae megalops</u>	1(27)				7
<u>Seleroplax granulosa</u>				1(27)	7
Phoronida	1(27)				20
Nemertea	1(27)				67
Ophiuroidea (Echinodermata)	2(53)	1(27)	2(53)		33

Shannon-Wiener Species Diversity Index D = 13.58

Table 9

RESULTS OF BEACH SEINE CATCH,
LA PLAYA BEACH, MARCH 25, 1979*

<u>Haul description</u>	<u>Species**</u>	
	<u>Leuresthes</u> <u>tenuis</u> <u>(grunion)</u>	<u>Atherinopsis</u> <u>affinis</u> <u>(topsmelt)</u>
S-1		
Time: 0930		
Location: N. of Lawrence St.		
catch total	876	26
number measured	102	26
standard length (cm)		
mean	8	11
maximum	14	15
S-2		
Time: 1130		
Location: off end of Lawrence St.		
catch total	19	464
number measured	4	86
standard length (cm)		
mean	10	8
maximum	12	14

* See Figure 7 for location. Beach seine was 100 ft long, 6 ft deep; net with 3/4 in. stretch, 3/8 in. bar mesh; bag in center 6 ft deep with 6 ft opening; bag mesh 1/2 in. stretch, 1/4 in. bar openings.

** Catch also included one staghorn sculpin (Leptocotus armatus) 8 cm long.

Table 10

LIST OF FAUNA CAUGHT IN FISH TRAP SET IN
LA PLAYA BEACH PROJECT AREA

<u>Species</u> <u>(common name)</u>	<u>Description</u>	
	<u>number</u>	<u>Sex and length (cm)</u>
T-1, March 23-24, 1979, south of Kellogg St. drainpipe*		
<u>Girella nigricans</u> (Opaleye)	4	10, 9.5, 8.5, 6.5
<u>Cymatogaster aggregata</u> (Shiner surfperch)	1	M-4.75
<u>Rhacochilus toxotes</u> (Rubberlip surfperch)	3	F-10, F-8.0, M-7.5
<u>Paralabrax nebulifer</u> (Barred sand bass)	1	7.5
<u>Panulirus interruptus</u> (Spiny lobster)	1	5.25 (carapace-2.25)
T-2, March 24-25, 1979 north of Kellogg St. drainpipe*		
<u>Atherinopsis californiensis</u> (Jacksmelt)	2	29, 34

* T-1 set 1400 March 23, recovered 1230 March 24. T-2 set 1300 March 24, recovered 1230 March 25. See Figure 7 for exact location. Bait consisted of fresh fish remains, fish meal, cat food, soy meal, and aluminum foil. The trap was set at a depth of about 5 ft below MLLW.

Table 11

RESULTS OF INTERTIDAL CLAM SAMPLING SURVEY,
LA PLAYA BEACH, MARCH 25, 1979*

Species (common name)	Length of Clams in Inches					Total No.	Density (clams/sq ft)	
	sample number**						max. 1 sample	average all samples
	1	2	3	4	5			
<i>Protothaca laciniata</i> (rough sided littleneck clam)	3/4	3/8	-	-	-	2	0.25	0.1
<i>Protothaca staminea</i> (common littleneck clam)	3/4, 7/8	1 1/8	1, 7/8, 7/8, 7/8, 7/8, 5/8	-	3/4	10	1.5	0.5
<i>Saxidomus nuttali</i> (Washington clam)	-	-	1 1/8	-	-	1	0.25	0.05
<i>Tagelus subteres</i> (jackknife clam)	1 3/8	-	-	-	-	1	0.25	0.05
total no. individuals	4	2	7	0	1	14		
maximum density (one species)	0.5	0.25	1.5	0	0.25			
average density (all species)	1.0	0.5	1.75	0	0.25			

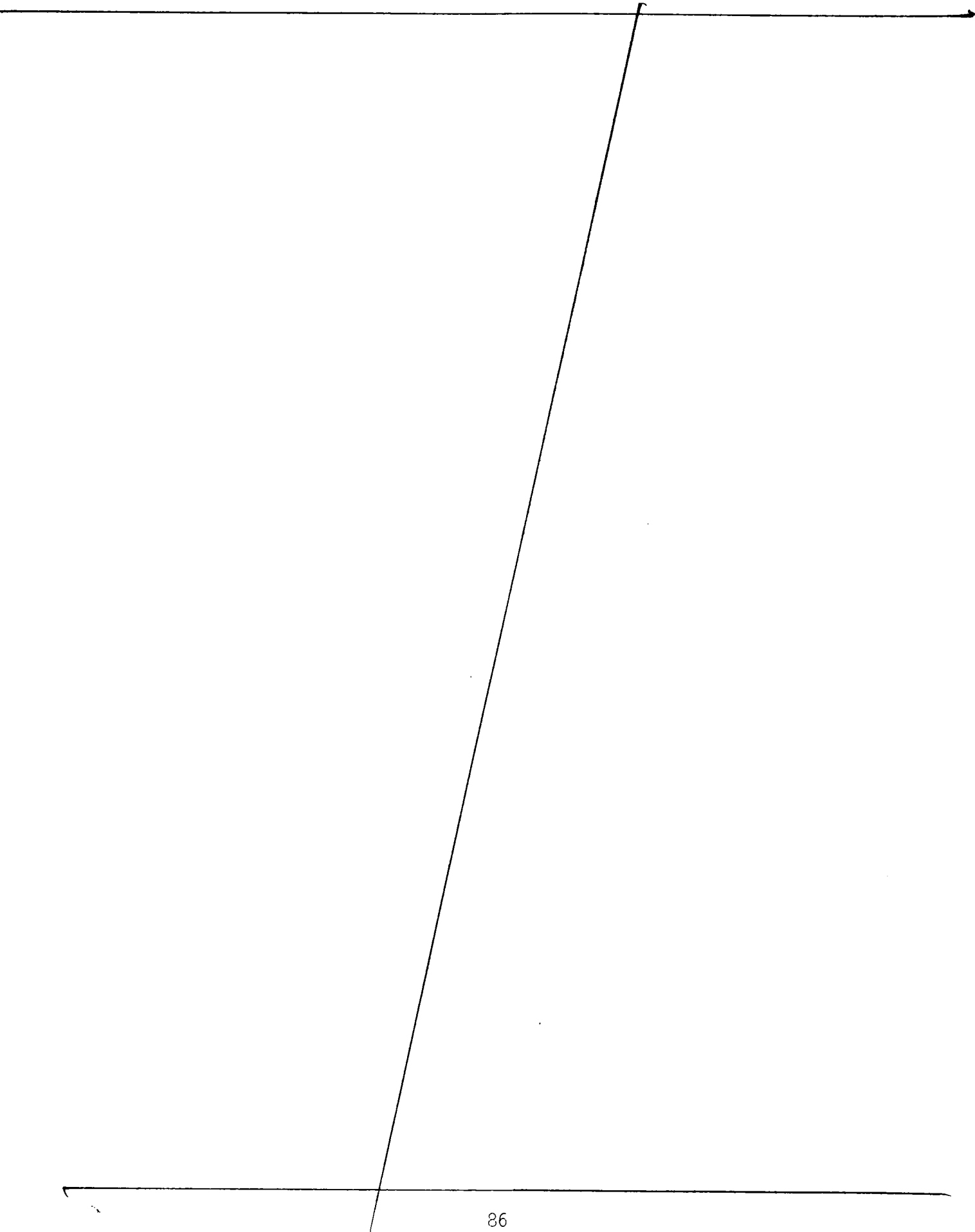
* See Figure 7 for exact location

** Each sample approximately 2 ft square (4 sq ft) by 0.5 to 0.8 ft depth
Average density of 5 samples: 0.7 clams/sq ft

Table 12

HISTORY OF DEVELOPMENTS AFFECTING LITTORAL DRIFT AND EROSION
ALONG THE LA PLAYA BEACH SHORELINE

Approximate Date	Event	Possible Consequence to La Playa Beach
1857-75	diversion of San Diego River from San Diego Bay to Mission Bay	possible decrease in sand supply
1900	construction of Zuniga Jetty	reduced northerly transport
1940-45	dredging main ship channel to San Diego Bay	decreased northerly transport
1934-50	construction of Shelter Island	termination of sand transport to the south
1950-52	dredging of Municipal Yacht Harbor to depths of 15 and 19 ft	1) change in refraction patterns; 2) increased offshore transport
1964	construction of Scripps Institution of Oceanography (SIO) Nimitz Marina facility; dredging	1) deposited 15,000-20,000 cubic yards of sand on Kellogg St. Beach; 2) reduced supply of sand from south of SIO facility
1974	further construction at SIO facility; barge replaced by pier; dredging	1) few thousand yards of sand placed on Kellogg St. Beach; 2) terminated the supply of all sand from the south
1974	force main sewer pipe installation and dredging	1) steepened offshore slope, favoring offshore sand transport; 2) increased wave exposure
1930-present	increased ship traffic in main channel generates more and higher wake waves	increased northerly transport of sand



PUBLIC REVIEW

Initial Distribution

The initial distribution of the Draft EIR was to the following public agencies which have jurisdiction by law, and/or to organizations and individuals with special environmental interests:

U.S. Army Corps of Engineers, Los Angeles
District Engineer
Environmental Quality Section (Fred Bills)
Construction/Operations
11th Naval District
Commandant
Environmental Protection Coordinator
Naval Oceans System Center (Hal Goforth)
Thomas J. Peeling, Alexandria, VA.
11th Coast Guard District
Long Beach
San Diego
Environmental Protection Agency
San Francisco (Regional Administrator)
U.S. Fish and Wildlife Services
Portland, OR.
Sacramento, State Coordinator
Laguna Niguel
National Marine Fisheries Service
Terminal Island, CA. (Regional Director)
Terminal Island, CA. (James Slawson)

Office of Planning and Research, Sacramento
State Clearinghouse (15 copies)
California Coastal Commission
San Francisco (Executive Director)
San Francisco (Port Coordinator)
State Lands Division, Sacramento
Long Beach (Robert Gale)
California Department of Transportation
San Diego (District Director)
California Department of Fish and Game
Long Beach, Region 5
Long Beach (Rolf E. Mall)
San Diego (John Duffy)
Department of Boating and Waterways, Sacramento (Director)
Sacramento (John S. Habel)

Comprehensive Planning Organization, San Diego
Areawide Clearinghouse (2 copies)
San Diego Coast Regional Commission
Executive Director
California Regional Water Quality Control Board
San Diego Region (Executive Officer)
San Diego (Pete Michael)

City of San Diego
 Mayor
 City Manager
 Planning Director
 Environmental Director
 Water Utilities Director
 Engineering & Development (W. M. Barnes)
 San Diego Metropolitan Sewerage District
 Pt. Loma Wastewater Treatment Plant

Point Loma Implementation Comm.
 Loma Portal Civic Club
 San Diego State University
 Center for Marine Studies
 Peninsulans, Inc. (Robert Bergman)
 Point Loma Beautiful (Marshall E. Dornin)
 San Diego Museum of Man
 Ken Hedges
 Ecology Centre
 Sierra Club
 San Diego Chapter
 Citizens Coordinate for Century III

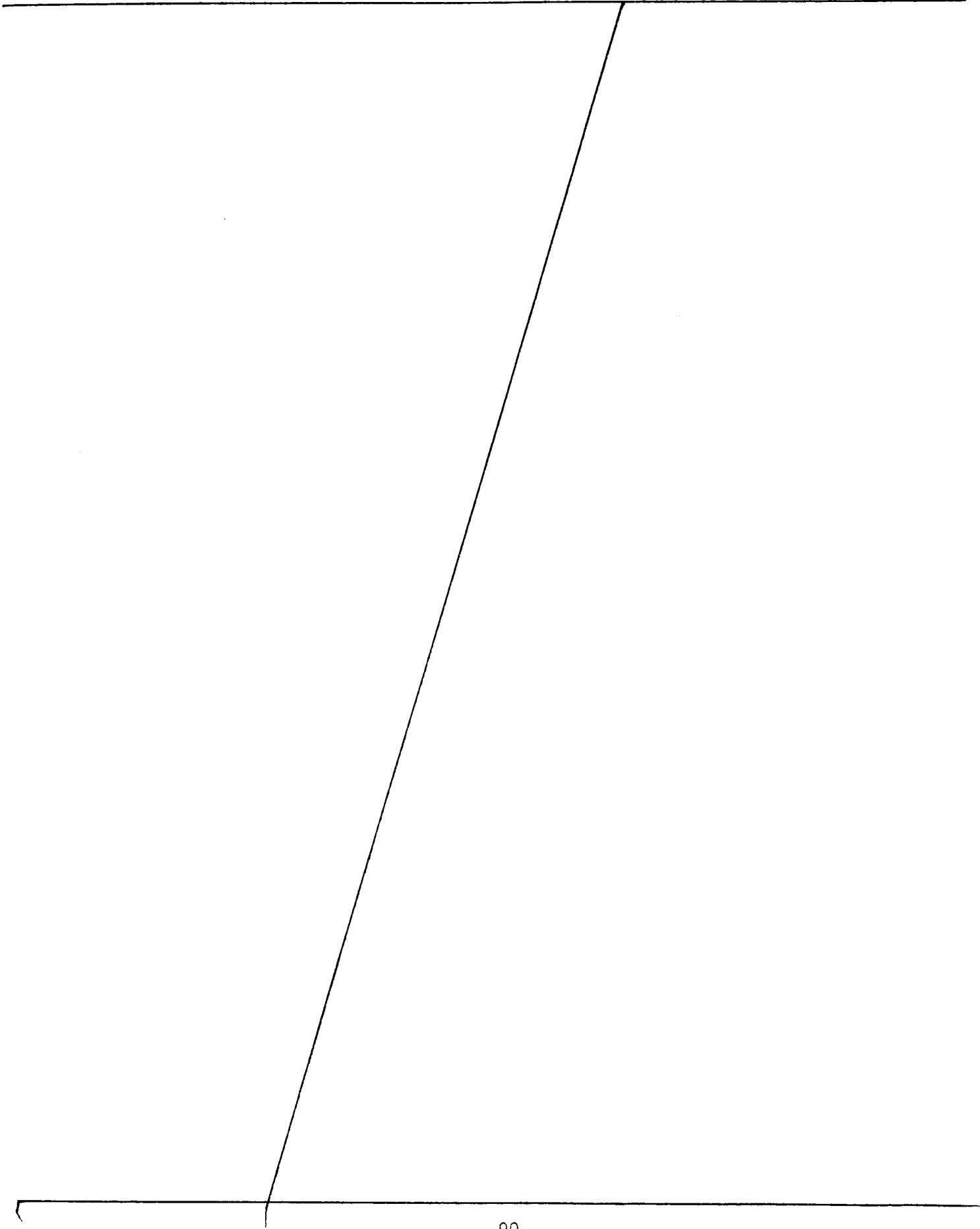
San Diego Public Library
 Main Library (2 copies)
 Point Loma Branch
 Governmental Reference Library
 San Diego State University
 Main Library (Bernice Barclay)
 Social Science Research Library

San Diego Chamber of Commerce
 Executive Vice President/General Manager
 Planning Division
 Port Planning
 Peninsula Chamber of Commerce
 Greater Shelter Island Assoc.
 Sea Science Services (Wendell Gayman) (2 copies)

San Diego Daily Transcript
 San Diego Union
 San Diego Evening Tribune
 San Diego Log
 Los Angeles Times (San Diego Edition)
 The Sentinel

Lawrence Kapiloff, Assemblyman, 78th District
 Philip R. White, Special request
 William F. Soeberg, Special request
 Thomas M. McMillan, Special request

San Diego Peninsulans, Inc.
Point Loma Implementation Comm. (Richard Lareau)
Loma Portal Civic Club
Point Loma Village Beautiful
Raymond D. Spicer, Jr.
Jay Evans



COMMENTS RECEIVED AND RESPONSE

The cover letter to the Draft EIR, giving pertinent information to the reviewers, and all comments received during the public and agency review period to the close of the public hearing, have been reproduced and are included in this Final EIR.

A legal notice announcing the availability of the Draft EIR and the public hearing was published on June 11, 1979. The review period was set for 45 days, ending on July 29, 1979. A total of 107 copies of the Draft EIR and the announcement of the public hearing were sent to the Board, public agencies which have jurisdiction by law, and to organizations and individuals with special interest. Of these, 49 went to federal, state, regional and local agencies, 15 to community and environmental groups, 5 to the business community, 6 to the news media, and 10 to other interested parties, including Assemblyman Kapiloff. Copies were sent to the San Diego Main Public Library, as well as the Government Reference Library, and San Diego County. Copies were also available for public inspection at the Clerk's Office in the Port Administration Building.

The objective of the environmental review process under CEQA is to provide decision makers, as well as the public, with information on the environmental consequences of the project. In this manner, they consider the impact on the environment as one aspect in their decision making process when taking action on the project. Comments on the merits or flaws, real or imagined, of the project itself (in this case the restoration of a public beach and shoreline stabilization), including its financing, are not relevant to the environmental assessment of the EIR.

During the review period, which ended July 29, 1979, letters concerning the Draft EIR were received from:

- US Fish and Wildlife Service
- National Marine Fisheries Service
- California State Clearinghouse
- California State Lands Commission
- California Department of Fish and Game
- City of San Diego (EQD)
- La Playa Homeowners' Association (Wm. F. Soeberg)
- Philip White & Company (Philip White)
- Southwestern Yacht Club (A. O. Bryant)

A letter of comment (dated August 10, 1979) was received on August 15, 1979 from the US Army Corps of Engineers after the review period had ended on July 29 and after the public hearing of August 7 was closed. For informational purposes and to complete the record, receipt of the letter is noted and a copy appended.

The purpose of a public hearing on a Draft EIR is to give an additional opportunity for anyone to address the Board of Port Commissioners about environmental impacts deemed inadequately presented. The public hearing on the Draft Environmental Impact Report for the proposed La Playa Beach Restoration was held on August 7, 1979. No one addressed the Board of Port Commissioners.

GENERAL COMMENTS

Concerns were expressed in the written comments received, attached at the end of this section, primarily about: the significance of northward littoral drift which might result in shoaling; the possibility of contaminated sediments being used for the proposed beach replenishment program; the potential for a significant loss of biological habitat without appropriate mitigation or alternative plan proposals; and the possibility of excessive project cost versus public benefits.

Where the Draft EIR was unclear, this response attempts to provide clarification, some data was updated, and additional information was presented as suggested by various reviewers. A number of comments included specific suggestions, proposals for alternative shoreline protection designs, mitigations, or project-related questions. Opposition to the project, as presented by the conservation agencies, is based on their staff interpretation that any loss of marine habitat is a priori significant unless completely "compensated" in "resource value".

Objections from the National Marine Fisheries Service (NMFS), the California Department of Fish and Game (CFG), the US Fish and Wildlife Service (USFW), and the US Army Corps of Engineers (USACE), regarding the loss of biological resources and intertidal and shallow subtidal habitat, were based primarily upon policy interpretation. The two federal fisheries agencies define as significant, any modification which reduces any one habitat.

CFG objections were based upon one of the criteria of the Resources Agency Shoreline Erosion Protection Policy, which, thoughtfully, was attached to the comment letter as it has not been discussed nor distributed to us either prior to "adoption" or afterward, to our knowledge. The referenced section indicates that "any project-caused impacts on fish and wildlife will be offset by adequate fish and wildlife measures". District staff recommends a reading of at least Section III on Shoreline Protection Projects in its entirety. The proposed project appears to fit well into the guidance criteria. Of course, an internal policy problem arises when these policies are interpreted so narrowly that they are at odds with the State EIR Guidelines for implementation of the California Environmental Quality Act (CEQA) which provide that mitigation measures should be applied to impacts which are found to be significant, i.e. substantially adverse.

SHORELINE EROSION

Shoreline/Bathymetric Changes: The California State Lands Commission indicated that the Draft EIR should include predictions regarding shoreline and bathymetric changes. To satisfy this alleged deficiency, an extended field study and the evaluation of existing data was suggested to include:

- (1) Historical aerial photos of La Playa Beach
- (2) Bathymetric changes
- (3) Waves and currents
- (4) Sources of energy responsible for sand transport,
and the temporal and geographic variations in energy
available for expenditure along the shoreline
- (5) Impacts of boat traffic on sand transport
- (6) The effect of tidal changes on wave action
and sediment transport

- (7) The potential shoaling impact of the project upon the Southwestern Yacht Club
- (8) Effect of the project bathymetric modifications on any seiche action in the harbor
- (9) Effects on Shelter Island from waves reflected from the proposed groin
- (10) Origin of the sand now found on La Playa Beach
- (11) Optimum sand grain size for stabilizing the beach

Implementation of additional studies recommended by the California State Lands Commission might provide information for determining more precisely the impacts of the project and various alternatives upon the existing environment. It is doubtful, however, whether the additional studies would yield new or significant information substantially different from that discussed in the Draft EIR; no substantiation has been provided. Detailed studies could help to develop a better theoretical understanding of these complex issues. Such extensive studies require considerable funds and time. It would also be necessary to determine what measures, if any, would need to be taken to stop continued loss of the present beach and stem shoreline erosion along La Playa Beach while such studies are conducted. It is further questionable that the Port is the logical agency to address academic modeling of theories which are clearly the responsibility of special purpose agencies.

The Draft EIR stated that a study has already been made of existing aerial photographs and of historic and bathymetric maps (pp. 36-43). Because of the magnitude of recent physical shoreline changes in the area, the value of additional historic data in predicting future shoreline impacts is limited. The present controlling parameters, including bathymetry, shoreline configuration, tidal current patterns, and wave generation sources, have changed greatly over the past few decades.

The impact upon boat traffic by waves has been discussed in the Draft EIR (p. 21); and the impact of waves upon littoral sediment transport has been described on pp. 39 and 40. The effect of tidal action on wave propagation and littoral transport was discussed on pp. 20, 39, and 40 of the Draft EIR. The impact of the proposed project on sediment transport into the Municipal Yacht Harbor, which includes the Southwestern Yacht Club, was also discussed on pp. 39-43, and 54-55 in the Draft EIR. The effect on Shelter Island of the reflection of waves from the proposed groin is described in the Draft EIR on p. 51.

The origin of sand now found on La Playa Beach is primarily of academic interest. It has little relevancy to fill sand selection or design detail of the proposed project or alternatives. Optimum grain size for a stable beach is not likely to be the same as optimum grain size for recreational beach use, or of the sand readily available for beach restoration replenishment. In all cases the material to be used must pass the federal requirements, as to chemical impurities, for "fill" in estuarine areas.

The California State Lands Commission also commented on seiches. A seiche is an oscillation (sloshing) of a body of water, whose period is determined by resonant (rebounding) characteristics in the containing basin, controlled by width and depth of the basin. Seiche periods generally range from a few minutes to an hour or more. The Municipal Yacht Harbor may be subject to seiche action (sloshing

waves) following the possible occurrence of a tsunami (seismic seawave), if one were to occur and enter San Diego Bay. Since the project would not substantially alter the width and depth of the Municipal Yacht Harbor, it is unlikely that whatever seiche potential may exist would be substantially changed. The model studies suggested by the California State Lands Commission might provide more detailed prediction capability for seiche probability in the Municipal Yacht Harbor. It is highly unlikely, however, that such studies would conclude the proposed groin construction would greatly alter the resonant characteristics in the Yacht Harbor.

(The Environmental Management Coordinator conducted a highly subjective experiment: while in his bathtub partly submerged in shallow water he set up a surrounding oscillating wave, or seiche analog, by rocking his body. His right arm was extended slightly from his body to simulate the 'Yacht Basin'. He tried to observe if there was a sloshing difference in the 'basin' as he narrowed the 'entrance' by spreading his thumb as simulated 'groin' closer to or further from his thigh. Neither this experiment nor the fact that there was no 'basin' seiche to begin with, thus no 'groin' effect, is to be considered as evidence. The objective is to give the interested lay reader a feel for the perspective of potential effect. It is not the intent to ridicule or minimize the reviewers' concerns.)

Impact of Project on Shoaling: Southwestern Yacht Club officials have noted that "slow but continuous erosion of the backfill material would be expected to take place because the littoral drift is predominantly in the direction of the Yacht Basin". The Club officials expressed concern that northward littoral drift might result in accelerated and/or additional shoaling in the vicinity of the Southwestern Yacht Club, a process which could be mitigated only by expensive dredging. Philip R. White has also expressed concern about shoaling of Southwestern Yacht Club, the Kona-Kai area, and ultimately, the rest of the Municipal Yacht Harbor.

The Draft EIR pointed out that the littoral drift rate decreases as it proceeds north (p. 42). The then Department of Navigation and Ocean Development (DNOD) estimated the littoral drift volume transport rate near Kellogg Street at 500-1,000 cubic yards per year. The littoral drift rate north of Perry Street is undetermined, but it is much less than in the Kellogg Street area. Littoral drift near Southwestern Yacht Club is considerably less, probably about 100-300 cubic yards per year.

Project implementation would have little effect on littoral drift rate near Southwestern Yacht Club. Littoral drift in this area depends both upon available sand which can be moved by littoral currents, and available energy for moving the sand. Sand would be available for movement by waves as long as the sandy beach exists south of the Yacht Club. When the beach to the south becomes so depleted of sand that large sections of rock or clay, or earth banks are exposed, then sand availability for northward transport would be reduced.

The proposed project would not significantly increase or decrease the amount of sand on the beach between Owen Street and the Yacht Club. The project would not significantly affect the amount of current or wave energy available for moving sand northward along the beach between Owen Street and the Yacht Club. Project implementation would shelter the beach from wave attack between Kellogg and

Lawrence Streets. The groin might provide very slight sheltering as far north as McCall Street, but would not significantly shelter the beach north of McCall Street. It is concluded that the project would have no significant impact on the shoreline, nor on shoaling in the vicinity of the Southwestern Yacht Club.

It has not been established whether or not alternatives considered in the Draft EIR for beach protection south of McCall Street would offer the Yacht Club protection from present shoaling. Protection against shoaling would, however, be provided if, 1) sand was removed from the beach north of Owen Street (perhaps in conjunction with revetment of the entire shoreline) or, 2) if one or more groins were constructed perpendicular to the shoreline north of Owen Street.

Mr. Philip White's concern that northward littoral drift would eventually result in filling of the Yacht Harbor is not warranted. Since the source of the sand now being transported northward, along the La Playa Beach shoreline has been eliminated, the only sand available for "filling" the Harbor is that which is now on the beach. The volume of sand on the beach is clearly inadequate to cause extensive shoaling in the Harbor.

NMFS and CFG indicated that the proposed project "will do little to moderate to present sand movement". Although this comment would apply north of McCall Street, the proposed project would eliminate substantial sand movement between the south end of the beach (Scripps Institution of Oceanography boundary) and a point about 350 feet north, near the northern end of the proposed groin. This is the portion of La Playa Beach where littoral drift is most rapid. North of the groin, wave sheltering may reduce littoral drift rate for a distance of 400-600 feet. The reduction in littoral drift rate north of McCall Street, however, would be insignificant.

BEACH REPLENISHMENT

Beach Replenishment with Yacht Harbor Sediment: The US Fish and Wildlife Service (USFW) and the National Marine Fisheries Service (NMFS) expressed concerns that the proposed La Playa Beach maintenance/beach replenishment program might involve contaminated sediments from beneath Southwestern Yacht Club piers.

The Draft EIR pointed out that sediments beneath Southwestern Yacht Club piers do contain higher concentrations of copper and other heavy metals (p. 24, Table 3), than some other harbor locations. The Draft EIR also discussed periodic redistribution of sand in order to replace sediment loss by erosion between Kellogg and McCall Streets (pp. 4-7). The shoaling potential beneath the Southwestern Yacht Club was also discussed.

The Port of San Diego does not intend to utilize sediments beneath or near the Southwestern Yacht Club for beach replenishment of the La Playa Beach area. The restoration and replenishment of La Playa Beach and any future efforts to protect the Southwestern Yacht Club from shoaling, or to remove existing sediments in the Yacht Club area, are separate and distinct actions.

For economic as well as environmental reasons a nearby nourishment source is preferred. Sands eroded from behind the proposed groin would be the most suitable and most economical material for the proposed periodic beach replenish-

ment program. Once substantial erosion has occurred behind and to the north of the proposed groin, these eroded sands would have accumulated along the beach and intertidal zone between Lawrence and Owens Streets. Relocation of these sands would be the most likely source for restoring the eroded shoreline. In no case would the restored sands be collected from points north of Perry Street, or from depths greater than zero feet mean lower low water (MLLW). Since the restored sand would be derived from the beach and intertidal zone, the sand would not contain significant amounts of sediment contaminants.

Use of sediments for beach replenishment/maintenance obtained from water deeper than zero feet MLLW would not be desirable primarily because:

- 1) Sediments obtained from greater depths would likely contain substantial portions of silt and clay, which have a much higher likelihood of containing some contaminated sediments.
- 2) Much greater expense would be involved to recover small quantities of sand from greater depths than other sources. If silts and clays were present, the desired sand would have to be sorted, requiring even greater expense.
- 3) US Army Corp of Engineers (USACE) and Environmental Protection Agency (EPA) permits regarding use of potentially contaminated sediments would have to be obtained. This permit process is a very time-consuming (years) and costly process particularly if the proposal involves sediments which may contain significant fractions of silt and clay, and/or contaminants. In the interim, the existing shoreline and public beach area would continue to erode unimpeded.

If adequate amounts of sand for the maintenance/replenishment program are unavailable for redistribution, then additional uncontaminated sand would be imported from suitable upland sources; probably from nearby areas such as the San Diego River Bed.

BIOLOGICAL

Use of Filter Blanket: The US Fish and Wildlife Service (USFW) suggested that further discussion of the proposed groin filter blanket be included in the Draft EIR. A filter blanket is a size-graded gravel bed which is placed beneath revetment quarry rock to reduce the loss of fine sediment through the large spaces between the quarry rock. If not used, constant wave action will draw the fine sediments out through the quarry rock and cause settlement, unless there is a non-critical landward supply and some local settling is un-critical, as may well be the case for this project.

The Draft EIR states (p. 5) that the filter blanket (if used) would be designed to retard the passage of sand through the groin. The filter blanket would reduce the size of spaces within the groin foundation. The total number of spaces between gravel fragments would be much greater, but the spaces themselves would be much smaller. The filter blanket would, therefore, reduce the biological habitat volume within the gravel bed, suitable for small marine life forms which require larger void spaces (for example, less than 1

inch across). It would, however, increase the surface area and number of small void spaces suitable for organisms which utilize spaces less than 1/4 inch across. The proposed groin with filter blanket would not support as many mollusks (mussels, limpets, etc.) and crustaceans (barnacles, lobsters, crabs, etc.). With a filter blanket, however, the groin would support larger numbers of smaller organisms such as polychaetes (marine worms) and very small, but ecologically important mollusks and crustaceans.

Fish Surveys: NMFS suggested that the fish surveys described in the Draft EIR were "highly biased" in favor of larger and slower moving fish species.

First it must be stated that the term "bias" is not used in the popular sense indicating an unfounded or deceitful attitude. Rather, it is applied in the scientific and neutral sense that a statistical selection takes place. This is often deliberately done in experimental designs to define (box in) the problem. Expert judgment can, of course, question if the selection (the "bias") was proper and/or justifiable: "Highly biased" may be misinterpreted by the lay reader or decision-maker as an indictment of the professional integrity of the Port's consultant or staff. It is sincerely believed by District staff that this was not the reviewers' intent.

Three different methods (fish traps, beach seines, and diver observations) were used to reduce the sampling bias of fish surveys. The results indicate that sampling procedures may have been somewhat skewed since small and faster swimming fishes were not found in abundance. However, since population estimates rather than a total population census was desired, these sampling methods were deemed to be the most practical. To obtain an unbiased census of the fish population in the area, all of the fishes would have to have been trapped or collected using techniques such as poisons (Rotenone) or explosives, to assure their collection. These highly lethal methods are sometimes used for sampling surveys. However, preliminary field observations did not indicate an essential need for an absolute census of fish populations in the area. An additional slight reduction in sampling bias certainly did not warrant the destruction of most of fish within the project area.

Somewhat biased quantitative information on biological populations is usually superior to limited qualitative observations as long as the approximated nature of the quantitative estimates is given due consideration. The approximate estimates of the fish populations within the La Playa Beach area was both useful and justifiable. Similar quantitative estimates are frequently made of other animal populations such as California gray whales, California least terns, California condors, and other species of fish and wildlife. The California least tern Recovery Team, under the joint auspices of CFG and USFW, annually conducts valuable population and nesting data on this rare and endangered bird, using acceptable, but somewhat biased, observation methods.

Grunion Spawning: The US Army Corps of Engineers (USACE) and the California State Department of Fish and Game (CFG) recommended that sand redistribution efforts associated with the proposed project be accomplished between September and March. This suggestion was made because CFG and USACE suspected that the present sand beach in the project area may be utilized as a spawning area for California grunion. CFG indicated that no direct evidence of such grunion utilization is available, but pointed out correctly that the Draft EIR stated

that large numbers of grunion were caught in a beach seine in the project area. The apparent "fact" that the grunion were caught in such large numbers, and four days prior to an expected grunion spawning tide, would strongly suggest such use. Therefore, if so, CFG was concerned that disturbance of the sandy beach during the grunion spawning period could adversely effect, or eliminate this use at the site. USACE reiterated these concerns, but recognized that San Diego Bay would be the only bay known to support grunion runs, and suggested that the beach be surveyed for buried eggs, and a grunion watch conducted.

Table 9 (p. 82) of the Draft EIR listed grunion and topsmelt catches of 876 and 26 respectively from the beach seine haul S-1. The beach seine haul S-2, listed 19 grunion and 464 topsmelt. These beach seines were taken on the same days about two hours apart, and within 100 feet of each other. The District's marine biologist ordered a complete review of the consultant's data. A recheck of the field notes indicates that the topsmelt were actually the dominant catch in both beach seine hauls, and that the count entries for grunion and topsmelt in haul S-1 had inadvertently been reversed. In reality, only 26 grunion were caught in the first haul and only 19 in the second haul.

District staff acknowledges with thanks the thoroughness of the reviewers who, based on the (mis)information before them, correctly identified what may have been a potential biological problem with the project. Staff pursued this question further and offers the following observations to deepen the understanding of grunion.

Attention should also be focused on the mean (average) standard length for the grunion caught in each of the hauls. As reported by Baxter (1960)*, the grunion's most rapid period of growth takes place during the first year of life when grunion reach 5 inches and are capable of spawning. As can be seen from the data in Table 9 of the Draft EIR, the standard mean length of grunion caught in both beach seine hauls is less than 5 inches and the standard maximum length is only slightly greater than 5 inches. Mr. Robert Fenner, the consulting biologist who conducted the counts and identification of the fishes, has further stated as a result of this review, that about half of the grunion were cut open and inspected for the presence of eggs, and none were found. He further indicated that the majority of the grunion caught did not appear to be mature.

Several publications exist on the life history notes and spawning characteristics of the California grunion, including: Thompson (1919); Clark (1925); Walker (1949-52); Baxter (1960); Daugherty (1960); Miller, Gotshall and Nitsos (1965); and Miller and Lea (1972), see attached list of references. None of these references, however, have indicated that San Diego Bay is known to support grunion runs. Dr. Andrew Olson, Professor of Zoology and Parasitology at San Diego State University, has many years of experimental and observational experience with California grunion in the San Diego area. He has no knowledge of San Diego Bay being used as a grunion spawning area.

The corrected data and above information suggest that the grunion are not likely utilizing the La Playa Beach area for spawning.

It should further be noted that the beach survey for buried eggs and a grunion watch, unless implemented within a very short period of time, would not be anticipated to yield positive results even if grunion were utilizing the La

*References at end of this section

Playa Beach area for spawning. The known months for California grunion are from late February or early March, to late August or early September.

It should also be noted that the sediment and bathymetric characteristics of the La Playa Beach area do not appear particularly favorable for grunion spawning. The sand found on the La Playa Beach foreshore is very coarse compared to sand commonly found on the open ocean beaches where grunion are known to spawn in abundance. These coastal beaches are listed in the references cited previously and have in common the presence of fairly large expanses of sandy beach, as opposed to the cobble or very coarse sand as found on La Playa Beach. It has been suggested that it may be difficult for grunion to dig themselves into cobble and coarse sand to lay their eggs. In addition, the foreshore slope of La Playa Beach is much steeper than most open ocean beaches where grunion are known to spawn. Further, the comparatively small waves, generated from passing ships, or by winds may not provide the long runup that open ocean waves provide on those coastal beaches where grunion are known to spawn. The upper foreshore zone and a berm-like/edge which are usually present along coastal beaches where grunion spawn, are missing entirely from those segments of La Playa Beach in the vicinity of Kellogg Street and north of McCall Street.

Eelgrass Beds: The Draft EIR described biological resources in the project vicinity and placed special emphasis on those habitats and marine organisms considered to be of unusual value (pp. 26-35). This included a discussion of eelgrass beds located 400-700 feet southeast of the project area adjacent to Shelter Island south peninsula (p. 26). The Draft EIR indicated that eelgrass beds would not likely to be significantly impacted by the project (pages 53-54). It is conceivable that eelgrass may be slightly affected by short-term, localized increases in turbidity during excavation of the groin foundation and placement of the revetment. However, there is no evidence, because of the distance from the project site, the short duration of construction, the alternating tidal currents, and the relatively small size of the groin, that such short-term turbidity increases would persist long enough to result in measurable, much less significant, impact upon these eelgrass beds.

Clam Population: NMFS has pointed out that while the clam populations in the project area might not constitute a harvestable recreational resource, the clams present do nevertheless constitute a "valuable recreational resource" and that they constitute an important food source for a variety of surf fishes and bottom fishes and a potential source of recruitment to other areas that have a more suitable habitat.

Certainly, if the majority of the clams in the La Playa Beach area reach maturity, they would provide recruitment for other areas. However, the sparsity of adult clams found in the project area suggests that mature, adult populations of clams are not particularly well established in this area. Given the present rate of beach sediment erosion, it is reasonable to assume that suitable habitat for clam population enhancement (stabilized sediments), does not exist in the project area. If the immature clams (undersized), from the project area were known to constitute an important fraction of the food material consumed by sport fishes caught along the beach, then it might be evident that they constitute a "valuable recreational resource". However, limited fishing in the area, the small incidental fish catch, and an ill-defined reliance of fishes on the clams as a major food source, indicate that the clam population in the La Playa Beach area does not likely constitute a "valuable recreational resource".

The US Army Corps of Engineers suggested that comparison between clam bed densities found at the La Playa Beach with those found offshore at San Onofre (Draft EIR, p.33) was invalid due to the difference in the wave energy environment. The Draft EIR drew the comparison to contrast the high productivity of a clam bed in a suitable habitat (San Onofre) which is a high energy environment but with a stabilized shoreline, with an unsuitable habitat (La Playa Beach) with an eroding shoreline. Also, the density of littleneck clams (*Protothaca staminea*) is known to be much higher than that found in the project area, near the northern tip of Shelter Island, in a stabilized shoal area (Duffy, personal communication).

Shorebirds and Waterfowl: USFW indicated that shorebirds, waterfowl, and especially migratory birds were "totally ignored" and should be discussed under Organisms of Special Concern and under Biological Impacts in the Draft EIR. District staff concurs that mention should have been made of the avian resource status: but it was not "ignored" as we shall indicate below. The choice of the term "totally ignored" may cast aspersions on staff or consultant motives and/or competency which is, we sincerely believe, not only undeserved but divisive and counterproductive. The District's environmental staff is sincere, competent, and yes, occasionally fallible. We also have signed and adhere to the Code of Ethical Practice (supplied on request) of the National and California Association of Environmental Professionals and have served on their Board of Directors.

No known published information is available for shorebirds, waterfowl or migratory birds within the project area. Field observations were made during March and April 1979, in the project area over 12 different days. During these visits, no shorebirds were observed in the area. Waterfowl observed included gulls, grebes, cormorants, mallards, and other ducks. None were feeding in the shallow waters or along the shoreline. The grebes and cormorants are diving birds, but were not seen feeding in the offshore area.

The absence of shorebirds, such as sandpipers, willips, etc., may be attributed to a lack of suitable food material given the unfavorable character of the shoreline, and to human utilization of the area. The intertidal area of La Playa Beach is largely unsuitable for shorebird feeding. The shoreline includes coarse sands and relatively sparse infaunal populations (marine invertebrates living within the sediment), which typically constitute primary food materials for many species of shorebirds. The area immediately offshore includes relatively few fishes and invertebrates which might serve as food sources of other waterbirds, including diving birds. The deeper waters, which may be used occasionally by diving birds, are not likely to be altered significantly by implementation of the project proposal.

Compensation/Mitigation Measures: In conformance with agency staff policies developed by federal entities, NMFS, and USFW are looking for compensation for any lost intertidal and shallow subtidal habitat, or project-related impacts on fish and wildlife. It should be pointed out that the California Environmental Quality Act (CEQA) does not require mitigation measures for impacts found not to be significant under the CEQA criteria. As stated in the Draft EIR, habitat compensation anywhere in San Diego Bay by itself would have attendant impacts which may be significant. Further, the District has attempted, unsuccessfully so far, to obtain a policy orientation by the federal agencies to commit to an environmental management approach instead of continuing to pursue wasteful and unproductive piecemeal "project" compensation for miniscule disturbances.

"Significance": NMFS indicated that the 0.8 acre loss of productive habitat is substantially adverse. The Draft EIR does not state that the habitat to be lost is a "productive" habitat. Productive is a relative term. It indicates the ability of a biological habitat to produce plant material and support animals, and thus continue to replenish the ecological health and stability of an area. Productivity must be considered in comparative terms when an evaluation of significant impacts is being attempted. Productivity of the Sweetwater Marsh and adjoining tidal flats in South San Diego Bay, for example, is much higher than other marsh areas within San Diego Bay, and higher still than areas which have been repeatedly eroded or disturbed in recent history, such as the La Playa shoreline area. In addition, the absence of any significant amounts of plant material, with the exception of sargassum growing attached to adjacent quarry rock and rubble, indicates that primary productivity (actual plant material produced) is relatively low for the La Playa Beach project area. The 0.8 acre habitat that would be lost in the La Playa Beach area is much less productive than many other areas in San Diego Bay. The intertidal and shallow subtidal habitats in the project area do not appear to constitute particularly productive habitats, and the loss of 0.8 acre of this area is not anticipated to result in a significant adverse biological impact.

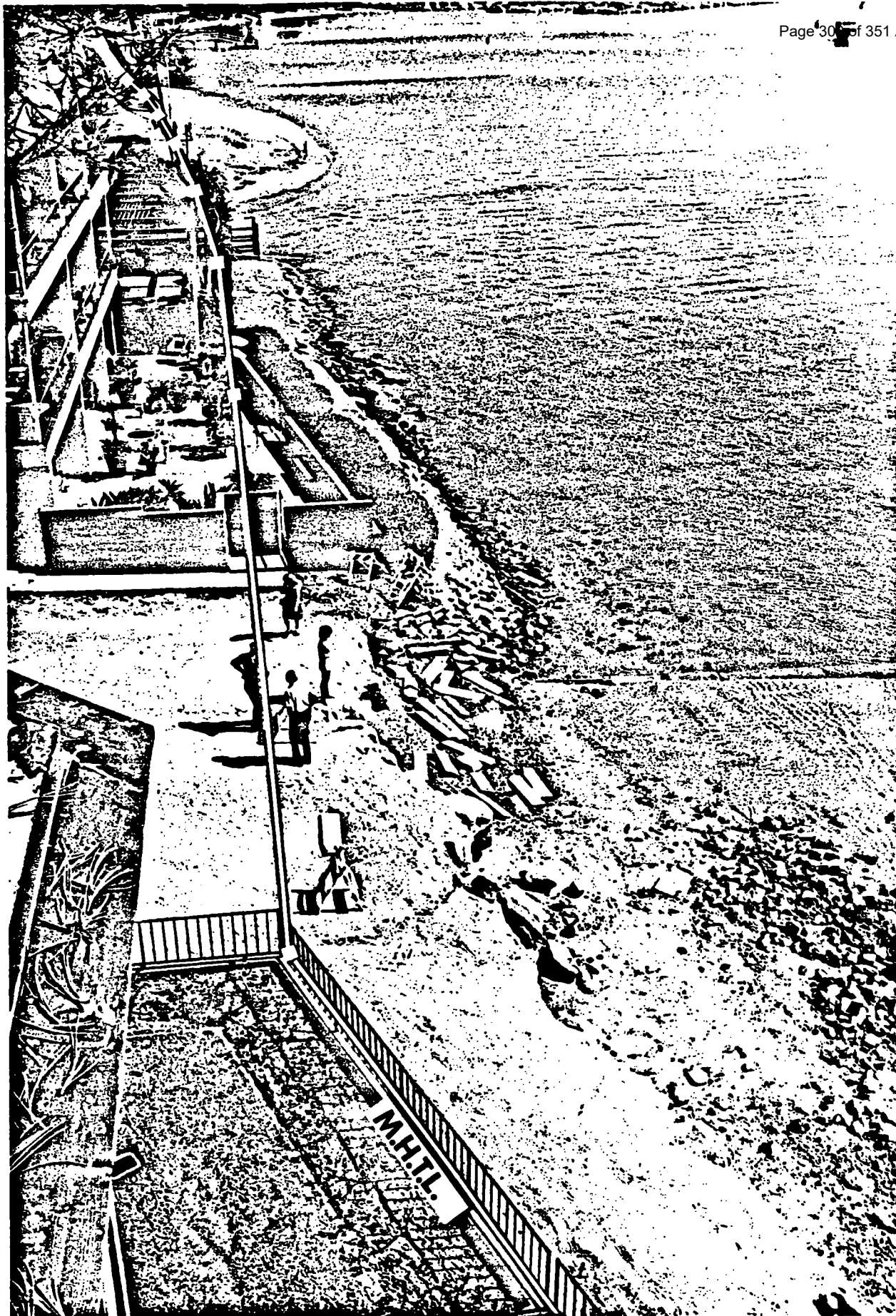
ALTERNATIVE PLANS

Alternative Plans: NMFS, CFG, and USFW all suggested an "alternative to the proposed project" which would have fewer impacts upon living marine resources. They propose that a sea wall be placed above the mean higher high water line (MHHW) accompanied by a beach replenishment program. Redistributed sand should then be placed seaward of the sea wall. This alternative was suggested to prevent further erosion of the existing shoreline and "eliminate impacts to intertidal and subtidal habitat and the resources depended upon those habitats". CFG suggested that the sea wall be limited to the segment of beach south of Lawrence Street.

This alternative plan (hereinafter, the NMFS/CFG/USFW Plan) would provide for little or no restoration of the dry sand area along the shore for the first 380 feet north of the Scripps Institution of Oceanography (SIO) facilities, and might result in some narrowing of the existing dry sand berm in the vicinity of Lawrence Street. It is unclear when or how often sand would be relocated, or exactly where the introduced sand might be placed. Presumably the sea wall would not be exactly straight, but would follow the shoreline approximately, from the south end of the beach to a point in the vicinity of Lawrence Street.

The NMFS/CFG/USFW Plan is similar to the proposed project in that it would include a structure that would protect property between the south end of the beach and Lawrence Street from erosion, and would provide for periodic beach replenishment. It differs from the proposed project in the essential feature, in that it does not provide for restoration and protection of the existing beach for public recreational use. In fact, the proposal is not the beach plus stabilization, as proposed by the Port, but solely shoreline protection placed, for all practical purposes, on the border of public and private property, see Figure R.

The NMFS/CFG/USFW Plan would not create an additional 0.8 acre (35,000 square feet) of dry sand beach. The proposed project calls for a groin similar in function to the sea wall but would diagonally angle away from the shore. The dry sand



78-8-276-34A

Figure R: Shoreline Appearance at Foot of Kellogg Street
(Tu 8/7/79, about 10:15 AM, Tide: approx. +5 MLLW;
mean high tide line (M.H.T.L.) indication is approximate)

beach would only be included on the west side. The NMFS/CFG/USFW alternative would have a sea wall roughly parallel to the shoreline, with a very small dry sand area, if any, on the west side, and dry, wet or no sand on the east side depending upon the tide, and the frequency and magnitude of beach replenishment programs. Following prolonged periods of erosion and during periods of high tide, the shoreline would be dissimilar to that created by the proposed project in that it would be rocky, and unattractive and possibly hazardous to swimmers. At low tide, it would be possible for swimmers to climb down the sea wall to enter the water from the short-lived low tide flats.

The NMFS/CFG/USFW sand replenishment operation might bury the sea wall and extend the shoreline 10 to 50 feet seaward. This would provide for limited recreational utilization of the beach but would also periodically, upon beach replenishment, destroy any marine life on the sea wall or on the adjacent low tide flat. This would defeat the objective of preservation of the intertidal and shallow subtidal habitat.

Impacts resulting from the NMFS/CFG/USFW Plan would be highly sensitive to the frequency, magnitude, and location of sand replenishment. If replenishment did not keep up with erosion, the shoreline would consist of a sea wall and tidal flat on the seaward side, emergent only during periods of low tide. If replenishment equalled or exceeded littoral drift rate, the sea wall might become largely covered with sand. In this case the NMFS/CFG/USFW Plan could offer usable beach area. The crest of the sea wall, however, would always be visible and might be considered to be both an aesthetic nuisance, a safety hazard, and a recreational disruption.

To maintain sand coverage of the NMFS/CFG/USFW sea wall, the maintenance program would require more frequent sand replenishment, or the addition of larger amounts of sand to the beach during each resupply operation. This would constitute considerable additional cost and environmental disruption during replenishment operations by construction equipment, as identified in the Draft EIR. Sand transport south of the north end of the proposed groin area (about 150 feet south of Lawrence Street), is more rapid than it is north of the proposed groin area. The proposed groin would offer some sheltering from wave action in this area. The NMFS/CFG/USFW Plan would not provide wave action sheltering in this area.

An intensive maintenance plan might be designed to keep the NMFS/CFG/USFW sea wall constantly covered with sand. If such a plan were carried out, however, there would be no need for the sea wall along any segment of the beach where the sea wall would be covered. Erosion protection then would simply consist of very frequent placement of very large quantities of sand along the beach. Under some circumstances, it is conceivable that trucks would have to make trips monthly, or even more often, on a continuing basis.

Impacts resulting from the proposed plan are much less sensitive to the maintenance schedule. If replenishment lagged behind erosion there may be a very slow retreat of the shoreline north of the groin and some enlargement of the cove which would develop shoreward of the groin. There would be, however, no marked change in the character of the beach. If sand replenishment exceeded erosion, then the beach would be prograded seaward (toward deeper water) along the shoreline segment north of the groin. Again, there would be no change in the basic beach characteristics. Replenishment would not affect the character of the shoreline east (bayward) side of the groin.

The comparative rates of littoral drift anticipated from the two plans would be quite different. About 100 feet north of Kellogg Street there would be almost no drift for the proposed project because there would be almost no sand in the intertidal zone. Under the NMFS/CFG/USFW Plan, drift might vary from relatively rapid (500-1,000 cubic yards per year) if sand deposits were present seaward of the sea wall, to no transport at all if there were no sand east of the sea wall, but possibly undercutting. At the end of Lawrence Street there would be some northerly transport under both plans. The rate of transport under the NMFS/CFG/USFW Plan would be slightly higher because the sea wall offers little or no sheltering of the shoreline in this area. Drift rate under both plans would depend somewhat on the maintenance program. The more erosion that occurs, the greater would be the sheltering effect. Thus, the drift rate would be expected to slow somewhat if replenishment did not keep pace with erosion. At McCall Street, one would expect the drift rates to be the same for both plans.

Biological impacts of the NMFS/CFG/USFW Plan would also be highly sensitive to the frequency, magnitude, and location of the sand replenishment operations. Reduced replenishment would expand eroded low tide flat areas. Replenishment in excess of erosion rates would cover low tide flat areas with sand. The proposed plan would cover a 0.8 acre with sand during construction, and periodically re-cover the northern area of the beach as it erodes. The NMFS/CFG/USFW Plan would disturb the shoreline area during construction of the sea wall, and periodically (probably much more frequently) re-cover the low tide area bayward of the sea wall with new sand.

ARMY CORPS

The late arrival of the US Army Corps of Engineers (USACE) comments just prior to the deadline for the District's response, did not allow integration within all the topic headings. There may be some redundancy in the following. The Corps indicated that reasons for rejection of various alternatives were not adequately supported in the Draft EIR. USACE stated that quantitative data regarding energy consumption, cost benefit, and required maintenance should be addressed. Further that a separate maintenance dredging project (at Talbot Street), north of and not associated with La Playa Beach, should be included in the Draft EIR.

In contrast to Corps and other federal projects where government funding has to be justified by each project, there is no legal requirement to prepare a cost v. benefit ratio on non-federally funded projects such as this. In fact, in the case of a type of recreational project, such as the one at hand, it appears meaningless. To place a monetary value on a summer day spent at the beach, a child building sand castles, or elimination of an eroded and unsightly shore is an arbitrary and subjective determination at best. Fiscal and economic considerations (including non-environmental trade-offs) and balancing the requirements of the Port's legislative mandate should not, under CEQA, be part of the environmental document. Guideline directions are to err on the side of excluding non-environmental, especially economic, considerations lest the EIR be 'self-serving and justifying the project'.

As to replenishment: the intent is to perform the bulk of the maintenance by redistribution of the sand and only to import new sand to make up for any loss. In other words, as the sand erodes near the end of the groin and widens the

beach further north, it will be returned to its original location to repeat the cycle. The whole operation is on a small scale and will be accomplished by means of skiploaders or similar equipment. This artificial stabilization of the La Playa Beach near Kellogg Street will hardly have any significant adverse environmental consequences.

The two projects, 79-82 (this proposal) and 79-174 (Talbot Storm Drain), are separated by over one-half mile and are in no way environmentally interrelated, except that the excavated material from the latter could be used as a possible source for some of the sand needed at the Kellogg Street Beach. Incidentally, the two sites are physically separated by the land spit, formed by littoral transport, which is now used by the Southwestern Yacht Club.

In past years, maintenance dredging has been necessary at the outfall of the Talbot Street drain to prevent the sand deposit (brought down by storm runoff through the City's storm drain system) from shoaling the adjacent boat mooring slips. The time for this maintenance operation has come again. Good sense would dictate the use of the sand, a valuable resource, to augment the deficiency at another beach location, namely, at the foot of Kellogg Street. It will result in a savings of \$27,000, an appreciable amount, at least in the eyes of the Port District. Of course, if it comes down to it, the La Playa Beach project can be undertaken without the Talbot Street sand source. It will simply cost more and require a different disposal means to abate the continuation of the shoaling at the Talbot Street outfall. So funds would be expended to dispose the sand and then turn around and purchase sand elsewhere for the La Playa beach restoration project, should it be possible to obtain the permits. Staff does not understand the Corps' environmental reservations. The whole issue may become moot even if permits can be secured because of the open-ended federal permit process in terms of timing. Port staff just tried to do some sensible economic and environmental management planning. Additionally, the transport of nearby material from tidelands should conserve energy and fuel as well as money.

As to the perennial question of "compensation": Refer to the earlier discussion. District staff persistently is confronted with single purpose federal agency staff policy positions which interpret any intrusion in the marine or tidelands area as requiring its own "compensation", hence starting a vicious circle. Perhaps the Corps of Engineers can offer a range of feasible suggestions? In making a permit determination the Corps might also consider the fact that a beach, even larger than proposed, existed at the foot of Kellogg Street some ten years ago, that this was lost and is continuing to decrease, and that no one has offered compensation for that environmental loss. The Corps, with shoreline protection experience, may want to consider that the present condition at the foot of Kellogg Street stems in part from uncoordinated, piecemeal, fragmented shoreline modifications such as the construction of the Scripps facility immediately to the south. It must also be stated that lots has been learned in the last 10 years in this field. However, CFG's suggestion of a minimal revetment section, contradicts present coastal engineering approaches.

On alternatives: Three major design alternatives were considered. These can be found in the referenced report on Shore Protection for La Playa Beach, prepared by the State of California Resources Agency, Department of Navigation and Oceanography Development, recently renamed Department of Boating and Waterways.

Alternative 1 called for frequent replenishment from outside sources without any retaining structures. It would make the beach wider than the chosen alternative. Although lower in initial cost, maintenance was expected to be higher. Furthermore, if future maintenance were delayed at any time, it could then again expose the adjacent land to wave erosion. Additionally, the more frequent and more massive replenishment over a larger area would clearly be more adverse to the marine environment.

Alternative 2 called for a continuous quarry stone riprap embankment some distance from the shore and extending from the military Reservation northward at least to McCall Street. This alternative was the most costly and simultaneously the environmentally least acceptable. It would remove a larger area, eliminate the entire sandy intertidal habitat and require a considerably larger materials and energy expenditure. Also, from the community interest and funding (political) viewpoint, this option had serious shortcomings.

Alternative 3 called for the installation of four intermittently spaced headlands or breakwaters between the Military Reservation and McCall Street. These were to consist of sand-filled synthetic fiber tubes coated with epoxy. An installation using this material was inspected by Port engineers. The conclusion was that at the La Playa Beach such an installation would be subject to destruction by vandalism and very unsightly. La Playa Beach is aesthetically very exposed and, coupled with the short life expectancy, this alternative was rejected. At one time it had been suggested that adjacent private property owners construct their own shore protection on their own land above the Mean High Tide Line; this appears impracticable due to existing improvements shoreward of this line, see Figure R. The Port District, of course, could not participate in any such venture aimed solely at the protection of private property.

SUMMARY

For a number of reasons the Port District has been encouraged to restore the recreational beach by recent State legislative action. The San Diego Coast Regional Commission encourages projects to particularly provide viable sandy beaches, public access, and recreation, while safeguarding the biological resources. The project proposed is a feasible compromise. It disturbs the existing beachfront the least, restores a public beach for recreational enjoyment, and provides a protected sand reservoir which as a result will facilitate and reduce the cost of minimal periodic maintenance. Overall energy consumption under any option is considered trivial. In fact, if fossil fuels become unavailable, beach maintenance as called for could be accomplished by means of Fresno Scrapers drawn by horses and mules, assuming these were again in vogue, and would be permitted to enter the bay waters temporarily.

After review and analysis of comments received, and providing above response, District staff believes that the project as proposed would not result in substantially adverse environmental effects, as defined by CEQA.

References for Response Section

- Baxter, J.L., 1962.
Inshore Fishes of California (1st Revision).
California Department of Fish and Game, Sacramento, 80 p.
- Clark, F.M., 1925.
The Life History of (Leuresthes tenuis),
An Atherine Fish with Tide Controlled Spawning Habits.
California Division Fish and Game, Fish Bulletin 10, 51 p.
- Daughterty, A.E., 1960.
California Grunion, (Leuresthes tenuis),
In California Ocean Fisheries Resources to the Year 1970 (W.T. Shannon ed.)
State of California Department of Fish and Game, 29-30 p.
- Miller, D.J., D. Gotshall, and R. Nitsos, 1965.
A Field Guide to Some Common Ocean Sport Fishes of California (2nd Revision,
April 1965)
Department of Fish and Game, 87 p.
- Miller, D.M., and R.N. Lea, 1972.
Guide to the Coastal Marine Fishes of California, Fish Bulletin 157
Department of Fish and Game, 235 p.
- Thompson, W.F., 1919.
The Spawning of the Grunion (Leuresthes tenuis)
California Fish and Game Commission, Fish Bulletin 3, 27 p.
- Walker, B.W., 1949.
Periodicity of Spawning by the Grunion (Leuresthes tenuis), and Atherine Fish
Submitted to the University of California at Los Angeles as a Ph.D. thesis,
unpublished.
- Walker, B.W., 1952.
A Guide to the Grunion
California Fish and Game, Vol. 38, No. 3, 409-420 p.



**PORT OF SAN DIEGO
AND LINDBERGH FIELD AIR TERMINAL**

(714) 291-3900 • P.O. Box 488, San Diego 92112

June 1979

SUBJECT: "LA PLAYA BEACH RESTORATION, Shelter Island Area"
Draft Environmental Impact Report
(UPD #78102-EIR-6)
San Diego Unified Port District

The attached Draft Environmental Impact Report has been prepared in accordance with the requirements of the California Public Resources Code, Section 21151, of the California Environmental Quality Act, as amended.

The San Diego Unified Port District proposes to construct a 350 foot long, 45 foot wide (at the base) rock groin diagonally to the shoreline at La Playa Beach near the foot of Kellogg Street in the Shelter Island area of San Diego Bay to restore an eroding beach and to stabilize the shore. A triangular area about 0.8 acre (35,000 square feet) beachward of the groin would be backfilled with sand to slightly above the level of the highest tides. The construction of the groin would involve a foundation trench (about 600 cubic yards) and the placement of about 6,500 tons of quarry rock, gravel, and a stone facing material. The backfill would include about 4,000 cubic yards of imported sand, as well as material excavated from the foundation trench. About 1,000 truckloads of rock and sand would be required during 2 months of construction. The project also includes a sand replenishment or redistribution program, as needed, possibly on a bi-annual basis.

This report is being distributed to all public agencies which have jurisdiction by law or special expertise with respect to any environmental effect of the project, and to known organizations with conservation and environmental interest. Your comments regarding this draft report will be a matter of public record, available to other agencies, organizations, and interested citizens, and will become a part of the final report. They will be available to the Board of Port Commissioners for consideration. Please focus on the environmental aspects of the project in discussing the sufficiency and/or accuracy of the report and provide appropriate information where possible. Your written comments regarding this draft report are requested by Friday, July 27, 1979.

A public hearing regarding this project before the Board of Port Commissioners has been scheduled for Tuesday, August 7, 1979. The Board meeting will begin at 2 PM and will be held in the Board Room located on the first floor, Room 106, of the Port Administration Building, 3165 Pacific Highway, San Diego, California 92101.

Very truly yours,

**TOMAS E. FIRLE, Coordinator
Environmental Management**

75102 EIR
Comment

United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
 24000 Avila Road
 Laguna Niguel, CA 92677

July 18, 1979

Port of San Diego
 P.O. Box 488
 San Diego, CA 92212

RECEIVED
 JUL 20 1979

Re: DEIR, La Playa Beach Restoration, Shelter Island

Dear Sirs:

**ENVIRONMENTAL
 MANAGEMENT**

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Report (DEIR) for the La Playa Beach Restoration, Shelter Island, dated June 1979. The DEIR is for a proposed project to construct a 350 foot long rock groin to control beach erosion and to provide shoreline protection for adjacent residences. The proposal also includes yearly replenishment of the beach with imported sand. The Service has the following comments.

GENERAL COMMENTS

The Service finds the DEIR inadequate in its description of the biological resources of the project vicinity. While fish and invertebrate populations are adequately discussed, the use of the area by waterfowl and shorebirds, especially wintering populations, has been totally ignored.

In addition, the need for an Army Corps of Engineers permit for the proposed construction needs to be addressed. The Corps has jurisdiction of the area under Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act of 1977. In conjunction with the permit, full compensation for loss of fish and wildlife resources needs to be explored. The mitigation measures described in the document are inadequate.

SPECIFIC COMMENTS

Page 5, Section II, Project Description - The proposed use of a filter blanket during construction needs to be discussed further with regard to its effects on fish and wildlife.



Save Energy and You Serve America!

Page 24, Section III, Environmental Setting, Pollution - The sediment samples from the Southwestern Yacht Club piers all contain heavy metals in the parts per million range. The effects of this concentration of heavy metals on marine organisms needs to be discussed. Littoral drift may increase sedimentation of the yacht basin requiring material to be removed. It would appear from the document that this material may be used in the yearly maintenance program. The effects of this should also be discussed.

Page 25, Section III, Environmental Setting, Organisms of Special Concern Use of the area by shorebirds and waterfowl, especially migratory birds of the Pacific Flyway, has not been addressed. Impacts of the project and its alternatives also need to be addressed.

Page 56, Section IV, Environmental Impacts, Unavoidable and Irreversible Significant Environmental Impacts - The impacts associated with yearly maintenance procedures required for the proposed project have not been discussed.

Page 58, Section IV, Environmental Impacts, Mitigation Measures Which Could Minimize Any Significant Effects - Compensation for the habitat lost has not been adequately addressed. Also mitigation and compensation for maintenance procedures need to be addressed.

SUMMARY

~~The DEIR is inadequate in the requisite information. The loss of habitat~~ by the initial proposed project coupled with the impacts of constant maintenance needs to be addressed. At present, the alternative of building a seawall above the mean high water line and back-filling the area with sand is the alternative favored by the Service. This alternative appears to provide the end product desired from the project without yearly maintenance and damage to fish and wildlife resources.

The Service appreciates this opportunity to comment on the DEIR. However, it should be noted these comments do not in any way preclude additional and separate evaluation and comments by the U.S. Fish and Wildlife Service, pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

In review of application for a permit under Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act of 1977, the Service anticipates that it would object to the issuance of such permit

by the Corps of Engineers for the project as presently designed. The reasons for this are that the proposed project does not solve the problem, destroys valuable fish and wildlife resources, and offers no compensation for these losses.

Sincerely yours,

Dale A. Pierce

Ralph C. Pisapia
Field Supervisor

SHL:rm

cc: San Diego Coast Reg. Commission
CE-LA, Env. Res. Branch
CDFG, Reg. 5, Long Beach, CA
NMFS, Terminal Island, CA



(7/27/79) Page 310 of 351 A
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Region
300 South Ferry Street
Terminal Island, California 90731

FSW33/RSH

July 27, 1979

Mr. Tomas E. Firle
Environmental Management
Port of San Diego
P.O. Box 488
San Diego, California 92112

RECEIVED

JUL 30 1979

ENVIRONMENTAL
MANAGEMENT

Dear Mr. Firle:

Subject: Review of "La Playa Beach Restoration, Shelter Island Area"
Draft Environmental Impact Report (UPD #78102-EIR-6)

We have reviewed the subject Draft Environmental Impact Report
and offer the following comments:

Specific Comments

Page 5, paragraph 1.

One of the project goals is to restore an eroding beach, however, it is apparent from the sand transport figures presented on pages 1 and 7 that the rock groin will do little to moderate present sand movement.

Page 7, paragraph 4.

The potential for increased dredging in the Shelter Island Yacht Basin as a result of the yearly importation of an undetermined amount of sand should be addressed in this section.

Page 35, paragraph 2.

The statement "....that these clams do not, at present, constitute a valuable recreational resource." should be changed to read "....that these clams do not, at present, constitute a harvestable recreational resource." The value of the existing clam population should not be measured only in terms of its immediate use to recreational clammers. Clams and other benthic invertebrates are important food items for numerous recreationally important species of fish including the diamond turbot (Hypsopsetta guttulata), spotfin croaker (Roncador stearnsi), white croaker (Genyonemus lineatus), and shiner surfperch (Cymatogaster aggregata). The existing clam population also increases the potential for recruitment to other areas which have suitable habitat.

Paragraph 3.

The size of the proposed project as well as the expected impacts to fishery resources does not warrant an extensive biological survey. However, it should be stated in this section that three of the sampling techniques utilized, diver surveys, fish trapping, and interviews with fishermen are highly biased in the results which are obtained. Diver surveys enumerate only those individuals that are of sufficient size to allow accurate sight identification. This inherent shortcoming is exacerbated by poor water clarity which apparently was a problem in this area during the survey. Fish trapping and interviews with fishermen are also both biased towards sampling only large individuals.

These sampling procedures, in addition to the beach seining which was performed, do provide a partial qualitative assessment regarding fish species present in the area. However, the use of this information to derive quantitative estimates of fish populations is not appropriate, since reliable estimates regarding the proportion of the population which was sampled cannot be made.

Page 53, paragraph 2.

It should be stated in this paragraph that the new sandy intertidal and subtidal habitats will be periodically disturbed by the proposed beach maintenance program.

Page 53, paragraph 5.

Clarification should be provided regarding the potential impacts on the nearby eelgrass bed. This section states "...that they would not be significantly disturbed by the project." Page 27, paragraph 1, however, suggests that habitats more distant from the proposed groin site, including eelgrass beds (south end of Shelter Island) could be affected by project disturbances.

Page 56, 58.

The argument is presented that a 0.8 acre loss of productive habitat is not substantially adverse. Perhaps the Port of San Diego should further substantiate this position by stating the quantity of habitat loss which would qualify as substantial or significant. Our agency believes that an uncompensated loss of this size is significant. Evidence in this document indicates that the cumulative losses from similar projects in the past have resulted in an 80% reduction in intertidal habitat of the Bay. These perturbations may result in a decrease in the populations of those species which are dependent on this type of habitat.

Page 58, paragraph 3.

The Port should be aware that, if this project proceeds as proposed, compensation for lost habitat and marine resources will be required. A

3

suitable plan to offset those resource losses will have to be developed before the NMFS will recommend issuance of the required Corps of Engineers permit.

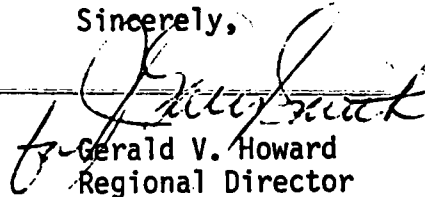
Page 59, paragraph 4.

The overall productivity of the Bay may not be measurably changed as a result of this project. However, our concern is that this project as well as similar projects completed in the past are gradually altering the habitat types in the Bay. Sandy intertidal and shallow subtidal habitats are slowly being replaced by rocky habitats with a corresponding shift in species composition.

Page 61.

Our agency would favor an alternative which has the least impacts on marine resources. Specifically, the construction of a seawall or placement of rock riprap above mean high water combined with a beach nourishment program would appear to accomplish the required project goals while also reducing impacts to marine resources and minimizing needed compensation.

Sincerely,



Gerald V. Howard
Regional Director



EDMUND G. BROWN JR.
GOVERNOR

State of California
GOVERNOR'S OFFICE
OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

RECEIVED

AUG 1 1979

ENVIRONMENTAL
MANAGEMENT.

July 30, 1979

Tomas E. Firle
Port of San Diego
P.O. Box 488
San Diego, CA 92112

Subject: SCH# 79012248 LA Playa Beach Restoration, Shelter Island
Area

Dear Mr. Firle:

State agencies have commented on your draft environmental document (see attached). If you would like to discuss the concerns and recommendations in their comments, contact the staff from the agencies whose names and addresses appear on the comments.

You may formally respond to the agencies' comments by writing to them (including the State Clearinghouse number on all such correspondence). When filing the Final EIR, you must include all comments and responses (State EIR Guidelines, Section 15146). State review of your draft environmental document will then be complete.

To aid in preparing environmental assessments on future projects, you should send to state agencies and the Office of Planning and Research your Notice of Preparation as prescribed by AB 884 and Section 15066 of the EIR Guidelines.

If you would care for assistance or if the need arises, the Office of Planning and Research is available to help identify responsible agencies, distribute Notices of Preparation, organize coordination meetings, mediate disputes, and hold consolidated hearings.

Please contact Rhonda Swarner at (916) 445-0613 if you have any questions.

Sincerely,

Stephen Williamson
Stephen Williamson
State Clearinghouse

SVW/ag
Attachment
cc: Ken Fellows, DWR

Memorandum

To : Mr. Jim Burns, Assistant to the Secretary
Resources Agency

Date : July 23, 1979

File No.:

Port of San Diego
P. O. Box 488
San Diego, CA 92112

RECEIVED
AUG 1 1979

From : **EXECUTIVE OFFICE**
1807 13th Street, Sacramento 95814

**ENVIRONMENTAL
MANAGEMENT**

Subject: Comments to Draft EIR, La Playa Beach Restoration
SCH #79012248P

The staff of the State Lands Commission appreciates the opportunity to review the Draft Environmental Impact Report of the La Playa Beach Restoration-Shelter Island and offers the following comments for your consideration:

On April 25, 1979, staff of the State Lands Commission visited the project site, and offers the following observations and recommendations for the Final EIR.

La Playa Beach is presently being eroded as evidenced by the exposed storm drain pipes and by the emergency measures taken by the homeowners, including various types of rock and rubble riprap as well as sandbag revetments. These measures have only partially slowed down the shoreline's retreat. A sheet-steel pile seawall adjacent to the Scripps Institute of Oceanography facility and concrete seawalls farther north appear to have fairly effectively stopped the sand bank retreat where they are located. However, the shoreline from Kellogg Street to Owen Street, which exhibits both retrogradation and progradational features, remains unprotected.

The area is a low energy environment resulting in a rate of erosion which, although relatively slow, is still a continuous problem to the homeowners. It appears that boat wakes may constitute a significant contributor of energy to bank erosion and sediment movement along the shore. Furthermore, tidal currents appear to be too low to be significant since they are reported to be about 1/10 to 1/4 kt. from a U. S. Army Corps of Engineers (COE) model study. Very little measured tidal current and wave data appears to be available for this area.

Mr. Jim Burns

-2-

July 23, 1979

In order to adequately assess this site, extended field studies and evaluation of available data at the San Diego Port Authority and Scripps Institute of Oceanography are needed. A study of historical air photos, bathymetric changes, and wave and current data would provide further insight into the problem. Subject areas suggested for further study are: (1) when, where, and how is the sand transported; (2) what is the effect of ship/boat traffic in the area; (3) the complex wave and tide regime in the area; and (4) what effect would the proposed groin and beach sand replenishment project have on a model, including its impact downstream, i.e. the Southwestern Yacht Club.

In summary, staff concurs with the information presented. However, the DEIR should more fully address the following:

1. The effect of the reflected waves from the proposed groin on Shelter Island;
2. If there is a seiche in the Yacht Harbor, what would be the effect with the change in bathymetry if the groin is built;
3. The source of the sand is still questionable. Did it originally come from the old San Diego River, around Point Loma, the Tijuana River, seacliff erosion, or combinations of these; and
4. What sand size would be most suitable to stabilize and reach equilibrium in this newly proposed beach environment.

Please advise this office if there are any questions relative to this matter.

Dwight E. Sanders
DWIGHT E. SANDERS, Chief
Planning and Environmental
Coordination

DES:MG:js

State of California

The Resources Agency

Memorandum

To : 1. Jim Burns, Projects Coordinator
Resources Agency

Date: July 24, 1979

2. San Diego Unified Port District
P. O. Box 488
San Diego, California 92112

RECEIVED
AUG 1 1979

From : Department of Fish and Game

**ENVIRONMENTAL
MANAGEMENT.**

Subject: SCH 79012248P La Playa Beach Restoration, Shelter Island Area, San Diego Bay,
San Diego County

We have reviewed the subject document detailing construction of a 350 foot rock groin and filling of the intertidal area adjacent to the groin with about 4000 cubic yards of imported sand. The indicated purpose of this project is to control shoreline erosion and widen an eroded beach. Further, because a subsequent slow but continuous erosion of the backfilled material would be expected to occur, the proposed project also includes a sand replenishment and/or redistribution program. This program would occur as needed and would include removal of accumulated sand from northerly segments of the shoreline for replacement on eroded segments.

The impact of this project to marine resources will be the loss of 0.8 acres of intertidal habitat and the flora and fauna dependent upon it. In addition, the sand replenishment/redistribution program will periodically remove intertidal beach sand for maintenance purposes. If the replenishment/redistribution sand were to be taken from the intertidal or subtidal segment of the beach then those resources which inhabit those habitat types would be periodically lost. While the proposed project would create approximately 0.1 acres of intertidal rocky and sand habitat, the net habitat loss would be approximately 0.7 acres.

Since the major purpose of this project is erosion control, the Resources Agency Policy for Shoreline Erosion Protection, adopted September 14, 1978 is applicable. Under Item III, Shoreline Protection Projects, Section B, pertaining to construction of breakwaters, seawalls, revetments or other artificial structures for coastal erosion control (see attached policy), states that construction of such structures shall be discouraged unless specific criteria are met. One of the criteria, item number five under Section B, states that "[a]ny project-caused impacts on fish and wildlife will be offset by adequate fish and wildlife measures."

As described in the subject DEIR, the proposed project will have the following impacts to fish and wildlife:

1. An estimated 7000 clams will be lost as a result of the construction of the proposed rock groin and sand beach.
2. About 0.8 acres of intertidal sand/mud flat, utilized by various fish species, will be lost.

In order to reduce or eliminate project impacts to marine resources and thereby render offsets unnecessary, we recommend that the following project alternative be strongly considered:

1. Instead of installing the proposed groin, place a revetment above the mean higher high water (MHHW) line to prevent further erosion of the existing shoreline. Placement of the revetment above MHHW would eliminate impacts to intertidal and subtidal habitats and the resources dependent upon those habitats. This recommendation is similar to alternative two described in the DEIR. However instead of reveting the entire La Playa Beach shoreline, the recommended revetment should be limited to the area between the San Diego Unified Port District southern boundary and Lawrence Street.
2. Maintain the existing sand beach north of the Kellogg Street area by a program of sand redistribution similar to that which would be necessary if the proposed rock groin-sand beach project were implemented.

The implementation of this alternative would:

1. Retain the existing intertidal and subtidal habitat area.
2. Protect the presently eroding shoreline.
3. Reduce, if not eliminate, the impact of importing sand by redistributing that which has been transported to the north.
4. Comply with the Resources Agency's Policy for Shoreline Erosion Protection.

In addition to the above, we also recommend that any sand redistribution efforts associated with this project be accomplished between September and March. We believe this is necessary to protect the integrity of the remaining sand beach which may be utilized by spawning California grunion. Although we have no direct evidence of such grunion utilization, their occurrence in large numbers in a beach sein set off of La Playa Beach four days prior to an expected grunion spawning tide strongly suggests such use. Disturbance of the sand beach during the grunion spawning period could reduce or eliminate use at the site.

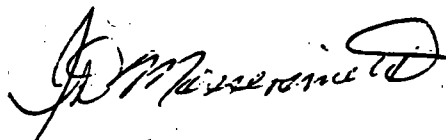
If the proposed project (i.e., the rock groin and sand fill) is adopted, then we believe that there must be a commitment to mitigate project induced impacts to living marine resources. To that end, along with our subsequent Fish and Wildlife Coordination Act responsibilities under Section 10 of the Rivers and Harbors Act, we suggest a meeting with the Port District staff and other interested conservation agencies to effect such mitigation considerations.

1. Jim Burns
2. San Diego Unified Port District

- 3 -

Page 318 of 351 A

If there are any questions regarding our comments and recommendations please contact Mr. Rolf E. Mall, Environmental Services Supervisor, 350 Golden Shore, Long Beach, California 90802. The phone number is (213) 590-5140.


FOR Director

RN:cc

cc: USFWS-Laguna Niguel; NMFS-Terminal Island

Attach

RECEIVED

AUG 6 1979

ENVIRONMENTAL
MANAGEMENT

Memorandum

Department Directors, Executive
Officers of Boards & Commissions

Date : SEP 14 1978

File No.:

Subject: Shoreline Erosion
Protection Policy

Office of the Secretary

RECEIVED

AUG 1 1979

POLICY FOR SHORELINE EROSION PROTECTION

ENVIRONMENTAL
MANAGEMENT

Introduction

California's shorelines are subject to the natural, continuously changing effects of erosion and accretion caused by waves, current and wind. In some instances development has taken place, or is being proposed, in unstable erosion prone areas which eventually may require remedial protection or even abandonment. Because the natural processes and human activities causing shoreline erosion do not respect political jurisdictional boundaries, State guidance and coordinated agency policies are required.

Remedial projects have been used along California shorelines with varying degrees of success. In some instances, breakwaters, groins, seawalls and revetments have created new problems because they were placed without a full understanding of the natural process of shoreline erosion. Remedial projects require large capital investments and may significantly alter the configuration, appearance and recreation potential of the shoreline. Projects designed to restore natural beach conditions by artificially supplying sand may be a more desirable alternative. This type of remedial action, however, requires periodic renourishment and a continuing supply of sand.

The cost to public and private property owners, the tragedy of homes lost by erosion, and the need for government relief and expensive remedial actions can be avoided if development is not allowed in geologically unsuitable areas, or in areas subject to sand depletion without natural replenishment, or to excessive erosion rates. Additionally, erosion problems might be forestalled or avoided by effective land use policies, especially in currently undeveloped areas and by not upsetting the delicate and natural balance of nature. Protecting coastal property values, maximizing the recreational potential of our shoreline by maintaining sandy beaches, protecting wildlife habitats, and protecting options for revenue producing activities are objectives of primary importance to the State of California.

SEP 14 1978

Department Directors, Executive
Officers of Boards & Commissions
Page 2

The 1976 amendments to the Federal Coastal Zone Management Act require that coastal management programs include a planning process to assess the effects of shoreline erosion, to study and evaluate ways to control or lessen the impact of erosion, and to restore areas adversely affected. The California Coastal Act of 1976 assigns primary responsibility for carrying out this program to the California Coastal Commission. The State Harbors and Navigation Code assigns the responsibility for studying shoreline erosion, for advising government agencies, for planning, designing and constructing shore protection works, and for administering State funds for the local share of Federal projects to the Department of Navigation and Ocean Development. The Public Resources Code assigns responsibility to the State Lands Commission for managing and protecting State-owned mineral resources and mineral rights. Although these laws form the heart of California's shoreline erosion control program, many other agencies play key roles and must exercise their mandates and advisory functions in a consistent manner.

This statement establishes the basic shoreline erosion control policies for all departments, boards, and commissions within the Resources Agency to use when developing projects, authorizing private or public projects, or commenting on permit actions taken by other authorities including Federal, State, and Local agencies.

These policies should be applied by State agencies when taking the following actions:

- (1) Commenting on Environmental Impact Reports pursuant to the California Environmental Quality Act, Environmental Impact Statements pursuant to the National Environmental Policy Act, and U.S. Army Corps of Engineers and U.S. Coast Guard public notices;
- (2) Issuing California Department of Fish and Game stream or lake bed alteration agreements, and State Lands Commission mineral extraction and tideland leases;
- (3) Planning, designing, and carrying out Department of Water Resources projects, Department of Navigation and Ocean Development projects, State Water Resources Control Board projects, and in planning, purchasing and improving State parks and beaches;
- (4) Considering coastal development and San Francisco Bay Conservation and Development Commission permits, and certifications of consistency with the California Coastal Management Program under provision of Section 307 of the Coastal Zone Management Act;
- (5) Preparing and certifying Local Coastal Programs required by the California Coastal Act;

SEP 14 1978

Department Directors, Executive
Officers of Boards & Commissions
Page 3

- (6) Granting Coastal Conservancy funds for mitigating shoreline problems; and
- (7) Reviewing mined-land reclamation plans, and classifying and designating significant mineral resources.

The effectiveness of these policies depends on the steps each department, board, and commission takes to carry them out. Agencies with administrative regulations affecting shoreline erosion should amend those regulations to incorporate these policies. Because the Local Coastal Programs (LCP) required by the California Coastal Act offer a unique opportunity for local agencies to deal with shoreline erosion in an effective, coordinated, and far-sighted way, each agency within the Resources Agency is directed to cooperate with the Coastal Commission and local governments by reviewing LCP work programs, offering technical assistance to identify issues, and suggesting ways to address these issues in carrying out the California Shoreline Protection Policies.

CALIFORNIA SHORELINE EROSION PROTECTION POLICY

I. General

Development of the lands adjacent to large bodies of water carries with it an element of danger from wave action, which can threaten the safety of public and private property and recreational values.

It is the policy of the Resources Agency that the use of these lands avoid hazardous and costly situations caused by erosion and minimize or resolve existing problems. Only in those situations where structures or areas of public use are threatened should the State resort to funding or approving remedial projects. When necessary, projects should restore natural processes, retain shoreline characteristics, and provide recreational benefits to the extent possible.

II. Planning and Regulation

A. In planning for the use of land adjacent to the shoreline, State agencies shall assure the following:

1. Effective land use plans and regulations to prevent existing and future developments from being endangered by erosion of sand beaches or the base of bluffs;
2. Measures to reduce surface runoff, groundwater effects, and other activities that create bluff stability problems;

SEP 14 1978

Department Directors, Executive
Officers of Boards & Commissions
Page 4

3. Measures for the orderly demolition or relocation of damaged or threatened structures and facilities and for the disposition of parcels of land that cannot be safely developed.
- B. Projects constructed within the coastal watersheds can increase the natural shoreline erosion rates by blocking the flow of sediment to the shoreline. It is therefore the policy of the Resources Agency that developments planned, developed, or authorized by State agencies shall meet at least one of the following conditions:
1. The development, together with other adjacent developments allowed under local land use regulations, will not reduce the natural sediment beyond that needed to adequately supply the shoreline;
 2. Mitigation measures to include providing an adequate sediment supply are included as a part of the project; or
 3. A regional plan exists that would provide an adequate supply of sand to protect the shoreline, even if the development is permitted.
-
- C. Beach and dune sand, and similar sediment lying in river beds, estuaries or in harbor channels is a valuable resource that should be used for shoreline protection. It is, therefore, the policy of the Resources Agency that all such dredge or excavation material removed within the coastal zone or near-shore waters, which is suitable in quantity, size, distribution, and chemical constituency, be discharged as follows:
1. Directly onto a natural beach in an appropriate manner for effective beach nourishment and in a manner to protect significant natural resources and the public use of such resources at those locations; or
 2. When beach nourishment is not needed or appropriate at the time of dredging, the sand should be deposited at locations for eventual use for beach nourishment, provided that suitable locations are available and steps are taken to protect both significant natural resources and the public use of such resources at those locations; or
 3. In those instances where quantity, distribution, or chemical constituency of dredge or excavation material limit its use as described in paragraphs one and two, the material should be used to optimize its mineral values or its utility as construction material;

SEP 14 1978

Department Directors, Executive
Officers of Boards & Commissions
Page 5

- D. Under California law, artificially induced shoreline accretions do not affect property boundaries. To preserve evidence of the position of reconstruction boundaries, it shall be the policy of the Resources Agency that before approving any shoreline erosion control measure, a Record of Survey map shall be filed with the State Lands Commission to preserve and protect public and private boundaries showing at least the following:
1. An accurate positioning of the present, preconstruction, high-water line;
 2. Sufficient ties to at least two existing record monuments, which will not be disturbed by proposed construction;
 3. The accurate position of any monument shown on a map filed in an office of public record, and which will be disturbed by the proposed construction, together with a plan to replace the monument in its original position or to nearby record monuments.
- E. The planning and improvement of parks and beaches should be done in a way consistent with protection against the potential erosion of the affected segment of the coastline, and any structures located in areas subject to erosion damage should be expendable or moveable.

III. Shoreline Protection Projects

Shoreline protection projects are proposed by both private parties and public agencies. It is the policy of the Resources Agency that the following policies should be followed when evaluating project applications:

- A. Nourishment of beaches to protect against erosion shall be encouraged where the following conditions are met:
1. This does not conflict with significant living marine resources;
 2. This will not result in adverse effects elsewhere on the coast; and
 3. Measures are included in the project to maintain the affected beaches in a nourished state.
- B. Construction of seawalls, revetments, breakwaters, or other artificial structures for coastal erosion control shall be discouraged unless each of the following criteria is met:
1. No other non-structural alternative is practical or preferable;

SEP 14 1970

Department Directors, Executive
Officers of Boards & Commissions
Page 6

2. The condition causing the problem is site specific and not attributable to a general erosion trend, or the project reduces the need for a number of individual projects and solves a regional erosion problem;
3. It can be shown that a structure(s) will successfully mitigate the effects of shoreline erosion and will not adversely affect adjacent or other sections of the shoreline;
4. There will be no reduction in public access, use, and enjoyment of the natural shoreline environment, and construction of a structure will preserve or provide access to related public recreational lands or facilities;
5. Any project-caused impacts on fish and wildlife resources will be offset by adequate fish and wildlife preservation measures; and
6. The project is to protect existing development, public beaches or a coastal-dependent use.

~~C. No project shall be approved that will cause loss or destruction of State mineral resources, or that will subject State mineral rights to trespass. All royalty considerations shall be determined by the State Lands Commission and implemented pursuant to the terms of a permit or lease granted by the Commission.~~

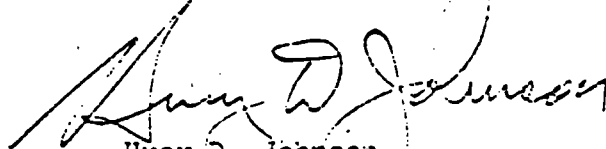
IV. Project Financing

- A. It shall be the policy of the Resources Agency to recommend State financial participation in shoreline erosion protection projects only when all of the following conditions are met:
 1. The protection project considers the long term effects of erosion on all adjacent coastline sections subjected to similar or related erosional mechanisms and takes into consideration the needs of the entire region;
 2. Any project-caused impacts on fish and wildlife will be offset by adequate fish and wildlife preservation measures;
 3. The public benefits including the long term environmental, social, and economic effect of the project are found to be greater than the public costs. The coastal section to be protected should contain substantial and valuable public-owned lands or facilities of greater value than the cost of the proposed project, or the protection scheme should provide, maintain, or improve the public use and enjoyment of the beach or shoreline;

SEP 14 1973

Department Directors, Executive
Officers of Boards & Commissions
Page 7

4. The project plan should use non-structural solutions such as beach nourishment as the recommended alternative or as a part of the recommended alternative, unless it is not feasible.
 5. Public access is provided to the shoreline area where the protection project is to be carried out unless the area is unsafe.
- B. In an emergency situation when erosion is threatening structures, State agencies should respond immediately by offering technical assistance for temporary protective actions. Assistance should first be directed to emergency situations involving public assets.



Huey D. Johnson
Secretary for Resources



THE CITY OF

SAN DIEGO

CITY ADMINISTRATION BUILDING • 202 C STREET • SAN DIEGO, CALIF. 92101

Page 326 of 351 A

ENVIRONMENTAL
QUALITY DIVISION
PLANNING
DEPARTMENT
236-5775

RECEIVED
JUL 12 1979

ENVIRONMENTAL
MANAGEMENT

July 9, 1979

San Diego Unified Port District
P. O. Box 488
San Diego, CA 92112

Attention: Tomas Firle

Re: Draft Environmental Impact Report (UPD #78-10-2, EIR-6), La Playa
Beach Restoration.

Dear Tom:

The Environmental Quality Division has reviewed the draft EIR on the La Playa Beach Restoration Project and found the report to accurately and sufficiently address the issues involved in this proposed beach restoration. We are of the opinion that this project will have no significant effect on concerns affecting The City of San Diego which are not adequately discussed.

We do appreciate this opportunity to review and comment on this proposed project. Thank you again for this opportunity.

Sincerely,

Bill Roberts
Senior Planner
Environmental Quality Division

BR:br

LA PLAYA HOMEOWNERS ASSOCIATION

July 6, 1979

RECEIVED

JUL 6 1979

Tomas E. Firle, Coordinator
Environmental Management
Port of San Diego
P.O. Box 488
San Diego, Ca. 92112

ENVIRONMENTAL
MANAGEMENT.

Dear Mr. Firle:

Enclosed you will find a typed copy of the letter our Association sent to Colonel Teague on April 26, 1979 regarding the San Diego Unified Port District's proposed construction of a 350 foot long, 45 foot wide (at the base) rock groin diagonally to the shoreline at La Playa Beach near the foot of Kellogg Street in the Shelter Island area of San Diego Bay to restore our eroding beach and to stabilize the shore.

Your outstanding DRAFT ENVIRONMENTAL IMPACT REPORT of June 1979 has been read with admiration and enthusiasm. Our faith in your agency has certainly been sustained. May we send our grateful thanks to all of those who worked to make this report so great.

No one of our members is an expert on environmental effects on this project so we have nothing to add to the report. Each one of us wants to express our gratitude on behalf of a grateful community. We know the problems of having the public out in front of our property but that fact is far outweighed by the value of having more open beach area available for all citizens.

Sincerely,

Wm F. Seeborg

Wm. F. Seeborg, President
La Playa Homeowners Association

LA PLAYA HOMEOWNERS ASSOCIATION

April 26, 1979

RECEIVED
JUL 6 1979

Gwynn A. Teague, Colonel, C.E.
 District Engineer, Dept. of the Army
 L.A. District, Corps of Engineers
 P.O. Box 2711, L.A., Ca., 90053

ENVIRONMENTAL
 MANAGEMENT

RE: Public Notice #79-82 3/28/79

Dear Colonel Teague:

As President of the La Playa Homeowners Association I would like to take this opportunity to express our appreciation for the work being done to restore our beach to its original condition. It has been sad to see the beautiful La Playa Beach turn into an eyesore, and become unavailable to the public who used to enjoy it so much. Your plans will make an extensive area of sand once again a place for recreation and relaxation for a grateful community.

Surely your plans will be approved by the Environmental Protection Agency and the Coastal Commission. As property owners we appreciate the work you and the Port Authority are doing in our behalf. You are both known for the quality of your work so we are sure that the final Environmental Impact Report will reflect the best from both agencies.

The following property owners join me in expressing our gratitude:

532-494-01-02 W. Shelburne Brown
 532-494-01-01 Wm.F. & D.P. Seeberg
 532-494-01-3 Evelyn Earnshaw
 532-494-01-04 Earl W. Johnson
 532-494-01-05 James O. & Dorothy M. Duncan
 532-494-01-06 Edward K. & Jan L. Morgan

Sincerely,

Wm. F. Seeberg, President
 La Playa Homeowners Association

PHILIP WHITE & COMPANY REAL ESTATE

1571 Rosecrans Street, San Diego, California 92106 / (714) 224-3615

June 14, 1979

78-22-500
Page 329 of 351 A
RECEIVED

JUN 19 1979

The Board of Port Commissioners
Port of San Diego Unified Port District
Post Office Box 488
San Diego, California 92112

**ENVIRONMENTAL
MANAGEMENT.**

Gentlemen:

Subject: La Playa Beach Restoration

I have read with great interest the environmental report on La Playa Beach prepared by Sea Science Services. I think it is a very good report and I am enclosing a copy of a letter I previously wrote to the Corps of Engineers which is self-explanatory.

In connection with the report, however, I would like to suggest that perhaps it does not fully cover the subject of humanus. I note that organisms of special concern are covered on Pages 31, 32, 33, 34 and 35, but "humanus" drew small attention on a portion of Page 11 and on Page 12. As you well know, this species comes in all shapes and forms, which is easily observed on the beach, and generally ranges in height from five to seven feet. Inasmuch as this species will asphyxiate if it gets too much air or drown if it gets too much water, it would seem that the use of this beach for the purpose of teaching the young to swim, thus lessening the chances of their being on the endangered species list, cannot be over emphasized.

I strongly urge that La Playa Beach be restored as a fine swimming beach.

Yours sincerely,



Philip R. White, President
PHILIP WHITE & COMPANY

PRW:ld
Enclosure

April 24, 1979

RECEIVED
JUN 18 1979**ENVIRONMENTAL
MANAGEMENT.**

Gwynn A. Teague, Colonel, CE
District Engineer
Dept. of The Army
Los Angeles District, Corps of Engineers
Post Office Box 2711
Los Angeles, California 90053

Dear Colonel Teague:

RE Public Notice No. 79-82/March 28, 1979
Proposed Restoration La Playa Beach, San Diego

The primary factor I would like to call to the attention of all concerned is that I have in my possession photographs showing this beach many years before Shelter Island was built, the Navy built its pier and performed its dredging, and the City of San Diego had its sewer installation. The work that is being done is restoration of the normal condition. The eroding of this beach caused by the items listed above is a most unnatural condition which should be corrected. Therefore, I would like to state that this is a conservation, as closely as can be performed, of the natural condition of this area.

Concerning the economics, the sand which the property owners placed in front of their dwellings and the sand that the City of San Diego placed in front of these dwellings to restore the beach continually washes in a northerly and easterly direction which, if continued, would ultimately fill in the yachting facilities at Southwestern Yacht Club and, I presume, ultimately the Kona Kai dock area and the rest of the bay. The properties in extreme jeopardy represent at this time approximately five million dollars and inasmuch as these people have had damage caused by the activities of these governmental agencies, it is going to be vastly better to conserve the beach than to face all the economic implications which could be brought forth in a court of law by the people seeking equity for their damages.

In regard to the aesthetics, the beach at this time is pretty well covered with pieces of asphalt put on the beach by parties unknown and other heavy debris, probably introduced in an effort to correct this erosion. The reintroduction of permanent sand will cover and eliminate these previous sins.

Colonel Gwynn A. Teague
Dept. of The Army, Corps of Engineers

-2-

April 24, 1979

General environmental concerns: This beach improvement program will greatly benefit the general environment of the area inasmuch as it restores the area as closely as possible to original condition.

Historic values: It is said that this is the beach the whalers originally used to come ashore and the whole history of San Diego Bay is closely related to this sheltered landing area.

Fish and wildlife values: The jetty will provide a natural fishing platform and will enable the fishermen to fish farther in the channel with a greater chance of success. In the three past years that I have closely observed the fishing on this beach, I have yet to see a person catch a fish in the area being restored. However, fishing from off the tip of Shelter Island is sometimes very active and it is for this reason I think the groin enabling the fishermen to fish farther in the channel will be very beneficial.

Flood damage prevention: There is nothing that could be done that would be of greater benefit to preclude flood damage than the plan that is set forth with this program.

Land use classification: This is a swimming area for the public. It is an area where young children learn to swim without the hazard of undertow, rip tides or sudden fall-off. It is, has been, and should be classified for use as a public beach with the dissemination of information to the public that this is the right place to teach very young people to swim.

Navigation: Having sailed this body of water for 30 years, it is my judgment that there is no navigational hazard created by the installation of this groin. The reason being that at the farthest point the groin extends only approximately 100 feet from the mean high tide line. Boats, either power or sail, should not come this close to the beach because (1) it is shoal, (2) it is invading the swimming area, and (3) the channel is very wide at this point and leaves plenty of room for tacking in or out of the harbor. Power boats would have no excuse to be in this area at all.

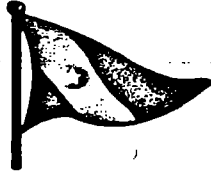
Water supply: There will be no effect on water supply, nor will there be any effect on water quality.

This program of beach restoration will meet the needs and definitely benefit the welfare of the people, not only in the area but in San Diego in general as well.

Yours truly,

Philip R. White, President
PHILIP WHITE & COMPANY

PRW:ld



Southwestern Yacht Club

2702 QUALTROUGH STREET
SAN DIEGO, CALIFORNIA 92106
PHONE 222-0438

July 27, 1979

Mr. Tomas E. Firle, Coordinator
Environmental Management
San Diego Unified Port District
P.O. Box 488
San Diego, California 92112

Dear Mr. Firle:

After a study of, and testimony from qualified individuals concerning the Draft Environmental Impact Report on the La Playa Beach Restoration, the Board of Directors of Southwestern Yacht Club are concerned about the significant adverse effect of the northward drift of sand and fill material ~~which would be deposited in the Yacht Basin and particularly in the area of Southwestern Yacht Club docks.~~

At the present time, shoaling is increasing significantly and has resulted in damage and destruction to a portion of the small boat dock at Southwestern Yacht Club.

As stated on page 7 of the report, a slow but continuous erosion of the backfill material would be expected to take place because the littoral drift is predominately in the direction of the Yacht Basin. Due to this drift the project would include a sand replenishment program as needed. Our concern is that this would eventually result in the area of Southwestern Yacht Club being a shoal area with a prohibitive cost of dredging around the docks.

The Board of Directors of Southwestern Yacht Club respectfully request that careful consideration be given to alternatives to the proposed project which would not result in the loss of the Yacht Basin by shoaling.

Sincerely,

Arden O. Bryant
Commodore

AOB/cc

ARMY CORPS LETTER

A letter of comment (dated August 10, 1979) was received on August 15, 1979 from the US Army Corps of Engineers after the review period had ended on July 29 and after the public hearing of August 7 was closed. For informational purposes and to complete the record, receipt of the letter is noted, a response provided above, and a copy hereby appended.



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2711
LOS ANGELES, CALIFORNIA 90053

SPLED-E

10 August 1979

Mr. Tomas E. Firle, Coordinator
Environmental Management
Port of San Diego
P.O. Box 488
San Diego, California 92112

RECEIVED

AUG 15 1979

ENVIRONMENTAL
MANAGEMENT

Dear Mr. Firle:

This is in response to a letter from your office dated June 1979 which requested review and comments on the Draft Environmental Impact Report (DEIR) for the "La Playa Beach Restoration, Shelter Island Area," UPD #78102-EIR-6. The DEIR has also been submitted to this office by the Port of San Diego in connection with permit application No. 79-82 for the same project. We offer the following comments:

a. The stated purpose of the project is to restore (widen) an existing public beach, yet no quantitative data are presented regarding project costs versus public benefits. This should be spelled out in the DEIR.

b. Environmental impacts of maintenance dredging (required to provide sand for the biannual replenishment of La Playa Beach) are not addressed. Two projects for which permit applications have been made, namely, the aforementioned No. 79-82, and No. 79-174 (Maintenance Dredging, Yacht Harbor, San Diego), are inter-dependent; their environmental impacts cannot be considered separately. Maintenance dredging impacts need to be incorporated into the DEIR.

c. Page 33: Comparison of the size and density of Littleneck Clams, Prototheca stominea, inhabiting La Playa Beach with those inhabiting the beds at San Onofre is not valid. The proposed project site is within a protected bay, whereas San Onofre is an open coast, high wave energy environment. Comparisons should be made with other enclosed areas.

SPLED-E

10 August 1979

Mr. Tomas Firle

d. Page 58: Possible mitigation measures for the loss of 0.8 acres of intertidal habitat are not adequately explored. The Port of San Diego should present, for review, specific proposals to mitigate for this loss.

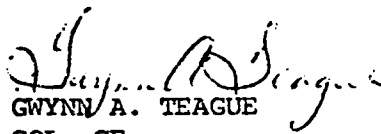
e. Page 62: Reasons for rejection of various project alternatives are not adequately supported or quantified, especially in terms of energy consumption, cost benefit, and required maintenance. These items should be addressed in the DEIR.

f. Page 82: The possible use of the beach for spawning by grunion, Leuresthes tenuis, needs to be investigated. The high concentration of grunion, seined off La Playa Beach four days prior to predicted spawning runs, strongly suggests that this species utilizes the beach. (San Diego Bay is the only bay known to support grunion runs). The beach should be surveyed for buried eggs, and a grunion watch should be conducted.

Until the environmental concerns cited above are adequately addressed, we cannot proceed with processing of your permit application. If you have any questions relative to our review of the DEIR or any other pertinent matters, please feel free to contact Mr. A. Forester Einarsen, chief, Environmental Quality Section, telephone (213) 688-2934, at your convenience.

Thank you for the opportunity to review and comment on this report. We hope that our comments may be of assistance in finalization of the EIR.

Sincerely yours,


GWYNN A. TEAGUE
COL, CE
District Engineer

APPENDIX A
INITIAL STUDY

SAN DIEGO UNIFIED PORT DISTRICT
P.O. Box 488
SAN DIEGO, CALIFORNIA 92112
(714)291-3900

Tomas E. Firle, Coordinator
Environmental Management

INITIAL STUDY

RECEIVED
Attachment E
JAN 3 1979

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL
MANAGEMENT

Project Title: LA PLAYA BEACH RESTORATION, Shelter Island Area
(UPD # 78102-6)
Location: Foot of Kellogg Street, La Playa Area, San Diego

APPLICANT

San Diego Unified Port District
(name of organization)
Joachim E. Liebmman
(authorized person)
Chief Engineer
(title)
3165 Pacific Highway
(address)
San Diego, CA 92112

phone: (714) 291-3900

PREPARER OF EA

San Diego Unified Port District
(name of organization preparing EA)
Michael V. Needham
(authorized person)
Assist. Environmental Mgmt. Coordinator
(title)
3165 Pacific Highway
(address)
San Diego, CA 92112

phone: (714) 291-3900

I. PROJECT INFORMATION

1. Project Description: Describe what is proposed, including construction and operation, the need, the major features and actions necessary to complete the project. This description should be self-explanatory and provide for a comprehensive but specific understanding of the proposal. Construction of a 45 foot wide by 350 foot long rock groin angling off from eroding shoreline to form triangular area (0.8 acre); filled with 4,000 cu. yds. sand to restore existing public beach and stabilize shoreline. Groin to extend 100 feet into Bay near Shelter Island Yacht Harbor entrance. Subsequent periodic sand replenishment or redistribution as needed by truck dumping. See the following "Project and Alternatives Summary" for more specific info.

Construction costs: \$140,000 Construction duration: 2 months
Annual costs: \$5,000 to \$10,000

"Project and Alternatives Summary"

PROPOSED LA PLAYA BEACH RESTORATION

Location:

The project area is located on the beach at the foot of Kellogg Street on Point Loma. It is also near the entrance to the Shelter Island Yacht Basin in North San Diego Bay.

The Problem:

The littoral sand drift along this beach is predominantly in a northerly direction. Sand deficiencies on this beach have existed for a long time. In 1964, however, construction of the Scripps Institution of Oceanography's Nimitz Marine Facility cut off the natural replenishment source altogether. Artificial nourishment furnished the sand supply over the subsequent 8 to 10 years but for some time now this sand has also moved northward along the beach, resulting in a denuded condition in the general project area and has exposed some of the adjacent privately owned property to wave action. Some property owners not properly protected by bulkheads have installed temporary shore protection using quarry stone riprap and sandbags.

Denudation of the beach has decreased the area available to the public for recreation and adversely affected the appearance of the shore line.

Purpose:

The purpose of the project is to restore the beach, and to diminish the sand drift from the area and the consequent need for periodic replenishment.

Procedure:

A skewed stone groin would be constructed starting at the mean high tideline adjacent to the Scripps fence and extending some 350 feet in a

A-1

north-northeasterly direction, terminating about 100 feet from the present shore line. The triangular space between the groin and the shore line is to be filled with sand. Beyond the end of the groin the erosion process would continue to a limited extent, and periodic sand replacement by redistribution of existing or importation of new sand are a part of the overall project.

The base for the groin would be excavated to zero elevation (MLLW) before the groin is constructed. The top of the groin to be at approximately elevation nine, slightly above the highest tide.

Quantities:

The total area which would be covered by the groin and imported sand is estimated at 35,000 square feet. The trench for the groin would require excavation of 600 cubic yards of sand, mud and debris which would be placed in the area of the proposed sandfill. The groin would consist of 1,000 tons of stone filter blanket, 4,200 tons of quarry run material, and 1,300 tons of stone revetment. The sandfill requires 3,600 to 4,000 cubic yards.

Cost:

The estimated cost is about \$140,000.

Permits:

Permits will be required from the California Coast Commission and the U.S. Army Corps of Engineers.

Alternative Solutions:

Three alternative solutions have been suggested in a report, dated January 1978, prepared by the California Department of Navigation and Ocean Development.

Alternative 1:

This alternative calls for initial and periodic beach nourishment only. Although it would restore the

beach in the most natural manner, the annual cost of replenishment is very high.

Alternative 2:

This alternative proposes a quarry stone riprap bank along the entire stretch from the Scripps fence to the foot of McCall Street. It would be at some distance from the shore line to permit filling of a high beach behind it. This proposal would destroy the character of the area as a neighborhood recreational and swimming beach. On the other hand, the maintenance would be negligible.

Alternative 3:

This calls for the modification of the shore line by installing four large sand filled synthetic fiber tubes. From the aesthetic viewpoint, this alternative is considered to be inferior. Also, damage to the tubes from vandalism is likely. These barriers could be constructed of other materials such as stone.

No Project:

The no project alternative would result in continued deterioration of the beach and decrease in the recreational area available to the public. It would also continue exposure of existing shore line to wave action.

2. Describe the project area, including distinguishing natural and man-made characteristics. Intertidal mud flat and sandy beach; some stone revetment, sand bags, rubble along shoreline residences, and some encroachments built to existing top of eroding bank; drainage improvements; and fence along south area separating site from Scripps Institution of Oceanography, Nimitz Marine Facility.

Attach an adequate site plan and identify the outlines of existing and proposed structures, parking, paving, landscaping, undeveloped area and the major features of a representative portion of adjacent parcels. The site plan can be a properly modified existing drawing or an adequately and carefully executed sketch; avoid unnecessary detail. All maps or other attachments must be fully xerox reproducible and shall not exceed 14" x 18", 8-1/2" x 11" preferred.

3. Describe the type of on-site activities:

- (a) Primarily limited to public beach recreational uses; including swimming, sun-bathing, picnic activity, fishing, etc.

UPD Master Plan's Land/Water Use Designation: Land Use: Public Recreation, Parks Recreation Areas, Water Use: Open Bay Water

- (b) Present/projected employees: N/A / N/A

- (c) Present/projected customers (clients): UNK / UNK (average per day)

- (d) Explain projections for (b) and (c): No public beach use records exist.

Existing use is likely to increase. Lawrence Street beach use about 40-50/day (DMU photos, 7/6/77).

4. (a) Total land area: 0 sq. ft.; total water area: 35,000 sq. ft. (Project area periodically inundated. Elevation range is 0 feet to 9 feet MLLW.

- (b) Existing/proposed square footage of land area for:

structures: 0 / 0 sq. ft.; paving: 0 / 0 sq. ft.

landscaping: 0 / 0 sq. ft.; undeveloped: 0 / 0 sq. ft.

- (c) Predominant/maximum height: +9MLLW / +9MLLW ft.

- (d) Existing/proposed parking: On site: 0 / 0 ; Street parking: 10 / 10 ; Other parking used: 40 / 40 .

- (e) Existing/proposed slips (piers): 0 / 0 ;

- (f) Extent of grading: Excavation: 600 cubic yds.; fill: 4,600 cu. yds;

Describe method, source: Excavate 600 cu. yds. for groin trench; Place 1,000 tons filter blanket; 4,200 tons quarry run; 1,300 tons stone revetment.

- (g) Dredging of water area: N/A cubic yds; fill: N/A cubic yds.

Describe method, source, and location of spoil disposal: Note: Excavation of groin trench and placement of groin rock and sand fill to be done at 0' elevation MLLW.

- (h) Indicate if sediment chemistry and/or biological data available: Yes

Describe present/future methods of solid waste disposal and amounts involved: No existing solid waste. Future solid waste disposal of beach trash can collection to be handled by Port District Maintenance.

- (i) Describe existing/proposed drainage improvements and what materials, other than domestic wastes, are/will be discharged into the sewer system: Existing main (36" diam.) concrete drainage culvert from Kellogg St. terminus; various small (8" diam.) PVC drainage pipes illegally constructed from adjacent properties. No additional drainage improvements proposed. No wastes will be discharged into sewer system.

- (j) Describe project appearance and how the design of the project is coordinated with the surroundings. Attach sketch of elevations and/or landscaping plan (maximum size, 14" x 18"), if available. Describe proposed signs: Project would appear as a gently sloping small sandy beach with low profile rock revetment groin along outward side. Appearance would be similar to existing surroundings. No signs are proposed, other than possibly safety information.

II. ENVIRONMENTAL BACKGROUND INFORMATION

1. Describe the existing conditions of the site and surrounding area, including land use; topographical features; plants, landscaping, animals, and marine life; land and water traffic patterns; and peak and congestion problems, as applicable: Existing land use is neighborhood recreational beach; Topography is gently sloping bay

shoreline with some top of bank erosion; no terrestrial plants are on site; landscaping of adjacent shoreline areas includes grass lawns, ice plant, misc. shrubbery; no animals other than domestic pets and some shorebirds; Marine life includes sargassum, clams, near shore fishes.

2. Describe any public bay access through the project site, including controlled access for clients, customers, or the public: Existing public bay access from Kellogg St. terminus directly onto beach. Adjacent access also available from Lawrence St., McCall St., and Nichols St.

3. List the primary beneficiaries of the project. Describe how the public will be affected: Primary beneficiary would be the general public. Restoration of an existing public neighborhood recreational beach area would increase area recreational opportunities.

4. Describe how the project could attract more people to the area or enable additional people to use the area, and what additional service businesses will be required: The project could attract more people to the area by the slight expansion of usable sandy beach area. No additional service businesses would be required.

5. (a) Estimate the number of daily motor vehicle trips (round trips) to the site: now 17 ; after completion 27 .

- (b) Estimate the average round trip mileage for each daily vehicle trip to and from the site: now 10 ; after completion 10 .

- (c) Explain your estimates for (a) and (b): San Diego City Transportation Planning Division Study (1/75), Beach and Bay Parks Uses; indicates average weekday vehicle trips per gross acre equal about 34. Silver Strand Beach, an underutilized beach, equals about 37 average weekday vehicle trips per 1,000 linear feet of shoreline. Proposed Kellogg Beach would include about 0.8 gross acre (27 ADT) and about 350 linear feet of shoreline (13 ADT). Existing usable portion of Kellogg Beach varies with tidal height. Average sandy beach exposure is about 0.5 gross acre (17 ADT). Round trip mileage based upon neighborhood park and primarily local use characteristics.

6. List UPD Plat #, name, and address of controlling interests for all adjacent parcels, including those controlled by public agencies (available from UPD Property Engineering).

UPD Plat # ---	UPD Plat # ---
Name	Name
Address	Address
UPD Plat # ---	UPD Plat # ---
Name	Name
Address	Address

7. Describe the fire protection needs of the site and the nature and location of existing/proposed facilities: Fire protection needs of site are and would be limited to beach uses, but would not necessitate additional facilities. No facilities on site.

8. Describe any environmental (or community) features of the site or its surroundings which may be affected (or affect) the project. Consider items such as traffic, noise, air quality, land use, plants, animals, or marine life both from the construction and operational aspect: Traffic along local streets may increase slightly (by about 10 ADT); noise may increase slightly along beachfront with increased beach use; air quality may be affected during construction and periodic sand replenishment/redistribution; land use of beach area may increase slightly, but type of use will not change; terrestrial plants/animals will not be affected; marine life may be affected during construction and subsequently disturbed during future periodic sand replenishment/redistribution; parking demands may increase slightly along local streets; groin/beach construction may affect adjacent shoreline configurations and erosion and/or shoaling potential.

III. SPECIFIC IMPACTS

- Describe physical impacts to land and/or bay: Extremely small decrease in tidal prism and increase in flushing rate. Potential change to adjacent shoreline configurations and/or to erosion/shoaling potential.
- Describe any change to plant or animal life, including landscaping: Terrestrial plant/animal life/landscaping would be unaffected. Bottom marine life would be destroyed/displaced. Intertidal habitat would be lost.
- Describe the nature, amount, and location of any change in bay water quality, including removal and/or construction of structures in the water: Excavation of groin trench and deposition of dredge spoils for sandfill may release sediment contaminants into water.
- Existing/proposed water consumption: NA / NA gal./day.
- Existing/proposed electric power consumption: NA / NA kwhr./month.
- Existing/proposed gas/oil consumption: NA / NA therms/day or gal./day.
Present gas/oil usage? NA. Describe gas/oil type and supply sources: Gas/oil consumption would be limited to construction uses.
- Describe air quality impacts from both stationary and mobile sources, including any dust, odors, fumes, chemical vapors, water sprays, etc.: Short-term dust impacts during construction and future periodic sand replenishment/reconstruction.
- Indicate how views from/to the site could be affected by the project from/to nearby property and surroundings. Describe any project interference with the line of sight to the bay from the nearest public road: Project would not interfere with views from/to the site nor from/to nearby property and surroundings. There would be no project interference with the line of sight to the bay.
- Describe any change in the sound environment which could occur on- or off-site, both from construction and operational noise: Short-term noise impacts during construction and future periodic sand replenishment/redistribution. Recreation related noise may increase slightly along the beachfront with increased use.
- Describe present/future demands on urban support systems (streets, sewers, utilities, restaurants, industrial and commercial support, housing, etc.): Existing urban support systems appear adequate to meet future demands from operation of the proposed project. Narrow streets in the vicinity, however, would not be able to comfortably accommodate truck traffic in this area and movement of sand in any appreciable quantities during replenishment/redistribution, would have periodic disruptive effects.

IV. CHECKLIST OF ENVIRONMENTAL EFFECTS

Check "yes" or "no" will the project:

	Yes	No
1. Significantly change the present use of the site?		x
2. Be incompatible with existing plans, programs or policies of any governmental agency or jurisdiction?		x
3. Require any variance from existing environmental standards (air, water, noise, etc.)?		x
4. Significantly change any existing features of tidelands, bay, estuary, or shoreline?	x	
5. Alter any unique, natural or man-made features?		x
6. Involve the demolition or removal of existing improvements, including landscaping?	x	
7. Increase the possibility of erosion of tidelands or siltation of the bay?		x
8. Involve soil stability or geological hazards?		x
9. Require a significant increase in public or private services?		x
10. Significantly affect traffic or transportation facilities?		x
11. Alter the employment base of the community?		x
12. Alter or limit access to public facilities or recreational resources?		x
13. Alter or eliminate views or vistas?		x
14. Alter the biological habitat of any flora, fauna or species ?	x	
15. Significantly affect the water quality of the bay?		x
16. Contribute adversely to air quality?		x
17. Substantially increase energy and water use?		x
18. Result in a different noise environment, both on or off site?		x

V. MITIGATING MEASURES

- Describe all proposed mitigating measures, or those already incorporated in the project to mitigate identified or potential adverse environmental effects: Program for future periodic sand replenishment/redistribution (estimated 1-2,000 cu. yds year) would decrease potential change to adjacent shoreline configurations and/or erosion/shoaling; standard regulatory procedures would be applied during construction to mitigate air quality (dust) and equipment noise impacts; rock groin height is limited to +9 ft. above MLLW and no views will be impaired.
- Specify how and when they will be carried out: During project construction and operation.
- Explain the extent and effectiveness of mitigation expected and how this was determined: Extent and effectiveness of sand replenishment/redistribution as mitigation against shoreline configuration changes/shoaling is expected to be adequate based upon District engineering site inspections and DMOD Report (1/78).
- What other mitigation measures were considered? Utilization of hydraulic dredges with small booster pumps for sand replenishment or redistribution without the need for truck transfer along local streets.
Why were they discarded? Sand pumping would avoid impacts associated with truck transfer, but would produce noise during operations and would increase expense.

VI. ALTERNATIVES (See also prior attachments: "Project and Alternatives Summary")

- Describe what alternatives were/are considered to reduce identified or potential adverse environmental effects: Place major submerged breakwater parallel to entire eroding area, but would not reestablish public beach.
b) Describe environmental benefits/liabilities of the project and alternatives: Project would not achieve objective of back fill of sewer main trench to reestablish original bottom contour and public beach, but with groin construction, such back fill would be unnecessary.
c) Describe how the project and alternatives are consistent with the provisions of the California Coastal Act of 1976, i.e. marine-oriented uses: Project would reestablish and enhance public beach and access and would stabilize existing shoreline.

3. Prior Environmental Documents (List all at this site)

- (a) UPD # 7563-EIR-25 Title: SHELTER ISLAND PRECISE PLAN Final EIR
 UPD # --- Title: ---
 UPD # --- Title: ---
- (b) Categorical Exemptions: UPD # --- Date: ---
 UPD # --- Date: ---
 UPD # --- Date: ---

For other pertinent reports see following page E-9b
 4. Permits

- (a) Required permits: List all other public agencies which have approval or permit authority related to this project, e.g., City building permits, Coastal permit, WQCB, APCD, Army Corps, EPA, FAA, Coast Guard, etc. Specify agency and type of permit required. (Omissions may invalidate or cause delay of this environmental review at a later date).

Coastal permit WQCB

Army Corps

UNR

Coast Guard

EPA

(b) Prior permits issued at this site:

- (1) Last Coastal Zone Permit: File No: --- Analyst: ---
 Title: --- Date: ---
 Describe conditions: ---
- (2) WQCB: File No: --- Analyst: ---
 Title: --- Date: ---
- (3) APCD: File No: --- Analyst: ---
 Authority to construct: --- Date: ---
 Permit to operate: --- Date: ---
- (4) U.S. Army Corps of Engineers: Public Notice No: Permit #73242 (8/9/73)
 as amended by permit #74234 (7/24/74)

Title: Second Point Loma Sewer Force Main Date: Aug. 9, 1973

(c) Existing or applied for permits:

- (1) Indicate any permits applied for or in effect for operation or use. Title, file numbers, date, phone number, name of person who issues or processed the permit must be included:

Two studies done in connection with Second Point Loma Sewer Force Main project by Woodward-Clyde Consultants, Evicon Division for Rick Engineering Company, May 1975: Short-Term Effects of a Dredging-Pipelining-Backfitting Project on an Eelgrass Bed in San Diego Bay; February 1976: Long Term Effects of (Same) after One Year.

E-9 a

2. Describe the "no project" alternative, i.e., indicate the environmental consequences of continuing the existing conditions, without the proposed project: Continuation of existing conditions would result in the continued northerly transport of sediment. This transport would continue to cover existing intertidal habitat to the north and would continue to erode the existing shoreline at the project site. Availability of beach for public recreational use would decrease at Kellogg St. and according to (MOD) the City's storm drain pipe could be undermined and might need major repair and/or replacement.

VII. BACKGROUND INFORMATION

1. UPD Property Plat #: --- ; Title: --- (available from UPD Property Engineering).

Dated: ---

2. Pre-Application Project Processing

- (a) Indicate if the conceptual plans have been presented to the Board of Port Commissioners or Port Staff. If so, describe in what form, and give date and result: Yes. Board of Port Commissioners approved the design concept by Resolution (R78-352) and authorized Port Director to issue RFP for env. consult. services. Approved in concept 12/12/78.

- (b) Indicate if project plans have been submitted to Port Staff: Yes
 If so, describe in what form, to whom submitted, give date and result: Board approved concept, discussed between Eng. and Env. Mgmt. 12/14/78. Eng. prepared project description.

- (c) List all environmental consultations or processing contacts with other agencies, firms or individuals in connection with this project. Give agency, name, phone, date, subject and result of consultation: Project was 1/8/78 with part of shoreline protection planning, interagency workshop at District on 1/8/78 with:

USFW: W. White S.D. Coastal: B. Warren
 " M. Free J. Kapiloff: J. Ruffner
 NMES: J. Slawson UPD: D. May
 COE: J. McVey " T. Firle
 " M. Cushman " M. Needham
 DMOD: J. Habel " J. Liebmann
 CFG: R. Hall " D. Forrest
 " T. Hoban " F. Trull

- (d) Last approved project plans or working drawings at this site.

Title: ---

Project #: --- ; By whom Approved: --- ; Date: ---

E-9 b

REPORTS RELATED TO LA PLAYA BEACH

- (2) Existing or applied for Variances: Indicate any variances which are applied for or in effect for the project site or operations. Agency, date, contact person, phone, conditions of variance and expiration date, must be included: _____
- _____
- _____

1. California State Department of Navigation and Ocean Development. 1978. Report on Shore Protection for La Playa Beach, San Diego. State of California Resources Agency, January 1978. 33p.
2. Cramer, L. E. 1977. Preliminary Report on Design and Construction Feasibility for a Protective Seawall at La Playa Beach, Cramer Corporation, San Diego, July 1977.
3. Robillard, G. A. and P. E. Porter. 1975. Short-Term Effects of a Dredging-Pipelaying-Backfilling Project on an Eelgrass Bed in San Diego Bay. Prepared for Rick Engineering Company, San Diego, by Woodward-Clyde Consultants, Envicon Division. 53p.
4. Robillard, G. A. and P. E. Porter. 1976. Long-Term Effects of a Dredging-Pipelaying-Backfilling Project on an Eelgrass Bed in San Diego Bay after One Year. Prepared for Rick Engineering Company, San Diego, by Woodward-Clyde Consultants, Envicon Division. 18p.

VIII. APPLICANT'S CONCLUSIONS

1. Explanations to Checklist of Environmental Effects, Section IV: For "yes" items, explain adequately why the effect should NOT be considered a "significant adverse environmental impact": 4) Actual physical change to existing shoreline would assist in restoration of existing beach. (6) Existing improvements are unauthorized encroachments by private land owners upon public tidelands. Some grasses and shrubbery may have to be removed, but no tree removal is anticipated. 14) About 0.8 acres of sandy beach/mudflat intertidal habitat will be replaced by the proposed beach fill. No rare-endangered or unique marine plants or animals are known to exist on the site.

2. Statement of Environmental Impact:

- ☐ The project will have NO significant adverse environmental impact.
- ☒ The project COULD have significant adverse environmental impacts. An Environmental Impact Report should be prepared by the Port District at applicant's expense after consultation on scope, implementation, and fees.

3. I am aware of the provisions of the California Coastal Act of 1976 and have consulted with Bruce Warren (print name) of the coastal staff on July 6, 1978 (date) concerning this proposal, who expressed the following concerns: (if none, insert "none") Discussion regarding parking requirements and public access. Project was in early planning stages.

Applicant Please Note: Do NOT file a San Diego Coast Regional Commission Application For Permit until after District environmental processing has been completed and you are so notified in writing.

IX. CERTIFICATION

1. PREPARER'S Certification: This Environmental Assessment was prepared by me for/as the applicant and I hereby certify that the statements furnished above and in the attached exhibits disclose relevant information to determine environmentally significant impacts, as required for the Port District's Initial Study. It has been prepared to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Michael V. Needham (signature of preparer) 12/27/78 (date)
Michael V. Needham (print name) Assistant Coordinator
 Environmental Management
 (position)
San Diego Unified Port District (affiliation) (714) 291-3900 (telephone)
3165 Pacific Highway (address)
San Diego (city) CA (state) 92112 (zip code)

2. APPLICANT'S Certification: I hereby certify that the project-related facts, statements, and information furnished above and in the attached exhibits, and in any other form to the preparer of this Environmental Assessment or to the Port District are true and correct to the best of my knowledge and belief. I am authorized to and do hereby accept and commit implementation of all mitigation measures listed in this Environmental Assessment and of the project as represented in the "Project Description." I understand that non-compliance with any of the mitigation measures or changes in the project as described shall be grounds to invalidate any/or all project approvals or permits regardless of the stage of project development or operation. I will notify the San Diego Unified Port District immediately in writing of any changes of the proposed project and I acknowledge that project changes may require additional evaluation. I shall hold the Port District harmless of any cost or damages resulting from consequences of non-compliance or unapproved project changes.

Joachim E. Lehnann (signature of applicant) 1-3-79 (date)
Joachim E. Lehnann (print name) Chief Engineer
San Diego Unified Port District (organization) (714) 291-3900 (telephone)
3165 Pacific Highway (address)
San Diego (city) CA (state) 92112 (zip code)

o EVALUATION o

TO BE COMPLETED BY THE SAN DIEGO UNIFIED PORT DISTRICT

X. ENVIRONMENTAL EVALUATION

1. Environmental Assessment Form Checklist:

Attachments

- (a) EA received for checking on: 12/22/78
 Filing Fee: NA by ---
 Deposited on NA by ---
 Address, signature verification by MVN
 EA Entries: ☒ complete ☐ deficient: 0's
☐ Site Plan
☐ Vicinity Map
☐ Property Plat
☐ Draft Coastal Appl.
☐ Draft Army Corps Appl.

Additional informational pages about:
 Project and Alternatives Summary
 Reports related

- (b) ☒ EA accepted as "complete" for processing on 1/3/79 by MVN
☒ EA rejected as incomplete on 12/22/78 by MVN
 Preparer/applicant notified on 12/21/78 by MVN
☐ Additional information required on 12/21/78 by MVN
 Response received on 1/3/79 by MVN

(c) The following agencies have been identified as (possible) "responsible agencies" or "jurisdictions by law":

☒ Coastal Commission ☒ Army Corps ☒ SD City
☒ APCD ☒ EPA ☐ Chula Vista
☒ WQCB ☐ Coronado
☐ CFC ☐ USFV ☐ Imperial Beach
☐ State Lands Commission ☐ U.S. Navy ☐ National City
☒ DMOD ☒ Coast Guard ☐ SD County

2. Environmental Review:

- (a) Specific concerns or questions were raised on the following information items submitted in Sections I-IX above:

Item #	Question/Concern	Explanation
I4d	Street and other parking available	Along area streets
I4h	Future trash collection	UPD Maintenance Dept.
I4i	Private drainage removal pending effects	Unauthorized encroachments
II5abc	Daily motor vehicle trips	SD Trans-Plan study
II8	Sand replenishment truck traffic	Access from area streets
III	Trench excavation/sediment quality	May have EPA limitation

- (b) The yes/no determinations for the following items in the Checklist of Environmental Effects, Section IV, are considered to have been incorrectly placed and should be changed:

Item	From	To	Rationale
---	---	---	
---	---	---	
---	---	---	

- (c) In addition to the review and evaluation of Sections I-IX, the following was considered:

Will the PROPOSAL result in:	Yes	Maybe	No
1. Substantial air emissions, or deterioration of ambient air quality, including emission of objectionable odors or sustained dust?	---	---	x
2. Substantial changes in water movements, direction, speed, flushing characteristics, or water quality?	---	x	---
3. Changes in the diversity of plant or animal species?	x	---	---
4. Reduction of the numbers of any rare or endangered plant or animal species?	---	---	x
5. Introduction of different species of plants or animals to the detriment of the existing flora and fauna?	---	x	---
6. Substantial effects due to light and glare, or changes in noise environment?	---	---	x
7. A change in the aesthetics of the area?	---	---	x
8. Introduction or change in the level of potentially hazardous substances to which humans or the environment could be exposed cumulatively or by accident?	---	---	x
9. Substantially increased demands on energy, fuels, water or waste disposal requirements?	---	---	x
10. Any effect on historic or archaeological areas?	---	---	x
11. A substantial change in quantity or quality of public or commercial recreational opportunities?	---	---	x
12. A change in any Port District or City Plan?	---	---	x
13. The requirement of any variance from existing codes and ordinances?	---	---	x

	Yes	Maybe	No
14. Any effect on existing community facilities or services?	---	x	---
15. Any effect to either on- or off-site utility capabilities?	---	---	x
16. Any material alteration to the character of its surroundings?	---	x	---
17. An adverse effect on adjoining communities?	---	x	---
18. An acceleration of the development of adjoining areas?	---	---	x

(d) Mandatory Findings of Significance

A project shall be found to have a significant effect on the environment if:

- (a) The project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
- (b) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- (c) The project has possible environmental effects which are individually limited but cumulatively considerable. As used in the subsection, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- (d) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

Do any of these findings apply?	Yes	Maybe	No
Give the rationale for any yes or maybe answer, to assist in the preparation of a mandatory EIR.	---	---	x

The proposed groin construction and sand beach fill would eliminate the existing marine intertidal plant and animal community for the area covered.

- (e) The following have been directly notified/consulted about the project:

Agency	Person	Phone	Disposition	Date
CCC	B. Warren		Concerned w/parking/access	7/6/78
APCD				
WQCB				
CFG	R. Mall		Concerned w/Habitat Loss	7/6/78
USFW	W. White		Concerned w/Habitat Loss	7/6/78
NMFS	J. Stawson		Concerned w/Habitat Loss	7/6/78
Corps	J. McVay		Concerned w/Erosion, etc.	7/6/78
City				

NI=No further interest; ND/IS=document reqst; C=concerned about

XI. DETERMINATION

1. The ENVIRONMENTAL MANAGEMENT DEPARTMENT of the San Diego Unified Port District on _____ reviewed and considered above proposal entitled, _____ (UPD # _____).

On the basis of the Initial Study (above information, but not limited to it), the Environmental Management Department found:

- ☐ The proposal could NOT have a significant adverse effect on the environment and directed the preparation and processing of a Categorical Exemption, under Class _____, which reads in part _____

_____ ; and
Class _____, which reads in part _____

2. The ENVIRONMENTAL REVIEW COMMITTEE of the San Diego Unified Port District at its meeting on January 3, 1979 reviewed and considered above proposal entitled, LA PLAYA BEACH RESTORATION, Shelter Island Area (UPD #78102-6).

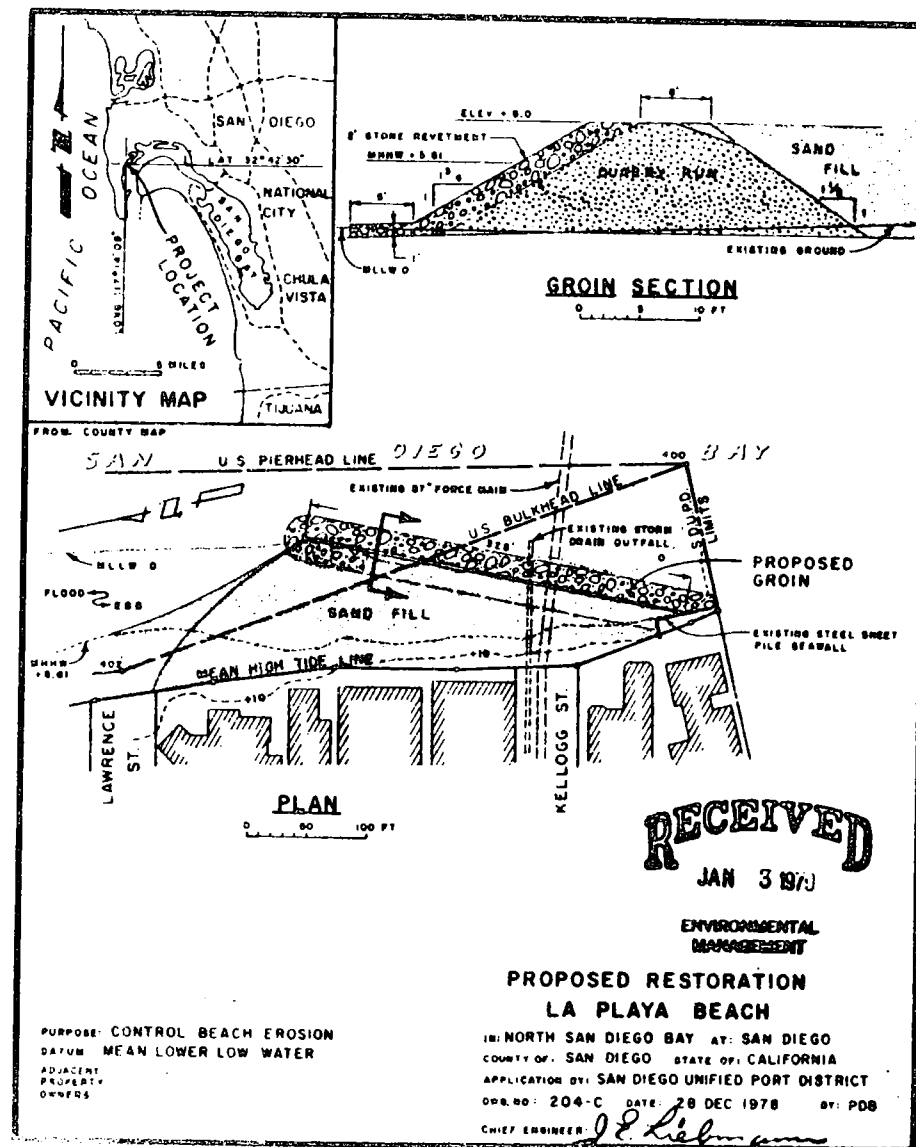
On the basis of the proceedings at this meeting and the Initial Study (above information, but not limited to it), the Environmental Review Committee found:

- ☐ The proposal could NOT have a significant adverse effect on the environment and directed the preparation and processing of a Negative Declaration.
- ☐ The proposal COULD have a significant adverse effect on the environment UNLESS all of the specific mitigation measures listed in this Initial Study are included in the project, which then would NOT have a significant environmental impact. Only upon acceptance of all of the mitigation measures by the applicant, the preparation and processing of a Negative Declaration is directed.
- ☒ The proposal MAY have a significant adverse effect on the environment and an Environmental Impact Report is required.

Thomas E. Fytle
THOMAS E. FYTLE, Chairman
Environmental Review Committee

1/3/79
(date)

E-15



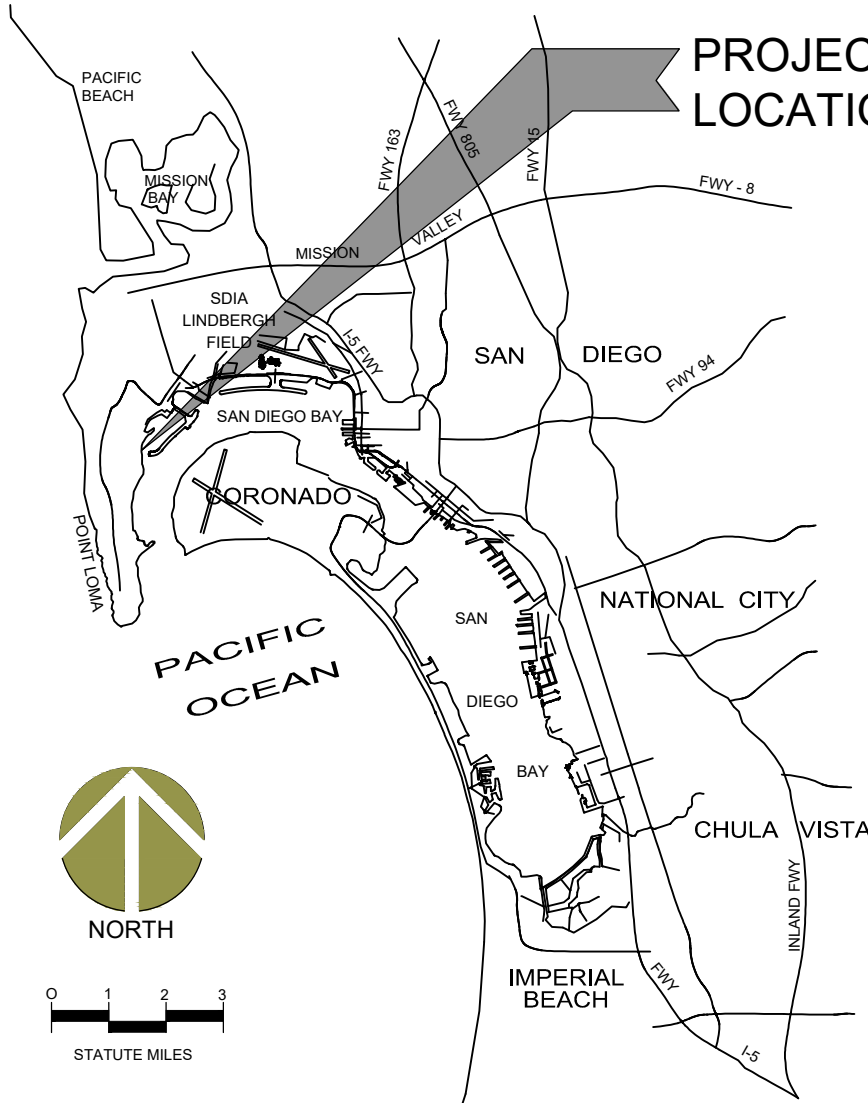
Document
End

SAND REPLENISHMENT AT KELLOGG BEACH FY 2025

SAN DIEGO, CALIFORNIA

VICINITY MAP

NO SCALE



ABBREVIATIONS

BMP'S	BEST MANAGEMENT PRACTICES
ELEV	ELEVATION
EXIST	EXISTING
I.E.	INVERT ELEVATION
MHTL	MEAN HIGH TIDE LINE
SDUPD	SAN DIEGO UNIFIED PORT DISTRICT

DATUM

ALL DISTRICT PROJECTS MUST USE THE FOLLOWING BASIS OF BEARINGS, UNLESS OTHERWISE APPROVED BY THE DISTRICT LAND SURVEYOR: NAD 83 (1992) EPOCH 1991.35, CCS83, ZONE 6.

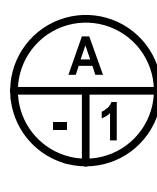
VERTICAL DATUM: MEAN LOWER LOW WATER (N.T.D.E. 1941-1959)
BENCHMARK SDUPD-031: 3" BRASS DISK STAMPED "PORT OF SAN DIEGO GPS CONTROL LS 6000" FOUND IN THE NE'LY CORNER OF A CONCRETE STORM DRAIN VAULT AT THE FOOT OF McCALL STREET.
ELEVATION: 10.827'

LEGEND

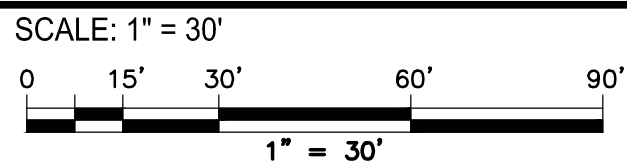
	SECTION OR DETAIL IDENTIFICATION
	SHEET NUMBER WHERE DETAIL IS SHOWN
	SHEET NUMBER WHERE DETAIL IS TAKEN
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING ROCK REVETMENT
	PROPOSED SAND FILL

SHEET INDEX

A/E NO	SHEET NO	DESCRIPTION
G1	1	TITLE SHEET
C1	2	GRADING PLAN, TYPICAL SECTION & WALL AND SITE ACCESS DETAIL



LOCATION MAP



PROJECT LOCATION



WORK TO BE DONE

WORK TO BE DONE SHALL BE ACCORDING TO THIS DRAWING AND SPECIFICATION NO 2024-26 OF THE SAN DIEGO UNIFIED PORT DISTRICT. THE WORK INCLUDES PLACING, GRADING AND FURNISHING OF APPROX. 2200 CY OF SAND MATERIAL TO REPLENISH AN ERODED PORTION OF KELLOGG BEACH IN SAN DIEGO, CALIFORNIA AND OTHER ANCILLARY WORK AS SHOWN ON THE DRAWING AND IN THE SPECIFICATIONS.

GENERAL NOTES

- SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE COMMENCING WORK.
- CONTRACTOR IS RESPONSIBLE TO LAY OUT ALL NECESSARY HORIZONTAL AND VERTICAL CONTROL AS SHOWN ON THE DRAWING.
- CONTRACTOR SHALL PERFORM WORK IN SUCH A MANNER AS TO MINIMIZE IMPACT ON ADJACENT PROPERTY OWNERS. CONTRACTOR HAS TO ADHERE TO THE DAYS AND TIME OF OPERATIONS AS SPECIFIED ON THE SPECIFICATIONS. SEE SECTION 01 14 00, WORK RESTRICTIONS OF SPECIFICATIONS 2024-26.
- CONTRACTOR HAS TO PROTECT IN PLACE ALL EXISTING IMPROVEMENTS. ANY EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION THAT ARE NOT INCLUDED IN THE WORK SHALL BE REPLACED BY THE CONTRACTOR WITHOUT COST TO THE DISTRICT.
- CONTRACTOR SHALL TAKE EVERY REASONABLE PRECAUTION TO PREVENT FOREIGN MATERIALS AND DEBRIS FROM FALLING INTO THE BAY DURING OPERATIONS.
- NO FUELING OR REPAIR OF EQUIPMENT ALLOWED ON THE PROJECT SITE.
- CONTRACTOR'S ACCESS IS SHOWN ON THIS DRAWING. CONTRACTOR TO ACCESS THE PROJECT SITE VIA KELLOGG ST. ACCESS FROM McCALL STREET IS NOT RECOMMENDED SEE DETAIL D ON SHEET 2.

CONSTRUCTION NOTES

- ALL SAND MATERIAL PLACED ON THE SITE DURING THE DAY SHOULD BE SPREAD OVER THE SITE AT THE END OF EACH WORK DAY. UNLESS APPROVED BY THE DISTRICT REPRESENTATIVE.
- CONTRACTOR SHALL PLACE SAND MATERIAL DURING LOW TIDE CONDITIONS, WITH USE OF SILT BARRIER. SEE WORK RESTRICTIONS OF SPECIFICATIONS 2024-26.
- CONTRACTOR SHALL USE ONLY RUBBER TIRED FRONT-END LOADER EQUIPMENT FOR THE WORK.
- NO MOTORIZED EQUIPMENT IS ALLOWED IN THE WATER.
- FURNISHING WATER FOR THE WORK IS CONSIDERED TO BE A SUBSIDIARY OBLIGATION OF THE CONTRACTOR. SEE SPECIFICATIONS FOR DUST CONTROL.
- THIS WORK IS COVERED UNDER THE ARMY CORPS OF ENGINEER (ACOE) PERMIT, SEE APPENDIX C OF THE SPECIFICATIONS.
- APPROVED CITY OF SAN DIEGO RIGHT OF WAY PERMIT HAS BEEN ISSUED FOR THIS PROJECT BY THE CITY. SEE APPENDIX D

RECORD DRAWING

REVIEWED BY:

PROJECT-MANAGER/ENGINEER

DATE

NOTE:
THIS DRAWING MAY BE A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. UTILIZE GRAPHIC SCALES TO VERIFY IF DRAWING IS A REDUCTION, AND ADJUST SCALES ACCORDINGLY TO THE GRAPHIC SCALES SHOWN.

SPEC NO. 2024-26 WBS NO. ME-0036-01

REFERENCES -

PROJECT ENGINEER

CONTRACTOR -

CONSTRUCTION STARTED -

CONSTRUCTION COMPLETED -

COST -

INSPECTOR -

REVISIONS

DATE / APPROVED



**PORT of
SAN DIEGO**
Waterfront of Opportunity

DESIGNED

HECTOR ARIAS

DRAWN

TRE DUBOISE

CHECKED

CHRIS BROOKE

APPROVAL RECOMMENDED

Hector Arias

H. ARIAS

PROJECT MANAGER

APPROVED

Chris Brooke

2/20/2025

ENGINEERING/CONSTRUCTION DEPARTMENT MANAGER

SAN DIEGO UNIFIED PORT DISTRICT

**SAND REPLENISHMENT
AT KELLOGG BEACH FY 2025**

TITLE SHEET

DATE -

A/E NO. A/E No.

SHEET 1 OF 2

DRAWING NO.

REV.

SI-2024-02

-

