Exhibit A
Scope of Work and Specifications
Bid Log Number 2014-02

2014 Bolsa Chica Lowlands Maintenance Dredging Project

July 28, 2014
PART 1 – GENERAL

1.1 WORK INCLUDED

The work of this Section consists, in general, of furnishing transportation, labor, materials, equipment, and incidentals necessary to perform the work including but not limited to the following:

A. Secure necessary permits as specified in Section 01575, “Temporary Environmental Controls.”
B. Dredging and Placement as specified in Section 02325, “Earthwork/Dredging”.
C. Site cleaning and removal of debris, equipment, and excess material upon completion of work.
D. Incidental work as shown on Plans, specified or directed by the Owner’s Representative.

1.2 WORK BY OTHERS

Not Applicable

1.3 DEFINITIONS

A. Oil Company - SoCal Holding, LLC (SoCal)
B. Contractor - Construction Contractor. For purposes of the site work, safety, and access standards under this work, Contractor, Contractor’s personnel, Contractor’s equipment and staging, shall be inferred to include all Contractor’s subcontractors and vendors entering the project site. Contractor shall ensure that its subcontractors adhere to the requirements of work as indicated in plans and specifications.
C. Owner - California State Lands Commission (CSLC)
D. Owner’s Representative - On Site Representative of the CSLC
E. Project Datums - Horizontal Datum: meter (m), California State Plane Zone 6 National American Datum 1983 (NAD83); Vertical Datum: meter (m), National American Vertical Datum 1988 (NAVD88)
1.4 TIME OF COMPLETION AND LIQUIDATED DAMAGES

A. The total time for completion will extend from the Notice to Proceed (NTP) to April 15, 2016.

B. There will be liquidated damages assessed as follows:

1. For each calendar day beyond 21 calendar days from NTP the dredging plan, schedule, and initial hydrographic survey are delayed, $1,000 dollars will be assessed.
2. For each calendar day beyond 45 calendar days from NTP the dredging is delayed, $5,000 dollars will be assessed.
3. Liquidated damages shall be concurrent.

PART 2 – PRODUCTS
Not Applicable

PART 3 – EXECUTION
Not Applicable

PART 4 – MEASUREMENT & PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
1.1 WORK INCLUDED

The work of this Section consists, in general, of furnishing all labor, materials, tools, equipment, and incidentals complete and in place as indicated on the Plans and as specified and doing all the work involved in complying with permit restrictions.

1.2 SUBMITTALS

The following Preconstruction Submittals shall be submitted in accordance with Section 01330, “Submittal Procedures.”

A. Overall Work Schedule
B. Parking and Field Office Placement
C. Contractor Regulations
D. Spill Prevention and Response Plan
E. Oil Field Safety Instruction Plan
F. Watercraft List (equipment used for materials or personnel transport)
G. Storm Water Pollution Prevention Plan
H. Transportation Plan/ Traffic Control Plan
I. Construction Practices and Safety Measures
J. Best Management Practices
K. Local Mariner’s Notification
L. Air Quality Conformity Determination and Local/Regional Air Permits
M. Manufacturer, Product Spec. and Anchor Plan for Permanent Pipe Segment

1.3 SPECIAL SCHEDULING REQUIREMENTS

A. Have materials, equipment, and personnel required to perform each segment of the work at the site prior to the commencement of the work. Mobilization includes the delivery, assembly of the dredge and pipeline, and operation of the dredge to deliver sand to the beach. Mobilization shall not be accepted until 763 m³ (1,000 CY) is successfully pumped to the beach. Payment for dredge volume is separate from mobilization.

B. The Pacific Coast Highway, Bolsa State Beach, City of Huntington Beach beach, and adjacent Oil Company facilities will remain in operation during the entire construction period. The Contractor shall conduct his operations so as to cause the least possible interference with normal operations of these activities, including oil spill simulation exercises.
C. The City of Huntington Beach beach (City Beach) is not scheduled to be used in the 2014-2016 dredging but may be added to the beach fill area with advanced request by Contractor and approval by Owner’s Representative. No Contractor activities are presently authorized on the City Beach.

D. Permission to temporarily interrupt any site traffic, State Park, City of Huntington Beach, or Oil Company operations or utility service shall be requested in writing a minimum of 15 calendar days prior to the desired date of interruption. The Contractor shall be solely responsible for any permits and approvals required for operations beyond those provided by Owner.

E. The work under this contract requires special attention to the scheduling and conduct of the work in connection with existing operations and public convenience. Identify on the construction schedule each factor which constitutes a potential interruption to these activities.

1.4 CONTRACTOR ACCESS AND USE OF PREMISES

A. Site Requirements
Ensure that Contractor personnel employed on the work are familiar with and obey regulations including safety, fire, traffic and security regulations. Keep within the limits of the work and use the authorized avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

B. Special Requirements for Work Within Oil Field Operator’s Boundaries
Before beginning any work, Contractor must ensure that all Contractor employees read, understand and comply with the Oil Field Operator Contractor Safety Handbook. The Contractor must validate that every worker has read and understands the handbook. Contractor is responsible to keep records available for periodic audit by Owner’s Representative. Additionally, a log must be kept at each job site office listing the names of all employees who have met this requirement.

Safety rules in the handbook are basic and general in nature and cannot cover every working condition. Additional local rules and procedures will apply in certain circumstances.

Before starting any work, Contractor must show all employees the Oil Company provided videotape. The video explains safety policies for the project site and basic work rules. The video also explains hazards Contractor’s employees may encounter on the site. Contractor must train its workers on all applicable hazards.
Contractor must give an Oil Company provided oil field safety test to each employee after the employee views the videos. Each worker must pass the test before he or she starts work. Each Contractor employee is accountable for his or her own safety and the safety of others in the workplace.

C. DMV Employer Pull Notice Program
Contractor employees who operate vehicles or heavy equipment on the project must have a valid driver’s license. Contractor should have a management system to ensure that this requirement is met. Contractor could meet the requirement by using the State of California Department of Motor Vehicles Employer Pull Notice Program. The program is offered to any employer interested in identifying an employee (driver):

1. Whose license has been revoked; or
2. Who does not have a current driver’s license (Class 1/A, 2/B, 3/C)

For a fee, the Department of Motor Vehicles will issue a driving record printout for each employee. The DMV will automatically generate a driving record report at least every 6 to 12 months for each employee. The DMV will use the report to identify employees who do not have a current and valid driver’s license. Regardless of the system used, Contractor must not allow employees to operate a motor vehicle on the project until they can prove they have a valid driver’s license.

D. Accident Reporting
Contractor is required to immediately report any and ALL accidents (that occur on the project site) to the Owner’s Representative. Contractor is required to submit a written accident report to the Owner’s Representative within 24 hours of the accident.

E. Spill Reporting
Contractor shall notify Owner’s Representative, Oil Company, and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center, 1-800-424-8802, the California State Lands Commission, (562) 590-5201, and the California Governor’s Office of Emergency Services, 1-800-852-7550) if a reportable quantity is released to the environment. ANY in water spill of any waste product, lubricant, solid, or liquid that does not belong in the water shall be reported to the Owner’s Representative.

F. Working Hours
There are no limits on working hours except as cited in the permits. Work may be performed Monday through Saturday, exclusive of holidays, unless otherwise specified. During periods of darkness, the different parts of the work shall be lighted in a manner approved by the Owner’s Representative.
1.5 SECURITY REQUIREMENTS

Contractor shall keep the site perimeter secure at all times. Provide temporary closures as required to maintain security, including temporary fencing around the beach discharge point and beach staging area. Do not park on or block the site entrances or transit routes at any time. On-site parking will be allowed only within the designated staging areas, the Contractor’s work zone on the beach or other areas as designated by the Owner’s Representative. Parking of private vehicles within these areas will only be allowed during approved hours of work. Parking in the eastern State Beach Parking lot will only be allowed for workers engaged in activities related to the inlet and State Beach improvements and only during approved hours of work. Work vehicles shall bare Contractor signage and shall utilize Owner issued dash placards. Non-paid access of limited Contractor vehicles to the State Beach will be provided by State Parks. However, any required payment for parking will be the responsibility of the Contractor.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
SECTION 01310
ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the various requirements specified.

1.2 REFERENCE SPECIFICATIONS

Unless otherwise stated in these specifications, the Reference Specification shall be the 2012 edition of the Standard Specifications for Public Works Construction (Greenbook).

1.3 SUBMITTALS

The following shall be submitted in accordance with Section 01330 “Submittal Procedures”:

1. List of contact personnel
2. Contractor facilities location map
3. Progress, pre-construction and completion photographs
4. Insurance (submitted with contract when executed)
5. Personnel list
6. Vehicle list
7. Spill Contingency Plan including provision to contact responsible parties: Oil Company, State Lands Commission, Department of Fish & Wildlife, Owner’s Representative, and local hazardous material company.

1.4 MINIMUM INSURANCE REQUIREMENTS

Procure and maintain during the entire period of performance under this contract minimum insurance coverage as defined in the Invitation for Bid including:

1. Commercial liability insurance
2. Worker’s compensation as required by Federal and State workers' compensation and occupational disease laws
3. Vehicle liability insurance coverage as required by California law
4. Others as required by State of California law

1.5 CONTRACTOR PERSONNEL REQUIREMENTS

A. Subcontractors and Personnel
Furnish a list of contact personnel of the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.
B Vehicle List
Sub�mit an original list of vehicles to be utilized at the work site with the following information for each vehicle:

1. Make
2. Year
3. Model
4. License number
5. Registered owner

1.6 SUPERVISION

Have at least one qualified supervisor capable of reading, writing, and conversing fluently in the English language on the job site during working hours. In addition, if a Quality Control (QC) representative is required on the contract, then that individual shall also have fluent English communication skills.

1.7 PRECONSTRUCTION CONFERENCE

After award of the contract but prior to commencement of any work at the site, meet with the Owner’s Representative to discuss and develop a mutual understanding relative to the administration of the safety program, preparation of the schedule prices, Shop Drawings, and other submittals, scheduling programming, and prosecution of the work. Major subcontractors who will engage in the work shall also attend.

1.8 AVAILABILITY OF CADD DRAWING FILES

A. Use of Owner provided CADD files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all subcontractors for the project.

B. If the Contractor uses, duplicates and/or modifies the Owner provided electronic CADD files for use in producing construction data related to this contract, all previous indications of ownership (seals, logos, signatures, initials and dates) shall be removed.

PART 2 - PRODUCTS

A. All products provided shall be new material of Grade A standards and meeting specifications and drawing details. Any product provided under this contract shall be preceded by provision of manufacturing specification and/or Shop Drawings and acceptance by Owner’s Representative. Absent prior acceptance of proposed products, products may be rejected without cause or demonstrable material defect.
PART 3 - EXECUTION

Not used.

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of furnishing labor, materials, and equipment for preparation, submittal, and updating of the project schedules and reports.

1.2 CONTRACT DELIVERABLES

A. Prepare and submit to the Owner’s Representative, via email for review and approval, the schedules and reports per Table 1: Reporting Frequency of Schedules and Reports.

B. Failure of Contractor to prepare, submit, and update the schedules and reports, in a timely, accurate manner and in accordance with the requirements of this Section will result in costs to the Owner which are difficult if not impossible to determine; therefore the Owner shall assess liquidated damages in the amount of $500 per calendar day, for every work day the schedule or report submittal, revision, or resubmittal is late. This amount shall be subtracted from any monies due and shall be forfeited by the Contractor. See Section 01110 for liquidated damages for initial submittals for Items 1, 2, 3, 4 and 6 of Table 1.

C. The monthly Schedules and Reports are due and shall be delivered to the Owner’s Representative on the first day of the month or first working day thereafter.

1.3 SCHEDULING SYSTEM/METHODOLOGY

A. Contractor shall develop and maintain the overall Detailed Project Schedule. The Detailed Schedule will be reviewed and approved by the Owner’s Representative for general consistency with the Contract requirements. Contractor shall not modify, change, or update the Detailed Baseline Project Schedule or any activities therein without the prior written approval of the Owner’s Representative.

B. The scheduling method used shall be Critical Path Method (CPM) format using timescaled precedence diagramming methods. The schedules shall be time-scaled in calendar days from the Notice to Proceed. The schedule shall clearly delineate construction activities for each phase.
### Table 1
Reporting Frequency of Schedules and Reports

<table>
<thead>
<tr>
<th>Description Schedule or Report</th>
<th>Reporting Frequency</th>
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<tbody>
<tr>
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<td>Within 21 Calendar Days After Notice of Award</td>
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<tr>
<td>1. Summary Schedule</td>
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<tr>
<td>2. Preliminary 60-Day Schedule</td>
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<tr>
<td>3. Detailed Project Schedule</td>
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<tr>
<td>4. Schedule Narrative</td>
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<tr>
<td>5. Variance Report</td>
<td></td>
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<tr>
<td>6. Equipment Schedule</td>
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#### 1.4 PRELIMINARY 60-DAY SCHEDULE

A. Contractor shall prepare a preliminary 60-Day Schedule covering the first 60 calendar days following Notice to Proceed (NTP) as well as a general approach for the remainder of the work. This Preliminary 60-Day Schedule shall be submitted within 21 calendar days after Notice of Award. The Owner’s Representative will review and respond with acceptance or direction to amend and resubmit. Contractor shall resubmit the amended schedule within 7 calendar days of receipt of Owner’s Representative's comments.

B. The schedule shall show work tasks that will or may affect completion dates including but not limited to planning, mobilization, key shop drawing, and sample submittals, fabrication and delivery of key and long-lead procurement elements. It shall also identify work items or milestones that will or may affect, or be affected by, activities of Oil Company, Caltrans, State Parks, City of Huntington Beach, utilities, and/or other third parties. Construction activities shall later be incorporated into the Detailed Construction Schedule, including requested revisions.
1.5 SUMMARY SCHEDULE

A. Submit a Summary Schedule to the Owner’s Representative for review not later than 21 calendar days after Notice to Proceed. Use the schedule of prices as defined in the Request for Proposal to define the major construction activities. The schedule shall be in bar chart format, timescaled, with critical path identified. The schedule shall be time-scaled in calendar days from the Notice to Proceed. The schedule shall clearly delineate construction activities for each phase. The Summary Schedule shall contain but not be limited to:
   a. Pre-activity Submittals (Spill Prevention Plan, HASP, Contractor 24-hr Contact List, Contractor Daily Log Forms)
   b. Completion of Pre-dredging Survey
   c. Mobilization of Equipment (inclusive of first 763 m$^3$ (1,000 CY) of sand dredged from the full tidal basin and placed on beach)
   d. Anticipated Dredging Duration within Each Dredge Area

B. Submit an updated Summary Schedule monthly. Indicate percent complete for each activity, a graphic depiction of schedule delays from Summary Baseline Schedule activities and milestones, the activity line darkened with the progress and the reporting cutoff date lined vertically through the schedule.

1.6 DETAILED PROJECT SCHEDULE

A. Submit to the Owner’s Representative for review and approval a Detailed Project Schedule not later than 45 calendar days after the Notice to Proceed. A clear delineation of construction activities in phases is required. Upon receipt of comments by the Owner’s Representative, a meeting will be held between the Owner’s Representative, the Contractor, and all major subcontractors and suppliers to resolve any conflicts between the Detailed Project Schedule and the intent of the Contract. Contractor shall resubmit the amended Detailed Project Schedule 7 calendar days after receipt of Owner's Representative's comments.

B. Comments made by the Owner’s Representative on the Detailed Project Schedule, during review, will not relieve the Contractor from compliance with requirements of the Contract Documents. To the extent that there are any conflicts between the approved schedule and the requirements of the Contract Documents, the Contract Documents shall govern. Acceptance by the Owner’s Representative of the Contractor's baseline schedule shall not relieve the Contractor of the responsibility for accomplishing the work within each and every intermediate Contract Milestone and completion date. Errors and/or omissions in the accepted baseline schedule, or in subsequent updates thereof, shall not excuse performance which is not in compliance with the Contract. Acceptance of a schedule update showing negative float shall not be construed as approval of a contract time extension. Acceptance by the Owner’s Representative in no way makes the Owner’s Representative an insurer of the baseline schedule's success or liable for time or cost overruns.
C. The work activities comprising the Detailed Project Schedule shall be detailed to assure planning and execution of the work and such that the schedules provide an appropriate basis for monitoring and evaluating the progress of the work. A work activity is defined as an activity which requires time and resources (labor, equipment, and material) to complete. Activities that require unusual shift work, such as, 2 shifts, 6-day week, or so forth, shall be clearly identified in the schedule. The schedules shall indicate the sequence and interdependency of work activities. They shall include, but not be limited to, the following items:

1. Mobilization and move-in
2. Temporary construction support installations
3. Coordination with other Contractors under separate contract to the Oil Company, the Gas Company, State Parks, utilities and work by others adjacent to the work
4. Excavation, dredging, and related earthwork activities
5. Submittal preparation by the Contractor and review by the Owner’s Representative, including Shop Drawings, technical manuals, and all other submittals
6. Other major construction activities
7. Subcontractor's items of work
8. Approvals and notices required by regulatory agencies or other third party
9. Supervisory Owner activities.
10. Punch-out and acceptance of work.
11. Contract stipulated milestone dates and sequence of work constraints, substantial completion date, and final completion date.
12. Final clean up.

D. Use a computerized critical path scheduling system capable of producing computer generated reports with the following minimum information:

1. Activity identification code keyed to Summary Schedule activities
2. Activity number and activity description
3. From the date of the report, remaining working days left until early finish of each activity
4. Activity percent complete
5. Activity duration
6. Early start/finish and late start/finish
7. Actual start date/finish date
8. Total float
9. Free float
10. The predecessor and successor activities for each individual activity including the precedence logic relationships
11. A comparison between the current update and the baseline schedule
E. Activities of the Owner and the Owner’s consultants shall not be placed on the critical path, if avoidable.

1.7 BIWEEKLY SCHEDULE UPDATES

A. On a biweekly basis, the Contractor shall meet with the Owner’s Representative for the purpose of providing a status update including dredging progress, issues encountered, and look ahead for the subsequent two weeks. These meetings may include direction on changes in dredging locations, based on changes in the system. Meeting dates are to be determined by the Owner’s Representative. The schedule shall be updated biweekly and shall reflect any changes in dredging as directed.

B. Submit updated or revised schedules in the same detail as the original submittal, unless otherwise directed by the Owner’s Representative. Submit updates at the beginning of each month for the duration of the Contract. The detailed Project schedule and computer tabulations shall be reviewed jointly by the Contractor's Project Manager and Construction Scheduler and representatives of all major subcontractors.

C. The schedule submittal to the Owner’s Representative shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float and an explanation of potential delays and/or problems and their estimated impact on performance and the overall project completion date.

1.8 VARIANCE REPORT

Submit a Variance Report monthly. It shall compare the Baseline and Updated Detailed Project Schedule and shall report non-critical activities which have been delayed 20 or more working days and critical (15 days or less total float) activities which have incurred any delay. This report shall include:

1. Activity code and description
2. Baseline scheduled early start/finish dates
3. Current anticipated early start/finish dates
4. Working days remaining to complete the activity
5. Percent complete of the activity
6. Reason for the delay in the "Remarks" column

1.9 WEEKLY SCHEDULE

Once each week, on a day mutually agreed to by the Owner’s Representative and the Contractor, a meeting will be held to assess the progress achieved by the Contractor during previous work week. Contractor shall submit a progress schedule listing the activities
completed and in progress for the previous week and the activities scheduled for the succeeding two weeks. A bar chart derived from the detailed schedule shall be used to generate the three-week window. All activities shown in this short interval schedule will be identified by the same activity numbers and descriptions as shown on the Detailed Construction Schedule. Contractor may add details to monitor this short interval Schedule.

1.10 EQUIPMENT SCHEDULE

A. Submit within 45 calendar days of Notice to Proceed, a schedule showing dates when key construction equipment shall be brought on the project to accomplish the work. This schedule shall list the quantity of equipment by type and capacity (excluding small tools) in a bar chart form.

B. Update equipment schedule biweekly showing actual equipment onsite at time of reporting period and forecasted equipment requirements necessary to achieve the baseline schedule.

1.11 AS-BUILT SCHEDULE

Submit within 30 calendar days after the final completion of each cycle’s work, an as-built schedule which shows actual finish dates for all activities. Adjust logic ties to reflect actual manner in which the work was executed. Submittal of the as-built schedule is a condition precedent to release of retainage and final payment for that cycle’s work.

1.12 REVISIONS TO DETAILED PROJECT SCHEDULE

A. Contractor may request a revision to the current Detailed Project Schedule. Requests for schedule revision shall be submitted in writing to the Owner’s Representative with justification and supporting evidence, as the Owner’s Representative deems necessary to determine whether the Contractor is entitled to such revision under the provisions of the Contract. Adjustments in schedules cannot exceed the contract time plus approved time extensions to the construction milestone and completion requirements.

B. Requests for revisions to the schedule shall be made separately from the biweekly updates and in the same format and detail as the original detailed baseline project schedule submittal. Minor changes to the accepted Schedule may be accepted at monthly meetings; a minor change is not considered a revision in the context of this Section. However, any revision shall incorporate previously made changes, both major and minor, to reflect current as-built and as-planned conditions.

C. No change to the approved Detailed Project Schedule shall be made without the prior written approval of the Owner’s Representative. Revisions to the Detailed Project Schedule shall be submitted for acceptance when required by the Owner’s Representative or on the occurrence of one or more of the following events:
1. The Owner’s Representative directs a change that affects an interim or final milestone date(s) specified under the Contract Documents or alter the length of a critical path.
2. A Change Order or Authority for Adjustment affects Contract interim or final milestone date(s) or the sequence of work.
3. Contractor elects to change any logic sequence or duration of activities or insert or delete activities.

1.13 SCHEDULE TIME EXTENSIONS

Float or slack time is not for the exclusive benefit or use of either the Contractor or the Owner, but it is a resource available to both parties, as needed to meet Contract milestones and Contract completion dates. It is further acknowledged that float created during the project through the actions of either party likewise remains for the benefit of both parties unless expressly agreed in advance to be for the sole benefit of one party.

1.14 YEAR 2 AND YEAR 3 SCHEDULES

The same relative timeframes shall be applicable to year 2 and year 3 (if option exercised) schedules with the assumed start date Notice to Proceed for that year’s preliminary schedule to be August 1.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including, but not limited to, the following:

B. Procedural Submittals

   a. Contractor’s Construction Schedule
   b. Reports
      1) Daily Construction Reports
      2) Material Location Reports
      3) Field Correction Reports
   c. Submittal Schedule
   d. Shop Drawings
   e. Quality Assurance Submittals
   f. Dredging Plan

C. Administrative Submittals

   Refer to other Division – 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:

   a. Permits
   b. Applications for payment
   c. Survey results and volume calculations and certifications
   d. Performance and payment bond
   e. Insurance certificates
   f. List of Subcontractors

D. Related Sections

   The following Sections contain requirements that relate to this Section:

   a. Division 1 Section 01321, “Progress Schedules” specifies requirements for submittal and distribution of various schedules and reports as specified.
   b. Division 1 Section 01770, “Closeout Procedures” specifies requirements for submittal of Project Record Documents, Operation and Maintenance Manuals, and Warranties at project closeout.
   c. Division 2, Section 02325, “Earthwork/Dredging” specifies requirements for submittal of Dredging Plans.
1.2 DEFINITIONS

A. Submittals

During the process of construction, the Contractor sends many different items to the Owner’s Representative to satisfy provisions in the Contract Documents. Because the number of dissimilar items involved is large, the Contract documents use the collective term “submittals” when referring to these items collectively. This single, comprehensive term incorporates any item the Contractor forwards to the Owner’s Representative for review or further processing.

Submittals serve many different purposes, but their main function is to distribute information among the various parties involved in the Project and are an expression of the Contractor’s interpretation of requirements in the Contract Documents, show how the Contractor intends to fulfill these requirements, and also allow the Owner’s Representative an opportunity to correct any misunderstandings the Contractor might have regarding the intent of the Contract Documents.

B. Shop Drawings

As used in this Section, Plans, schedules, diagrams, and other data prepared specifically for this contract, by Contractor or through Contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier Contractor, to illustrate portion of work.

C. Administrative submittals

Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.3 SUBMITTAL PROCEDURES

A. Coordination

1. Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal in accordance with the dates established in the Submittal Schedule.
2. Begin submittal process only after receipt of accepted submittal schedule.
3. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.

B. Processing

Submittals shall be submitted to the Owner’s Representative at the address to be provided prior to mobilization.
1. To avoid the need to delay installation as a result of the time required to review and process submittals, allow time as noted below for submittal review, including time for re-submittals.

   a. Allow Owner’s Representative 10 working days, excluding legal holidays, Saturdays or Sundays, for initial review process. Allow additional time if Owner’s Representative must withhold review to permit coordination with subsequent submittals.

   b. Allow Owner’s Representative 10 working days, excluding legal holidays, Saturdays or Sundays, for each re-submittal review process.

   c. Time for review process starts when Owner’s Representative receives submittal and is exclusive of time required for shipping to and from the Owner’s Representative’s office.

      1) Submittals received by 10:00 am will be considered as received on that day.

      2) Submittals received after 10:00 am will be considered received on the next working day.

3. No extension of Contract Time will be authorized because of failure to transmit submittals to the Owner’s Representative in accordance with the dates established in the Submittal Schedule.

4. Submittals not requested will not be reviewed or retained by the Owner’s Representative.

5. Upon receipt of submittals, Owner’s Representative will assign a Submittal Log Number thereto. Contractor, in any subsequent correspondence, shall refer to this Submittal Log Number to expedite replies relative to previous submittals.

6. Unless Contractor makes other arrangements, submittals will be returned by standard USPS or UPS ground delivery.

C. Submittal Preparation

1. Place a permanent label or title block on each submittal for identification. Size of label is optional, but all Information required shall be included and be easily readable.

   a. Include the following information on the label for processing and recording action taken:

      1) Project name

      2) Project number (as provided by Owner’s Representative)

      3) Date

      4) Name and address of Owner’s Representative: do not include logo

      5) Name and address of Contractor
6) Name and address of subcontractor, supplier, manufacturer as applicable.
7) Name of drawing preparer: not initials
8) Number and title of appropriate Specification Section
9) Drawing number and detail references, as appropriate
10) Name of person and company preparing submittal

2. Provide a space approximately 3-1/2” x 11” on the label or space on Shop Drawings, Product Data, and Samples to record the Contractor’s review and approval markings and the action taken, and the Owner’s Representative’s action stamp.

3. Shop Drawings, Product Data, and Samples not bearing the Contractor’s review and approval stamps, with action taken, and signature, will not be accepted for review.

4. Shop Drawings, Product Data, and Samples submitted without specified space for review, approval, information label, and action stamps, will not be accepted for review.

D. Submittal Transmittal

1. General
   a. Transmit each submittal from Contractor to Owner’s Representative using a transmittal form.
   b. The Owner’s Representative will not accept submittals received from sources other than the Contractor and will be returned without action.

2. Recording Information
   a. On the transmittal, record relevant information and requests for data.
   b. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations.
   c. Include Contractor’s certification that information complies with Contract Document requirements.

1.4 CONTRACTOR’S SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses.

A. Submittal Register
   Contractor shall prepare and submit the submittal register using a form approved by the Owner’s Representative. Submit with quality control plan and project schedule. Verify that all submittals required for project are listed and add missing submittals.
1.5  SUBMITTAL SCHEDULE

A. Coordinate Submittal Schedule with the list of subcontracts, Schedule of Values and the list of products as well as the Contractor's Construction Schedule.

B. In addition to the Information to be provided on the Submittal Schedule, provide on Contractor's letterhead a list of all subcontractors and a description of the work to be performed by the subcontractor.

C. Distribution
1. Following response to initial submittal, print and distribute copies to the Owner’s Representative, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the Project meeting room and field office.
2. When revisions are made, distribute 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 construction activities.

1.6  REPORTS

A. Daily Construction Reports
1. Prepare a daily construction report, recording the following information concerning events at the site, and submit duplicate copies to the Owner’s Representative and Owner for record at weekly intervals:
   a. List of subcontractors at the site
   b. Approximate count of personnel at the site
   c. High and low temperatures, general weather conditions
   d. Accidents and unusual events
   e. Meetings and significant decisions
   f. Stoppages, delays, shortages, losses
   g. Meter readings and similar recordings
   h. Emergency procedures
   i. Orders and requests of governing authorities
   j. Change Orders received, implemented
   k. Owner’s Representative interactions or field directions
   l. Equipment or system tests and start-ups
   m. Partial Completions,
   n. Substantial Completions authorized
   o. Volumes estimations

B.  Field Correction Reports

When the need to make corrective action that requires a departure from the Contract Documents arises, prepare a detailed report including a statement describing the problem and the corrective changes. Indicate reasons the Contract Documents cannot be followed. Submit a copy to the Owner’s Representative Immediately.
1.7 SHOP DRAWINGS

1. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents.
   a. Do not reproduce Contract Documents or copy standard information as the basis of Shop Plans.
   b. Standard information prepared without specific reference to the Project is not a Shop Drawing.

2. Shop Drawings include fabrication and installation Plans, setting diagrams, schedules, patterns, templates and similar Plans. Shop Drawings shall be numbered consecutively. Include the following information:
   a. Clearly marked with the Owner’s Representative’s Project number, Owner's Project number, if any, and Contract type
   b. Engineer’s Drawing number, if any, on which the item is indicated, and the Specification section number
   c. Name of the Contractor
   d. System in which the item is a component
   e. Highlight, encircle, or otherwise indicate deviations from the Contract Documents
   g. Dimensions
   g. Identification of products and materials included by sheet and detail number and Specification Number
   h. Notation of dimensions established by field measurement
   i. Details of Construction

3. Do not submit Shop Drawings for construction that does not comply with requirements of the Contract Documents.

4. Contractor shall maintain complete set of Shop Drawings as "Record Shop Drawings", to turn over to the Owner at Project closeout.
   a. Refer to Section 01770 "Closeout Procedures", for additional requirements.

PART 2 - PRODUCTS

Products that are to remain on site as the property of the Owner shall be documented by manufacturer’s specifications and description and shall be new materials. Submittals for products shall be made in the same manner as Shop Drawings and must be accepted in the same fashion. Deliveries of products shall be accompanied by manufacturers labeling and verified purchase order or similar manufacturer’s documentation of material specification and quantity.

PART 3 - EXECUTION

Not Applicable
PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
Bolsa Chica Maintenance Dredging Project
Huntington Beach, CA

**Submittal**

Review of shop drawings, product data and/or samples is for conformance with the design concept and with the information given in the Contract Documents. This review does not relieve the Contractor of responsibility for any deviation from the Contract Documents. Refer to the Contract Documents relative to submittals for clarification of Contractor responsibility.

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**SELECTION**

Final Action for Contractor:

- [ ] Approved (APP) - Work May Proceed
- [ ] Not Approved (NA) - Work Shall Not Proceed Based on Information Submitted. Resubmit.
- [ ] Approved as Noted (ANN) - Proceed on Basis of Revised Information Noted
- [ ] Submittal Not Requested (SNR)

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<tr>
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<tr>
<td>Owner’s Representative</td>
<td>Merkel &amp; Associates 5434 Ruffin Road San Diego, CA 92123</td>
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<tr>
<td>General Contractor Address, phone number</td>
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<td>Subcontractor Address, phone number</td>
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Contractor’s Logo and address here)  

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The Contractor certifies that it has examined the items submitted by this transmittal and finds that they are, to the best of its knowledge, in compliance with the Contract Documents.

By: Name: ____________________________  
(Signature required)

Remarks:

The information submitted has been reviewed for compliance with the Contract Documents. The review and the resulting notations so not assume completeness of the submittal nor suggest that information not requested is waived. Further, the review does not relieve the Contractor from the satisfactory completion of the Work in compliance with the Contract Documents.

By: Name: ____________________________  
(Signature required)

* Review Codes:

| APP | Approved: | Work May Proceed |
| AAN | Approved As Noted: | Proceed on Basis of Revised Information Noted |
| SNR | Submittal Not Requested: | Not Reviewed or Retained by the COTR. |

Primary Checker: Secondary Checkers:

__________________________  
__________________________  
__________________________
PART 1 - GENERAL

1.1 WORK INCLUDED

This project includes metric units of measurements. The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960. A number of circumstances require that both metric SI units and English inch-pound (I-P) units be included in a section of the specifications. When both metric and I-P measurements are included, the section may contain measurements for products that are manufactured to I-P dimensions and then expressed in mathematically converted metric value (soft metric) or, it may contain measurements for products that are manufactured to an industry recognized rounded metric (hard metric) dimensions but are allowed to be substituted by I-P products to comply with the law. Dual measurements are also included to indicate industry and/or Owner’s standards, test values or other controlling factors, such as the code requirements where I-P values are needed for clarity or to trace back to the referenced standards, test values or codes.

1.2 USE OF MEASUREMENTS

A. Measurements shall be either in SI or I-P units as indicated, except for soft metric measurements or as otherwise authorized. When only SI or I-P measurements are specified for a product, the product shall be procured in the specified units (SI or I-P) unless otherwise authorized by the Owner’s Representative. The Contractor shall be responsible for all associated labor and materials when authorized to substitute one system of units for another and for the final assembly and performance of the specified work and/or products.

B. Hard Metric

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value. Hard metric measurements are often used for field data such as distance from one point to another or distance above the floor. Products are considered to be hard metric when they are manufactured to metric dimensions or have an industry recognized metric designation.
C. Soft Metric

1. A soft metric measurement is indicated by an SI value which is a mathematical conversion of the I-P value shown in parentheses (e.g. 38.1 mm (1-1/2 inches)). Soft metric measurements are used for measurements pertaining to products, test values, and other situations where the I-P units are the standard for manufacture, verification, or other controlling factor. The I-P value shall govern while the metric measurement is provided for information.

2. A soft metric measurement is also indicated for products that are manufactured in industry designated metric dimensions but are required by law to allow substitute I-P products. These measurements are indicated by a manufacturing hard metric product dimension followed by the substitute I-P equivalent value in parentheses (e.g., 190 x 190 x 390 mm (7-5/8 x 7-5/8 x 15-5/8 inches)).

D. Neutral

A neutral measurement is indicated by an identifier which has no expressed relation to either an SI or an I-P value (e.g., American Wire Gage (AWG) which indicates thickness but in itself is neither SI nor I-P).

E. Important Conversions

For purposes of this work, the dredged sand volume is a basis of payment and shall be determined by straight volumetric calculation by independent surveyor. Where numeric conversions require any rounded multipliers, the conversion between cubic yards (CY) and cubic meters (m³) shall be 1m³ = 1.308 CY.

1.3 COORDINATION

Discrepancies, such as mismatches or product unavailability, arising from use of both metric and non-metric measurements and discrepancies between the measurements in the specifications and the measurements in the Plans shall be brought to the attention of the Owner’s Representative for resolution.

1.4 RELATIONSHIP TO SUBMITTALS

Submittals for Owner’s Representative approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required Plans and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved.
PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists of furnishing transportation, labor, materials, equipment and incidentals required to place, construct, maintain and remove temporary facilities.

1.2 SUBMITTALS

Owner approval is required for all submittals. The following Preconstruction Submittals shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

A. Traffic control plan
B. Construction site plan

1.3 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes used for this contract. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.4 TEMPORARY UTILITIES

A. The Contractor shall provide all utilities for any temporary on-site office.

B. The Contractor will be required to establish an account with Southern California Edison for electric dredging operations, if electric dredge is to be used. The location of the meter and switchgear is shown on the Plans and the address for the connection is 19800 Pacific Coast Highway, Huntington Beach, CA. The Owner shall make available 12 KV, 200 amps, 3 Phase electricity to Contractor.

1.5 WEATHER PROTECTION

A. Take necessary precautions to ensure that temporary covers over stored materials are monitored carefully. Take immediate actions required to seal and secure covers when rain or other detrimental weather is imminent, and at the end of each workday.

B. Site Storm Protection: When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby property. Precautions shall include, but are not limited to, removing loose materials, tools and equipment from exposed locations; and removing or securing
temporary work. When a warning of heavy rains is issued, take precautions to minimize damages due to floods or high standing water. Precautions shall include, but are not limited to ensuring any water control structures are operational, appropriate storm water BMPs are in place, and drainage patterns are not impaired by Contractor’s work.

1.6 STORAGE AREAS

Storage Size and Location: The open site available for storage shall be confined to the indicated operations areas as indicated on the Plans and/or described in the permits.

1.7 TEMPORARY SANITARY FACILITIES

Provide adequate sanitary conveniences of a type approved for the use of persons employed on the work, properly secluded from public observation, and maintained in such a manner as required and approved by the Owner’s Representative. Temporary sanitary facilities shall be furnished, maintained and removed after acceptance of the work by a commercial firm licensed to do this work by the government entity having jurisdiction over the area where the project is located. Maintain these conveniences at all times without nuisance. Upon completion of the work, remove the conveniences from the premises, restore the area to preconstruction conditions, and leave the premises clean and free from nuisance. Include provisions for pest control and elimination of odors.

1.8 TEMPORARY BUILDINGS

A. Temporary facilities (including trailers) shall be in like new condition. Location shall be subject to direction by the Owner’s Representative. Storage of material/debris under such facilities is prohibited. Contractor shall be responsible for the security of the stored property.

B. Trailers or storage buildings will be permitted, where space is available, subject to the approval of the Owner’s Representative. The trailers or buildings shall be in good condition, free from visible damage rust and deterioration, and meet all applicable safety requirements. Trailers shall be roadworthy and comply with all appropriate state and local vehicle requirements. Failure to maintain storage trailers or buildings to these standards shall result in the removal of non-complying units at the Contractor's expense. A sign not smaller than 0.6m by 0.6m (24 inches by 24 inches) shall be conspicuously placed on the trailer depicting the company name and contact information. Trailers shall be anchored to resist high winds and must meet applicable State and local standards for anchoring mobile buildings and trailers.
PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

3.1 TEMPORARY PHYSICAL CONTROLS

A. Access Controls - Place warning signs at the construction area perimeter designating the presence of construction hazards requiring unauthorized persons to keep out. Signs must be placed at the dredge discharge area warning the public of construction activities.

B. Temporary fencing - Temporary fencing must be placed around the dredge discharge point and around the beach staging area.

3.2 TEMPORARY WIRING

Provide temporary wiring in accordance with National Fire Protection Association (NPFA) 241 and NFPA 70, Article 305-6(b), Assured Equipment Grounding Conductor Program. Program shall include frequent inspection of all equipment and apparatus.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z359.1 Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.5 Mobile and Locomotive Cranes
ASME B30.8 Floating Cranes and Floating Derricks
ASME B30.22 Articulating Boom Cranes

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1910 Safety and Health Regulation in General Industry
29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
29 CFR 1926 Safety and Health Regulations for Construction
29 CFR 1926.65 Hazardous Waste Operations and Emergency Response
29 CFR 1926.500 Fall Protection

U. S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 Safety and Health Requirements Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10 Portable Fire Extinguishers
NFPA 70 National Electrical Code
NFPA 241 Safeguarding Construction, Alteration, and Demolition Operations
1.3 SUBMITTALS

Owner approval is required for all submittals. The following Preconstruction Submittals shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

A. Accident Prevention Plan (APP)
B. Activity Hazard Analysis (AHA)
C. Certificate of Compliance (Crane)

1.4 DEFINITIONS - Terms are defined as follows:

A. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.

B. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered personnel.

C. Multi-Employer Work Site (MEWS). A multi-employer work site, as defined by OSHA, is one in which many employers occupy the same site. The Owner considers the Contractor to be the "controlling authority" for all work site safety and health of the subcontractors.

D. Operating Envelope. The area surrounding any crane. Inside this "envelope" is the crane, the operator, riggers, rigging gear between the hook and the load, the load and the crane's supporting structure, ground, rail, or similar items.

E. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
   1. Death, regardless of the time between the injury and death, or the length of the illness;
   2. Days away from work;
   3. Restricted work;
   4. Transfer to another job;
   5. Medical treatment beyond first aid;
   6. Loss of consciousness; or
   7. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in actions listed above.

F. Site Safety and Health Officer (SSHO). The superintendent or other qualified or competent person who is responsible for the on-site safety and health required for the project. The Contractor quality control (QC) person can be the SSHO on this project.

G. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or
equipment damage; dropped load; derailment; two-blocking; overload; and collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents, even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.)

1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with the Oil Field Operator’s Environmental, Health and Safety Manual, CALOSHA Construction Safety Orders, USACE EM 385-1-1, and other related federal, state, and local, laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.6 DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, Contractor and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Owner upon request.

1.7 TRAINING

New employees (Contractor and subcontractor) shall be informed of specific site hazards, attend and pass a site safety review before they begin work as called for in Section 01140 Work Restrictions. All employees will be required to attend Oil Company training. Documentation of this orientation shall be kept on file at the project site.

1.8 DISPLAY OF SAFETY INFORMATION

Within 2 calendar days after commencement of work, erect a safety bulletin board at the job site. The following information shall be displayed on the safety bulletin board in clear view of the on-site construction personnel, maintained current, and protected against the elements and unauthorized removal:
A. Map denoting the route to the nearest emergency care facility.
B. Emergency phone numbers.
C. Copy of the most up-to-date APP.
D. OSHA 300A Form.
E. A sign indicating the number of hours worked since last lost workday accident.
F. OSHA Safety and Health Protection-On-The-Job Poster
G. Safety and Health Warning Posters.

1.9 EMERGENCY MEDICAL TREATMENT

Contractor and subcontractors shall arrange for their own emergency medical treatment. The Owner has no responsibility to provide emergency medical treatment.

1.10 REPORTS

A. Accident Reports
   1. For recordable injuries and illnesses, and property damage accidents resulting in at least $2,000 in damages, the Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the CALOSHA Incident Report and provide the report to the Owner’s Representative within 1 calendar day of the accident. The Owner’s Representative will provide copies of any required or special forms.
   2. For a weight handling equipment accident the Contractor shall conduct an accident investigation to establish the root cause of the accident, complete the required CALOSHA Accident Report form and provide the report to the Owner’s Representative within 30 calendar days of the accident. The Owner’s Representative will provide a blank copy of the accident report form.

B. Accident Notification
   Notify the Owner’s Representative as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident involving an overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. Information shall include Contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident, including the type of construction equipment used. Preserve the conditions and evidence on the accident site.
C. Regulatory Citations and Violations
Contact the Owner’s Representative immediately of any OSHA or other regulatory agency inspection or visit, and provide the Owner’s Representative with a copy of each citation, report, and Contractor response. Correct violations and citations promptly and provide written corrective actions to the Owner’s Representative.

D. Certificate of Compliance
The Contractor shall provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). Certificate shall state that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance shall comply with 29 CFR 1926 and USACE EM 385-1-1 section 16 and Appendix H. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

The Contractor shall comply with USACE EM 385-1-1, NFPA 241, the APP, the AHA, CALOSHA and other related submittals and activity fire and safety regulations.

3.2 EQUIPMENT

A. Material Handling Equipment
1. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
2. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
3. Operators of forklifts or power industrial trucks shall be licensed in accordance with CALOSHA.

B. Equipment and Mechanized Equipment
1. Equipment shall be operated by designated qualified operators. Proof of qualifications shall be kept on the project site for review.
2. Manufacture specifications or owner's manual for the equipment shall be on site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Such additional safety precautions or requirements shall be incorporated into the AHAs.

3. Equipment and mechanized equipment shall be inspected in accordance with manufacturer's recommendations for safe operation by a competent person prior to being placed into use.

4. Daily checks or tests shall be conducted and documented on equipment and mechanized equipment by designated competent persons.

3.3 HOUSEKEEPING

All debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location; however garbage accumulation must be removed each day. All trash receptacles shall be emptied on Fridays and the day before a holiday.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910 Occupational Safety and Health Standards
29 CFR 1910.120 Hazardous Waste and Emergency Response
40 CFR 112 Oil Pollution Prevention
40 CFR 122.26 EPA National Pollutant Discharge Elimination System Permit Regulations
40 CFR 241 Guidelines for Disposal of Solid Waste
40 CFR 268 Land Disposal Restrictions
40 CFR 273 Universal Waste Management
40 CFR 279 Used Oil Regulations
40 CFR 355 Emergency Planning and Notification
40 CFR 716 Health and Safety Data Reporting

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 832-R-92-005 Storm Water Management for Construction Activities

US. ARMY CORPS OF ENGINEERS (USACE)


WETLAND MANUAL Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all project permit requirements and State, and local laws and regulations. The Contractor shall be
responsible for any delays resulting from failure to comply with environmental requirements.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this Section by all subcontractors and suppliers and their employees.

1.5 PAYMENT OF FEES AND FINES

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with permit requirements Federal, State, Regional and local laws and regulations.

1.6 SUBMITTALS

Approval is required for all submittals. The following shall be submitted in accordance with Section 01330, “Submittal Procedures”:

A. Preconstruction Submittals
   Environmental protection plan
   Stormwater Pollution Prevention Plan (SWPPP)
   Environmental quality board permits
   Pre-construction survey
   Regulatory notification

B. Closeout Submittals
   Some of the records listed below are also required as part of other submittals.
   Post-construction survey
   Solid waste disposal permit
   Waste determination documentation
   Disposal documentation for hazardous and regulated waste
   Contractor Hazardous Material Inventory Log

1.7 REPORTS

A. Preconstruction Survey
   Prior to start of any onsite construction activities, the Contractor and the Owner’s Representative shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection that are not specifically identified on the Plans as environmental features requiring protection. This survey report shall be signed by
both the Contractor and the Owner’s Representative upon mutual agreement between Contractor and Owner’s Representative as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the Plans, regardless of interference, which their preservation may cause to the Contractor's work under the contract.

B. Solid Waste Disposal Permit
Submit one copy of a State and local permit or license showing such agencies' approval of the disposal plan before transporting wastes off-site.

C. Waste Determination Documentation
The Contractor will complete a Waste Determination form (provided at the pre-construction conference) for all Contractor derived wastes to be generated. The waste determination must be based upon either a constituent listing from the manufacturer used in conjunction with consideration of the process by which the waste was generated; EPA approved analytical data, or laboratory analysis (Material Safety Data Sheets (MSDS) by themselves are not adequate). All support documentation must be attached to the Waste Determination form. As a minimum, a Waste Determination form must be provided for the following wastes (this listing is not all inclusive): oil and latex based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and all containers of the original materials.

D. Disposal Documentation for Hazardous and Regulated Waste
Submit a copy of the applicable EPA and State permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities.

E. Regulatory Notification
The Contractor is responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. The Contractor will forward copies to the Owner’s Representative prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all inclusive): demolition, renovation, NPDES defined site work, remediation of controlled substances (asbestos, hazardous waste, lead paint).

1.8 ENVIRONMENTAL PROTECTION REQUIREMENTS

A. General
Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features
associated with the project. Comply with Federal, State, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Attend an environmental briefing to be included in the preconstruction meeting. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the activity; types and quantities of wastes/wastewater that may be generated during the contract.

B. Licenses and Permits
The Contractor shall obtain licenses and permits except for those appearing as attachments.

C. Contractor Liabilities for Environmental Protection
The Contractor is advised that this project and the station are subject to Federal, State, and local regulatory agency inspections to review compliance with environmental laws and regulations. The Contractor will fully cooperate with any representative from any Federal, State or local regulatory agency who may visit the job site and will provide immediate notification to the Owner’s Representative, who will accompany them on any subsequent site inspections. The Contractor will complete, maintain, and make available to the Owner’s Representative or regulatory agency personnel all documentation relating to environmental compliance under applicable Federal, State and local laws and regulations. The Contractor will immediately notify the Owner’s Representative if a Notice of Violation (NOV) is issued to the Contractor.

The Contractor will be responsible for all damages to persons or property resulting from Contractor fault or negligence as well as for the payment of any civil fines or penalties which may be assessed by any Federal, State or local regulatory agency as a result of the Contractor's or any subcontractor's violation of any applicable Federal, State or local environmental law or regulation. Should a Notice of Violation (NOV), Notice of Noncompliance (NON), Notice of Deficiency (NOD), or similar regulatory agency notice be issued to the Owner on account of the actions or inactions of the Contractor or one of its subcontractors in the performance of work under this contract, the Contractor will fully cooperate with the Owner in defending against regulatory assessment of any civil fines or penalties arising out of such actions or inactions and shall be responsible for all costs of defense and any penalties issued.

1.9 ENVIRONMENTAL PROTECTION PLAN

A. General
Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Owner’s Representative. The purpose of the Environmental Protection
Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction tasks. Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Owner’s Representative for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

B. Compliance
No requirement in this Section shall be construed as relieving the Contractor from compliance with all permit requirements and all applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

C. Contents
1. The environmental protection plan shall include, but shall not be limited to, the following:
   a. Names of persons within the Contractor's organization who is (are) responsible for ensuring adherence to the Environmental Protection Plan.
   b. Names and qualifications of persons responsible for manifesting hazardous waste to be removed from the site, if applicable.
   c. Names and qualifications of persons responsible for training the Contractor's environmental protection personnel.
   d. Description of the Contractor's environmental protection personnel training program.
   e. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
   f. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355,
and/or regulated under State or Local laws and regulations. This plan shall include as a minimum:

1.) The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. At a minimum, the documentation shall include a site plan indicating the location of spill, date and time, estimated quantity of spill, details of spill response/clean-up with response/clean up materials used, confirmation that the spill was cleaned up, and photographs before and after the clean-up. This individual shall immediately notify the Owner’s Representative, Oil Company and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center, 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

2.) The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3.) Training requirements for Contractor’s personnel and methods of accomplishing the training.

4.) A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

5.) The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

6.) The methods and procedures to be used for expeditious contaminant cleanup.

g. A contaminant prevention plan that identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. A copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

h. A biological resources protection plan that defines procedures for identifying and protecting biological resources known to be on the project site; and/or identifies procedures to be followed if
biological resources not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Owner’s Representative.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the Plans and specifications which may have an environmental impact will be subject to approval by the Owner’s Representative and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Owner’s Representative determines that the proposed alternate method will have an adverse environmental impact.

1.11 NOTIFICATION

The Owner’s Representative will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Owner’s Representative of the proposed corrective action and take such action when approved by the Owner’s Representative. The Owner’s Representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Owner’s Representative may take under the contract.

PART 2 – PRODUCTS

Not used

PART 3 – EXECUTION

3.1 PROTECTION OF NATURAL RESOURCES

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Confine construction activities to within the limits of the work indicated or specified.
3.2 LAND RESOURCES

A. General

The Contractor shall confine all activities to areas defined by the Plans and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the Plans or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any existing landscape feature unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times. Stone, soil, or other materials displaced shall be removed by the Contractor.

B. Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

C. Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with permit requirements and Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The Contractor's best management practices shall be in accordance with the National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP). All temporary measures shall be removed after the area has been stabilized.

D. Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the Plans or as directed by the Owner’s Representative. Temporary movement or relocation of Contractor facilities shall be made only when approved.
3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or federally issued Clean Water Act permits. Contractor shall use vegetable based lubricants and fluids for all equipment operating in the water. Hydraulic fluids used on the dredge shall all be vegetable based. Any spill of vegetable based products shall be reported as a spill in accordance with state and federal regulations.

3.4 AIR RESOURCES

A. General
   Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

B. Particulates
   Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from recycled materials processing equipment; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be violated or which would cause a hazard or a nuisance. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

C. Odors
   Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

D. Sound Intrusions
   The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of California and local rules.
E. Burning
Burning is prohibited.

3.5 MATERIALS MANAGEMENT AND WASTE DISPOSAL

A. General
Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the Plans.

B. Solid Wastes
Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off the property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. The Contractor shall comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

C. Contractor Generated Hazardous Wastes/Excess Hazardous Materials
Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and shall manage and store hazardous waste in accordance with the approved hazardous waste management plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as construction of berms or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off the work site property within 5 working days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Owner’s Representative and the Owner. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's
responsibility. The Contractor shall coordinate the disposition of hazardous waste with the Owner’s Representative and the Owner.

D. Fuel and Lubricants
To the greatest extent practical, as determined by the Owner’s Representative, fueling, lubrication and servicing of vehicles and equipment shall be accomplished off site. When no other option is available and when approved by the Owner’s Representative, storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Tarps must be placed underneath all equipment parked overnight or fueled on the beach. Contractor shall use vegetable based lubricants and fluids for all equipment operating in the water. Hydraulic fluids used on the dredge shall all be vegetable based. Any spill of vegetable based products shall be reported as a spill in accordance with state and federal regulations.

Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site as needed in accordance with the work performed.

E. Waste Water
Waste water from construction activities shall not be allowed to enter water ways. The Contractor shall dispose of the construction related waste water off-site in accordance with all Federal, State, Regional and Local laws and regulations.

3.6 CONTROL AND DISPOSAL OF HAZARDOUS WASTES

A. Hazardous Waste/Debris Management
The Contractor will identify all construction activities that will generate hazardous waste/debris. The Contractor must provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, State, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268. Hazardous waste will also be managed in accordance with the approved Hazardous Waste Management Section of the Environmental Protection Plan. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. No hazardous waste will be brought onto the site. Provide to the Owner’s Representative a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Owner’s Representative immediately.
B. Hazardous Waste Disposal
The Contractor agrees to provide for the final treatment/disposal of the hazardous material/waste in accordance with all local, State and Federal laws and regulations, and the terms and conditions of the contract within sixty (60) days after the materials have been generated. This will include all necessary personnel, labor, transportation, packaging, detailed analysis (if required for disposal, and/or transportation, including manifesting or completing waste profile sheets, equipment, and the compilation of all documentation is required).

C. Pollution Prevention/Hazardous Waste Minimization
The Contractor will actively pursue minimizing the use of hazardous materials and the generation of hazardous waste while on site. The Hazardous Waste Management Section of the Environmental Protection Plan will include the Contractor's procedures for pollution prevention/hazardous waste minimization.

D. Hazardous Material Control
The Contractor will include hazardous material control procedures in the Safety Plan. The procedures will address and ensure the proper handling of hazardous materials, including the appropriate transportation requirements. The Contractor will submit a MSDS and estimated quantities to be used for each hazardous material to the Owner’s Representative prior to bringing the material onsite. Typical materials requiring MSDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. At the end of the project, the Contractor will provide the Owner’s Representative with the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used. The Contractor will also ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated. The Contractor will ensure that all containers of hazardous materials have NFPA labels or their equivalent. Copies of the MSDS for hazardous materials will be kept on site at all times and provided to the Owner’s Representative at the end of the project. The Contractor will certify that all hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste per 40 CFR 261.

E. Petroleum Products
Conduct the fueling and lubricating of equipment and motor vehicles off-site unless otherwise approved by the Owner’s Representative. When maintenance must be done on site it shall be in a manner that protects against spills and evaporation. All used oil generated on site will be managed in accordance with 40 CFR 279. The Contractor will determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. In addition, used oil containing 1000 parts per million of solvents will be considered a hazardous waste and
disposed of at Contractor's expense. Used oil mixed with a hazardous waste will also be considered a hazardous waste. All hazardous waste will be managed in accordance with the paragraph entitled Hazardous Waste or Debris Management of this section and will be managed in accordance with the approved Environmental Protection Plan.

F. Releases or Spills of Oil and Hazardous Substances

Contractor shall take precautions to prevent releases/spills of oil and hazardous substances. In the event of any releases of oil and hazardous substances, vegetable lubricants, chemicals, or gases; immediately (within 15 minutes) notify Oil Company, Owner, and the Owner’s Representative. The Contractor is responsible for verbal and written notifications as required by the federal 40 CFR 355, State and local regulations. Spill response will be in accordance with 40 CFR 300 and applicable State and local regulations. Contractor will contain and clean-up these spills without cost to the Owner. If Owner or Oil Company’s assistance is requested or required, the Contractor will reimburse parties for such assistance. Provide copies of the written notification and documentation that a verbal notification was made within 20 days.

The Contractor shall notify the Owner’s Representative immediately upon discovery of any spill. The Contractor shall maintain spill cleanup equipment and materials at the work site. The Contractor shall clean up all hazardous and non-hazardous (WHM) waste spills caused by the Contractor. The Contractor shall reimburse parties for all material, equipment, and clothing generated during any spill cleanup. The Contractor shall reimburse the Owner for all costs incurred including sample analysis materials, equipment, and labor if the Owner must initiate its own spill cleanup procedures, for Contractor responsible spills, when:

a. The Contractor has not begun spill cleanup procedure within one (1) hour of spill discovery/occurrence, or

b. If, in the Owner’s Representative's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas.

3.7 DUST CONTROL

Keep dust suppressed at all times, including during nonworking periods. Sprinkle or treat, with dust suppressants, the soil at the site, haul roads, and other areas disturbed by operations. Dry power broom cleaning will not be permitted. Air blowing will not be permitted.
3.8 NOISE

Make the maximum use of low-noise emission products, as certified by the EPA. Confine pile-driving operations to the period between 7 a.m. and 7 p.m., Monday through Saturday, exclusive of holidays, unless otherwise specified.

3.9 MERCURY MATERIALS

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove without breaking, pack to prevent breakage, and transport off-site in an unbroken condition for disposal as directed. Contractor shall immediately report to the Owner’s Representative instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Owner’s Representative.

3.10 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds.

3.11 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.12 TRAINING OF CONTRACTOR PERSONNEL

The Contractor’s personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of biological resources that are known to be in the area.

3.13 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction as directed by the Owner’s Representative after each year’s work. The Contractor shall, unless otherwise instructed in writing by the Owner’s Representative, obliterate all signs of temporary construction
facilities such as work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded to the pre-construction condition if requested by the Owner’s Representative.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 SUBMITTALS

The following shall be submitted in accordance with Section 01330, “Submittal Procedures”:

A. Closeout Submittals
B. As-Built Plans

1.3 PROJECT RECORD DOCUMENTS

Project Record Documents consist of furnishing a set of Record Documents showing changes made to the project and representing an “As-Built” set of Plans. Upon completion and prior to acceptance of the work, Contractor shall submit a set of final Record Documents to the Owner’s Representative. Record Documents include, but are not limited to, Plans and Specifications. As-Built Plans shall show as-built contours of the project at a contour interval of 0.5m. Contractor shall provide As-Built Plans in AutoCAD format and bathymetric survey data as ASCII point files as well.

1.4 CLEANUP

Sweep paved areas and rake clean landscaped areas. Remove waste and surplus materials, rubbish and construction facilities from the site. Remove any rocks larger than a tennis ball or other construction debris on beach.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.
4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION
PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section includes, in general, providing all labor, materials, tools, equipment and incidentals and doing all work as may be necessary to provide earthwork and dredging; including excavation, dredging, transporting, placement, measuring, filling, and final grading. Work may be performed using a diesel or electrically powered hydraulic dredge. Any equipment use in the dredging must meet current California emissions standards and be appropriately permitted for use within the South Coast Air Quality Management District.

1.2 SUBMITTALS

Submit Dredging Plan the following in accordance with Section 01330, "Submittal Procedures." Submit a dredging and measurement work plan for completing this work. Provide detailed description of all equipment and activities proposed in the dredging and beach placement operations, including ingress/egress, safety measures, public safety measures on the beach, measurement of the dredging activities, means of removal, transporting, and placement. Provide a detailed description of proposed surveying methods and timing to account for movement of material within the dredging footprint. Include specific discussion regarding how infill will be addressed during the dredging of Zone 1 and easterly portions of Zone 2.

1.3 CRITERIA FOR BIDDING

A. Base bids on the following criteria:

1. Dredging contract is for two consecutive seasonal dredging cycles with similar dredged volumes and dredging expectations.
2. Dredged material quantity 57,000 m³ (74,500 CY) per dredge cycle between September 15 and March 15 of consecutive years for a total of 114,000 m³ (149,000 CY)
3. Dredge a minimum of 6,900 m³ (9,000 CY) and a maximum of 16,800 m³ (22,000 CY) each month over a 4-6 month period in the dredging cycle.
4. Owner’s Representative may direct alteration of dredging locations on a biweekly basis based on infill patterns and water movement characteristics.
5. The dredge and associated piping and materials may be stored on-site (out of the water) between dredging cycles without cost, but may be mobilized off and back on-site at Contractor’s sole expense. The security of the dredge and associated piping and materials stored on-site will be the Contractor’s responsibility.
B. Contractor shall immediately notify Owner’s Representative if any material is encountered that is not sands suitable for beach placement, or which is unsuitable for dredging with a cutterhead suction dredge, such that Owner’s Representative may divert work or otherwise provide direction to Contractor. Note that there may be hard material, rock, and/or construction debris within the dredging area, the presence or extent of which is unknown. Contractor is not required to dredge or remove any material other than beach compatible sands.

1.4 MATERIALS TO BE REMOVED

A materials testing report from prior maintenance dredging has been prepared for the project and is available in the Appendices. This material testing report is believed to represent the characteristics of the dredging area, however, other subsurface conditions as described in 1.3 B may exist. All portions of the proposed dredge footprint have been previously dredged and subsequently filled in with littoral sands. In the event Contractor encounters material contrary to this, the Contractor shall divert work and continue dredging. The Owner’s Representative shall be notified and further direction provided to the Contractor. There is no intent to dredge in previously undredged, non-sandy materials.

1.5 PERMITS

The Contractor shall comply with conditions and requirements of the Corps of Engineers Permit and other State, Park, City and Federal permits. The Owner’s Representative will secure the permits for dredging and disposal of material as indicated. Air quality permits shall be obtained by the Contractor. The point of contract for this region is: South Coast Air Quality Management District, Merill Hickman, 21865 Copley Drive, Diamond Bar, CA, phone (909) 396-2000. Ingress/egress and public safety requirements are of particular interest for this project. Contractor is responsible for any traffic control Plans or permits on offsite public roadways.

1.6 ENVIRONMENTAL PROTECTION REQUIREMENTS

A. Provide and maintain during the life of the Contract, environmental protective measures. Also, provide environmental protective measures required to correct conditions, such as oil spills or debris that occur during the earthwork and dredging operations. Disposal of all debris shall be off-site within an authorized landfill or other legal receiver site. Comply with Federal, State, and local regulations pertaining to Water, air, and noise pollution.

B. Contractor shall be responsible for the prompt collection and removal of any trash, debris, rocks larger than a tennis ball, or construction wastes that are deposited on beach that are associated with the construction work or which are derived from the beach nourishment materials.

C. All equipment operated within the water shall utilize biodegradable vegetable oil-based hydraulic fluids. Exceptions shall be made for small outboard-motored support skiffs.
D. Tarps must be placed underneath all equipment parked overnight or fueled on the beach.

E. Contractor shall protect sensitive dune vegetation, and threatened and endangered animals during the completion of work. Owner’s Representative will identify the locations of the vegetation and animals and the protection limits shall be fenced by Contractor. The “construction fencing” (wooden wind fencing) or single strand wire fencing shall be maintained by Contractor during the project.

1.7 NOTICE TO PROCEED (NTP)

The Notice to Proceed is expected to be issued not less than 14 days prior to commencement of work. It shall be the responsibility of the Contractor to complete the dredging plan schedule, and preconstruction hydrographic survey within 21 calendar days of Notice to Proceed, and to begin dredging within 45 calendar days of Notice to Proceed.

PART 2 – PRODUCTS

A permanent 10-inch HDPE dredge discharge pipe segment shall be placed under the Oil Service Bridge and PCH Bridge to facilitate the present and future dredging. This pipe shall not be delivered to the site until such time as the manufacturer and material are accepted.

PART 3 – EXECUTION

3 DREDGING AND FILL OPERATIONS

A. General

1. Underground Utilities
There are no known underground utilities in the dredging footprint. The Contractor shall physically verify the location and elevation of any existing utilities indicated prior to starting construction.

2. Machinery and Equipment
Movement of construction machinery and equipment during construction shall be at the Contractor's risk. Repair, or remove and provide new pipe for existing or newly installed pipe that has been displaced or damaged.

B. Dredging

1. General
Dredge to contours, elevation, and dimensions indicated on the Plans. Place excavated materials on the beach south of the inlet at the intended location per the Plans. Dredge the payment zones in the following order: Zone 5, 1, 2, 4, 3, unless modified by the Owner’s Representative.
2. Tolerances
A tolerance of 0.3 meter above the prescribed dredging elevation will be allowed in the dredging area and no more than five percent (5%) of the area shall be above the target dredge elevation. There is no paid overdepth dredging allowance and high points are not paid.

3. Side Slopes
Side slopes may, but are not required to be, cut vertically and allowed to naturally stabilize. Slope toe lines shall follow, as closely as practicable, the lines indicated or specified and payment shall be made for sand removed from an area within an envelope defined by a 1V:5H slope upward from the specified toe line to account for cut slope layback.

4. Basis for Bids
Base bids on an estimated quantity of 57,000 m³ (74,500 CY) of dredging per dredging cycle for two consecutive dredging cycles (September 15 - March 15). A unit price for dredging/placement from each Dredge Zone (Zone 1 to Zone 5) shall be used in calculating the project costs. By written change order to the Contractor, the Owner may increase the volume of material removed by up to 20% per year. Payment to Contractor for this additional dredging will be based on the unit cost for the Dredge Zone multiplied by the additional dredged volume. Where the capacity of the equipment is inadequate to meet higher annual volumes, the Contractor may reject increased volume requirements. The earthwork/dredging conditions specified and indicated above describe conditions that are known. However, the Contractor is responsible for other conditions encountered which are not unusual when compared to the conditions recognized in the earthwork/dredging business as usual in earthwork/dredging activities such as those required under this contract.

Payment will be at the contract unit price per cubic meter for each dredge zone, multiplied by total cubic meters of acceptable dredge volume based on pre- and post-construction surveys of each dredge zone to be performed by an independent California licensed professional surveyor hired by the Contractor and witnessed by the Owner’s Representative.

5. Inspection
Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. Furnish, at the request of the Owner’s Representative, boats, boatmen, laborers, and materials necessary for observing and surveying the work. When required, provide transportation for the Owner’s Representative and inspectors to and from the dredging area and between the dredging plant and adjacent points on shore.

6. Plant
Maintain the plant, barges, pipelines, and associated equipment to meet the requirements of the work. Promptly repair leaks or breaks along pipelines. Remove dredged material placed outside limits due to leaks and breaks at the Contractor’s expense.
7. Method of Communication
   Provide a system of communication between the dredge crew and the crew at the disposal area. A portable two-way radio is acceptable.

8. Salvaged Material
   Articles of value, which are brought to the surface during dredging operations, shall remain or become the property of the Owner and shall initially be deposited on shore at a convenient location near the site of the work, as directed.

9. Safety of Structures
   The execution of work shall ensure the stability of structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations. Repair damage resulting from dredging operations, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the Contract. Anchoring, spudding, or attaching to the bridges, piles or abutments will not be allowed.

10. Plant Removal
    Upon completion of the work, promptly remove plant, including ranges, buoys, piles, and other markers or obstructions.

C. Beach Fill Placement
   1. General
      Fill and backfill to contours, elevations, and dimensions indicated. The existing beach contours are variable. The intent of the placement is to extend the existing berm seaward by the distance indicated on the Plans, and along the beach for a distance sufficient to accommodate the dredged volume. The fill will be placed hydraulically and mechanically manipulated to achieve the final grading. A shortage of sand to achieve the identified fill section and plan conditions shall result in a shortening of the beach fill rather than an extension of a smaller fill section to the full project extent. In the event the planned fill has inadequate capacity to accept the full fill volume, Contractor shall make Owner’s Representative aware of the capacity limitation not less than 30 days prior to completion of the fill on the State Beach to allow the Owner’s Representative to obtain authorization to extend the fill onto the Huntington Beach beach. Contractor will be responsible for providing certificates of insurance and endorsements for the City, if work is extended onto the City beach.

   2. Tolerances
      A tolerance of 0.5 meters below the prescribed grade will be allowed in the beach placement. A tolerance of +/- 3 meters shall be allowed for the width of the top of the beach crest.

   3. Staking
      The Contractor shall place and maintain grading stakes with clearly marked target elevations and tolerances on the beach until each section has been accepted by the Owner’s Representative.
4. Beach Disposal Site Preparation
Prior to placement of materials on beach, Contractor shall remove organic materials to the extent possible to avoid burying such with sand being placed.

5. Public Access
The Contractor shall maintain public access to the beach during operations and shall provide sand walk-over ramps across the placement pipes at intervals not to exceed 50 meters or as modified by current State Parks Right of Entry permit.

D. Measurement
1. Actions
   a. The Contractor will retain an independent California licensed hydrographic surveyor to provide all pre-, post- and acceptance surveys. Progress surveys will be made by the Contractor to support payment requests for dredged material. The Owner’s Representative reserves the right to witness and perform separate verification of all surveys and Contractor shall give at least 5 days notice of survey activities.
   b. Surveys/Soundings
      (1) A mandatory pre-survey conference shall be held to discuss all aspects of the Contractor’s survey plan including: control, equipment, procedures, safety plan, QC program, excavation control, dredging control, calibration, schedule, excavation/dredging limits, and deliverables.
      (2) The material removed will be measured by cubic meter in place, by means of soundings taken before and after excavation/dredging. Surveys/soundings will be taken by either, trigonometric leveling (total station)/differential leveling, Differential Global Positioning System (DGPS), 200 kHz single-beam acoustic methods, acoustic multi-beam swath methods, or in combination, as determined by the Owner’s Representative; results of surveys/soundings by any of these methods, singularly or in combination, will be the basis for payment.
      (3) The Contractor’s hydrographic surveys for progress payment shall meet or exceed the survey standards listed in the U.S. Army Corps of Engineers EM 1110-2-1003 (Hydrographic Surveying) for Class I surveys. Surveys shall be in North American Datum 1983 (NAD83) California State Planes Zone 6, meter and North American Vertical Datum of 1988 (NAVD88), meters, and be performed by a hydrographic survey Contractor with at least three (3) years of experience in hydrographic surveying and having either a current Land Surveyor's or a Professional Engineer's license, authorized to certify
surveys in the State of California. The Hydrographic Surveyor firm selected by the Contractor must be approved by the Owner’s Representative prior to performing surveys for this contract.

(5) Hydrographic surveys shall be conducted using an Automated Range-Azimuth Positioning System or Differential Global Positioning System (DGPS) with positional accuracy to Class I surveys or better that is linked to an automated (digital) depth recording device capable of continuous logging of $x,y,z$ positional data with depth measurement resolution to the nearest $3/100$ of a meter. Digital depths shall be supplemented by analog depth records if survey is performed by single beam echosounder. Sounding lines shall be verified by crosslines at least 10 percent of the principal sounding lines. Distance between successive soundings (sounding interval) shall be no more than 3 meters. Soundings shall be reduced to sounding datum (NAVD 88) by using actual tides and other appropriate corrections, such as RTK, resulting in an accuracy to meet or exceed Class I survey standard.

(6) If tide gages are used for survey correction, the Contractor shall submit a tide gage plan for approval by the Owner’s Representative. The plan shall include the types of gages to be deployed and the locations. All tide gages shall be referenced to the vertical datum as shown on the Plans.

(7) The Contractor’s independent Surveyor shall utilize the “Project Benchmark” indicated on the Plans as the benchmark for all surveys. A tie-sheet for the “Project Benchmark” is available to Contractor, if desired.

2. Method of Measurement
The total amount of dredged material will be measured by computing the volume between the bottom surface shown by the surveys and/or soundings of the pre-dredge survey, and the bottom surface shown by the soundings of the post-dredge acceptance survey within the dredging limits for each of the five Dredge Zones. The Plans represent existing conditions based on current available information, but will be verified and corrected, if necessary, by surveys or soundings taken before dredging in each locality. The Triangulated Irregular Networks (TIN) made from post-processed survey soundings, representing the pre-dredge and post-dredge acceptance survey conditions, will be used for quantity determination. The dredging limits shall be subtracted from the TINs, and the pre-dredge survey difference minus the post-dredge acceptance survey difference will represent the quantity dredged. Misplaced materials (including any required removal and placement), materials placed in temporary stockpiles, and excessive dredging beyond the limits and tolerances
indicated on the Plans and Specifications will be excluded from the quantities for which payment will be made.

3. Surveys During Progress of Work
Contract depth will be determined by soundings or sweepings taken behind the dredge as work progresses. The Contractor shall take progress soundings or sweepings and provide the resulting data to the Owner’s Representative. Progress surveys shall be performed not less than weekly when dredging Dredge Zone 1 to account for high material influx rates. Progress surveys shall be conducted not less than biweekly for Dredge Zones 2 through 5. At Contractor’s discretion and expense, surveys may be conducted more frequently to better track material dredged and deposited on the beach.

The Contractor's survey shall provide full coverage of an entire area for which progress payment is being submitted plus a buffer of 100 meters around the dredging area to calculate displaced but non-exported sand volume. Contractor's hydrographic surveys shall be performed electronically (automated) and the data shall be provided and submitted to the Owner’s Representative on an electronic media (ASCII format) in delimited files of easting, northing, and elevation (x,y,z). Three copies of the plot of the soundings will accompany the x,y,z data and all data shall be collected and plotted in metric units with the Project Datums.

4. Biweekly Estimates
Biweekly estimates of work completed will be based on the result of progress surveys made during the progress of the work. Deductions will be made for excavation/dredging not in accordance with the Specifications and for sand relocated but not exported from the system.

E. Final Examination and Acceptance
As soon as practicable after the completion of payment zones, which in the opinion of the Owner’s Representative, will not be affected by further dredging operations, each zone will be surveyed by the independent surveyor. The Contractor will remove shoals and lumps by dragging the bottom or by dredging as directed by the Owner’s Representative. However, if the bottom is soft removal may be waived at the discretion of the Owner’s Representative. The Owner’s Representative will be notified when soundings or sweepings are to be made and will be permitted to accompany the sounding or sweeping party and to inspect the data and methods used in preparing the final estimate. When areas are found to be in a satisfactory condition, the work therein will be accepted as complete. Final estimates will be subject to deductions or correction of deductions previously made because of excessive overdepth, earthwork/dredging outside or authorized areas, or disposal of material in an unauthorized manner.
After completion of the dredging and beach nourishment work, the Contractor shall provide 4 copies of reproducible “As Built” Plans of the dredging and beach nourishment areas showing all spot elevations, controls, 0.5m contour lines and existing features. Plans shall be scaled to an appropriate size and referenced to Project Datums and data shall be presented as digital (ASCII format) in delimited files of easting, northing, and elevation (x,y,z) with Project Datums.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

Quantities of Dredging shall be based on the amounts of material removed and subsequently transported to and placed on the beach. These quantities shall be determined by comparing pre-removal surveys and post removal surveys and calculating the actual volumes of sand that have been excavated and/or dredged, except for all excess quantity resulting from exceeding allowable tolerances. There will be no payment for material dredged beyond the allowable tolerances. Progress surveys comparing pre- and post-removal conditions shall be the basis of all volume calculations.

4.2 PAYMENT

Payment for Earthwork/Dredging shall include removal, transportation and placement to the lines and grades shown on the Plans. Payment will be paid at the Unit Price for Dredging and Placement of sand in the Proposal and Bid.

END OF SECTION