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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

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-- End of Section Table of Contents --

## SECTION 01090

## SOURCES FOR REFERENCE PUBLICATIONS

## PART 1 GENERAL

## 1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g.

UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

## 1.2 ORDERING INFORMATION

The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959  
Ph: 610-832-9500  
Fax: 610-832-9555  
Internet: [www.astm.org](http://www.astm.org)

NOTE: The annual ASTM Book of Standards (66 Vol) is available for \$3500.00. Prices of individual standards vary.

ASME INTERNATIONAL (ASME)  
Three Park Avenue  
New York, NY 10016-5990  
Ph: 212-591-7722  
Fax: 212-591-7674  
Internet: [www.asme.org](http://www.asme.org)

COMMERCIAL ITEM DESCRIPTIONS (CID)  
Order from:  
General Services Administration

Federal Supply Service Bureau  
470 E L'Enfant Plaza, S.W.  
Washington, DC 20407  
Ph: 202-619-8925  
Internet: <http://pub.fss.gsa.gov/h1-pub.html>

## CORPS OF ENGINEERS (COE)

Order from:

U.S. Army Engineer Waterways Experiment Station  
ATTN: Technical Report Distribution Section, Services  
Branch, TIC  
3909 Halls Ferry Rd.  
Vicksburg, MS 39180-6199  
Ph: 601-634-2571  
Fax: 601-634-2506

NOTE: COE Handbook for Concrete and Cement (Documents w/prefix  
CRD-C) (1949-present; 2 Vol) free to Government offices; \$10.00  
plus \$8.00 per yr for 4 qtrly supplements to others). Individual  
documents, single copies free. Order from address above.

## DEPARTMENT OF COMMERCE (DOC)

Order From:

National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161  
Ph: 703-487-4600  
Fax: 703-321-8547  
Internet: <http://www.ntis.gov>

## ENGINEERING MANUALS (EM)

USACE Publications Depot  
Attn: CEIM-SP-D  
2803 52nd Avenue  
Hyattsville, MD 20781-1102  
Ph: 301-394-0081

## NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

Department of Commerce  
Gaithersburg, MD 20899-0001  
Ph: 301-975-4025  
Fax: 301-926-1630  
Order Publications From:  
Superintendent of Documents  
U.S. Government Printing Office (GPO)  
Washington, DC 20402  
Ph: 202-512-1800  
Fax: 202-512-2250

or

National Technical Information Services (NTIS)  
5285 Port Royal Rd.  
Springfield, VA 22161  
Ph: 800-553-6847  
Fax: 703-321-8547  
Internet: <http://ww.gov/ntis.gov>

-- End of Section --

## SECTION 01200

## GENERAL REQUIREMENTS

## PART 1 GENERAL

## 1.1 APPLICABLE PUBLICATIONS

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

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM F 547 (1977; R 1995) Definitions of Terms  
Relating to Nail For Use with Wood and  
Wood-Based Materials

## ASME INTERNATIONAL (ASME)

ASME B18.2.1 (1996) Square and Hex Bolts and Screws  
(Inch Series)

ASME B18.2.2 (1987; R 1993) Square and Hex Nuts (Inch  
Series)

## COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-2336 (Rev A) Primer Coating (Alkyd, Exterior  
Wood, White and Tints)

CID A-A-2962 (Rev A) Enamel, Alkyd (Metric)

## DEPARTMENT OF COMMERCE (DOC)

DOC PS 1 (1996) Voluntary Product Standard -  
Construction and Industrial Plywood

## ENGINEERING MANUALS (EM)

EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety  
and Health Requirements Manual

## NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

NIST PS 20 (1994; Addenda Jan. 1997) American  
Softwood Lumber Standards

## 1.2 SUBMITTALS

Government approval is required for all submittals with a "G" designation. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

## SD-07 Certificates

## Safety Plan G

## 1.3 PROJECT FACILITIES

The Contractor shall construct and/or erect the following project facilities.

## 1.3.1 Construction Signs

Signs shall be erected as soon as possible and within 10 days after commencement of work under this contract shall include:

Project Sign at location designated by the Contracting Officer.

Warning Signs facing approaching traffic on all haul roads crossing under overhead power transmission lines.

Six hard hat signs at locations directed.

Six beach disposal signs along the exposed disposal pipe and beach fill haul route at locations designated by the Contracting Officer.

## 1.3.2 Bulletin Board at the Contractor's office

A weatherproof bulletin board, approximately 36 inches wide and 30 inches high, with hinged glass door shall be provided adjacent to or mounted on the Contractor's project office. If adjacent to the office, the bulletin board shall be securely mounted on no less than 2 posts. Bulletin board and posts shall be painted or have other approved factory finish. The bulletin board shall be easily accessible at all times and shall contain wage rates, equal opportunity notice, and such other items required to be posted.

## 1.4 CONSTRUCTION SIGNS

## 1.4.1 Materials

Lumber shall conform to NIST PS 20, and shall be seasoned Douglas Fir, S4S, Grade D or better except that posts, braces and spacers shall be construction Grade (WCLB).

Plywood shall conform to DOC PS 1, grade A-C, Group 1, exterior type.

Bolts, Nuts and Nails. Bolts shall conform to ASME B18.2.1, nuts shall conform to ASME B18.2.2, and nails shall conform to ASTM F 547.

Paints and Oils. Paints shall conform to CID A-A-2336 for primer and CID A-A-2962 for finish paint and lettering.

## 1.4.2 Construction

Project and hard hat signs shall be constructed as detailed in Figures 1, 2, and 3. Decals and safety signs will be furnished by the Contracting Officer.

Warning Signs shall be constructed of plywood not less than 1/2 inch thick and shall be securely bolted to the supports with the bottom of the sign

face 3 feet above the ground. The sign face shall be 2 x 4 feet, all letters shall be 4 inches in height. Beach Disposal Signs shall depict the wording, "DANGER - KEEP OUT, BEACH CLOSED, U.S. ARMY CORPS OF ENGINEERS BEACH NOURISHMENT PROJECT."

Painting. All exposed surfaces and edges of plywood shall be given one coat of linseed oil and be wiped prior to applying primer. All exposed surfaces of signs and supports shall be given one coat of primer and 2 finish coats of white paint. Except as otherwise indicated, lettering on all signs shall be black and sized as indicated.

#### 1.5 CONTRACTING OFFICER'S FACILITY

The Contractor shall provide as a minimum, a separate room in the Contractor's project field office (trailer) for the Contracting Officer's Representative. The room shall be accessed by an outside door (locked) separate from the Contractor's entry door. The room shall not be less than 3 meters wide by 5 meters long, and shall contain a suitable desk and chair as approved by the Contracting Officer, with telephone line, service, and 1 telephone; 1 file cabinet, minimum 3 drawer, legal, lockable; and access to a copy machine and FAX machine.

#### 1.6 MAINTENANCE AND DISPOSAL OF PROJECT FACILITIES

The Contractor shall maintain the project facilities in good condition throughout the life of the project. Upon completion of work under this contract, the facilities covered under this section will remain the property of the Contractor and shall be removed from the site at his expense.

#### 1.7 PUBLIC UTILITIES

##### 1.7.1 General

The approximate location of all railroads, pipe lines, power and communication lines, and other utilities known to exist within the limits of the work are indicated on the drawings. The sizes, locations, and names of owners of such utilities are given from available information, but their accuracy is not guaranteed. Except as otherwise indicated on the drawings, all existing utilities will be left in place and the Contractor shall conduct his operations in such a manner that the utilities will be protected from damage at all times, or arrangements shall be made by the Contractor for their relocation at the Contractor's own expense. The Contractor shall be responsible for any damage to utilities known to exist and shall reimburse the owners for such damage caused by his operations.

##### 1.7.2 Utilities Not Shown

If the Contractor encounters, within the construction limits of the entire project, utilities not shown on the plans and not visible as of the date of this contract and if such utilities will interfere with construction operations, he shall immediately notify the Contracting Officer in writing to enable a determination by the Contracting Officer as to the necessity for removal or relocation. If such utilities are left in place, removed or relocated, as directed by the Contracting Officer, the Contractor shall be entitled to an equitable adjustment for any additional work or delay.

##### 1.7.3 Coordination

The Contractor shall consult and cooperate with the owner of utilities that are to be relocated or removed by others to establish a mutual performance schedule and to enable coordination of such work with the construction work. These consultations shall be held as soon as possible after award of the contract or sufficiently in advance of anticipated interference with construction operations to provide required time for the removal or relocation of affected utilities.

#### 1.7.4 Utilities To be Relocated or Protected

The Contractor shall notify the Contracting Officer, in writing, 14 calendar days prior to starting work on any utility to be relocated or protected. On each relocation, notification shall include dates on which the Contractor plans excavation, by-pass work, removal work and/or installation work, as applicable.

#### 1.7.5 Electric Current

All electric current required by the Contractor shall be furnished at his expense. All temporary lines shall be furnished, installed, connected, and maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer and shall be removed by the Contractor in a like manner at his expense prior to final acceptance of the Construction.

### 1.8 NOTICES

#### 1.8.1 Traffic Routing

The Contractor shall notify the Contracting Officer 7 days in advance of the time work will be started in areas requiring the rerouting of traffic, traffic lane striping, and removal of street signs. The foregoing shall apply to progressive modifications of traffic routing within an area in which work is in progress.

#### 1.8.2 Existing Bench Marks and R/W Markers

The Contractor shall notify the Contracting Officer, in writing, 7 days in advance of the time he proposes to remove any bench mark or right-of-way marker. The Contractor shall concurrently notify the County of Orange Surveyor, (714)-834-3102.

#### 1.8.3 United States Coast Guard

The Contractor shall notify the Commander, Eleventh Coast Guard District, and the Coast Guard Marine Safety Office - Long Beach not less than 14 calendar days prior to commencing work. The notifications, via letter or facsimile (with copy provided to the Contracting Officer), shall include as a minimum the following information:

Project description and location including latitude/longitude (NAD 83).  
Size and displacement of any floating construction equipment.  
Name and radio call signs for working vessels.  
24-hour telephone number for on-site contact and name of project engineer.  
Work start and completion dates.  
Potential hazards to navigation.

Mail address:

Commander (oan) Eleventh Coast Guard District Building 50-6  
Coast Guard Island Alameda, CA 94501-5100  
ATTN: Local Notice to Mariners  
TEL (510) 437-2980 FAX (510) 437-2961

U.S. Coast Guard Marine Safety Group LA-LB  
1001 South Seaside Ave., Bldg. 20  
San Pedro, CA 90731  
ATTN: Waterways Management  
Tel (310) 732-2020 Fax (310) 732-2029

#### 1.8.4 Aids to Navigation

The Contractor shall not remove, relocate, obstruct, willfully damage, make fast to, or interfere with any aids to navigation unless specifically noted as part of this work. The U.S. Coast Guard has authority for moving or relocating aids to navigation. The Contractor shall notify the Eleventh Coast Guard District (address and telephone number above) in writing with a copy to the USCG Marine Safety Office - Long Beach, and the Contracting Officer, not less than 14 calendar days in advance of the time he plans to operate marine equipment adjacent to any aids to navigation which requires relocation or removal.

#### 1.8.5 U.S. Naval Weapons Station, Seal Beach

The Contractor shall notify the U.S. Naval Weapons Station, Seal Beach, POC Public Works Engineering Department, (562) 626-7755 prior to the commencement of operation. The following information shall be provided:

Project description and worksite locations.  
Size and type of all construction equipment performing work in the project area.  
24-hour telephone number for on-site contact and name of project engineer.  
Work start and completion dates.

The Contractor shall notify other appropriate officials of the U.S. Naval Weapons Station, Seal Beach, as determined by the Contracting Officer 48 hours prior to changes in operation or schedule of work.

#### 1.8.6 County of Orange

The Contractor shall notify the County of Orange, Public Facilities and Resource Department, 34551 Puerto Place, Dana Point, California 92629, telephone (949) 489-9473, prior to the commencement of dredging and beach fill operations. The information stated in 1.8.5 shall be required.

#### 1.8.7 City of Seal Beach

The Contractor shall notify the City of Seal Beach, Public Works Department, 211 Eighth Street, Seal Beach, California 90740, (562) 431-2527 prior to the commencement of operation. The information stated in paragraph 1.8.5 shall be required.

#### 1.9 RESTRICTIONS

### 1.9.1 Obstruction of Channel

The Government will not undertake to keep the harbor entrance or navigation channels free from vessels or other obstructions. The Contractor will be required to conduct the work in such a manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon the completion of the work, the Contractor shall promptly remove his plant, including ranges, temporary buoys, and piles and other marks placed by him under the contract in navigable waters or on shore.

### 1.9.2 Local Restrictions

The following restrictions apply to the construction operations conducted at the Surfside-Sunset:

Construction activity on the beach shall be restricted to the hours of 7 a.m. to 6:30 p.m., Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturdays. No beach grooming will be conducted on Sunday. This does not restrict dredging activities or pumping of sand onto the beach. The Contractor and his employees shall park all private vehicles within the designated area(s).

Booster Pump. The booster unit if required shall be located along the beach fill as far as practical from the Surfside Colony housing. At no time shall the booster unit be placed between the Surfside Colony housing and the rock revetment in front of the housing. The booster pump will not be allowed inside the U.S. Naval Weapons Station. The booster pump shall be mounted on rubber to reduce vibrations and the blower shall be vented toward the ocean to minimize the noise level. The booster unit shall be fully enclosed with a bamboo, grade-stake, or chain-link fencing not less than 6-foot in height.

The existing road through the Contractor's Work Area shall remain open at all times. The Contractor shall not place any equipment, materials, or park vehicles within the road or within 10 feet from the edge of the pavement.

Discharge pipeline. The discharge pipeline, if routed along the east jetty from the borrow area to the beach shall only be placed on the seaward side of the jetty. The pipeline shall not be placed on the inside (harbor side) of the jetty. The discharge pipeline shall be routed along the beach fill operations as it progresses downcoast. Attention is invited to paragraph 1.12 Public Safety.

Beach Access Ramp. The Contractor shall provide access ramps over the discharge pipeline at 200 meter intervals so that beach access remains available during construction operations. Also, the Contractor shall provide an access ramp over the discharge pipeline at every street entrance and lifeguard tower. No ramps shall be constructed across vegetated areas.

Ramps or sand tracks shall also be provided when crossing the sand between the road inside the U.S. Naval Weapons Station Facility and the beach access gate to protect underground utilities. Attention is invited to paragraph 1.12 Public Safety.

### 1.10 PERMITS

Reference is made to the clause of the contract entitled: PERMITS AND RESPONSIBILITIES, which obligate the Contractor to obtain all required licenses and permits.

#### 1.11 MARINE PLANT AND EQUIPMENT

All marine plant and equipment shall be inspected and certified as required under the regulation of the U.S. Coast Guard before being placed in service. No marine plant or equipment requiring Coast Guard inspection shall be put into use or on the job without the required certification issued by the U.S. Coast Guard Officer in Charge of Marine Inspections.

All marine construction equipment shall monitor appropriate VHF marine safety radio channels.

#### 1.12 PUBLIC SAFETY

Attention is invited to the CONTRACT CLAUSE: PERMITS AND RESPONSIBILITIES. The Contractor shall provide temporary fencing, barricades, and/or guards, as required, to provide protection in the interest of public safety. Whenever the Contractor's operations create a condition hazardous to the public, he shall furnish at his own expense and without cost to the Government, such flagmen and guards as are necessary to give adequate warning to the public of any dangerous conditions to be encountered and he shall furnish, erect, or maintain such fences, barricades, lights, signs and other devices as are necessary to prevent accidents and avoid damage or injury to the public. Contractor will provide a guard at the dredge discharge at all times beach is open to the public. Flagmen and guards, while on duty and assigned to give warning and safety devices shall conform to applicable city, county, and state requirements. Should the Contractor appear to be neglectful or negligent in furnishing adequate warning and protection measures, the Contracting Officer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor without additional cost to the Government. Should the Contracting Officer point out the inadequacy of warning and protective measures, such action of the Contracting Officer shall not relieve the Contractor from any responsibility for public safety or abrogate his obligation to furnish and pay for those devices. The installation of any general illumination shall not relieve the Contractor of his responsibility for furnishing and maintaining any protective facility.

#### 1.13 SAFETY REQUIREMENTS

##### 1.13.1 General

The Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, (see CONTRACT CLAUSES: SECTION 00700, ACCIDENT PREVENTION) and the Occupational Safety and Health Act (OSHA) Standards for Construction (Title 29, Code of Federal Regulations Parts 1910 and 1926 as revised from time to time) and California Occupational Safety and Health Regulations Title 8 are applicable to this contract. In case of conflict, the most stringent requirement of the standards is applicable. Pursuant to EM 385-1-1, the Contractor shall submit a Site-Specific Safety and Health Plan.

##### 1.13.2 The Prime Contractor's Superintendent

The Prime Contractor's superintendent shall take an active role in

enforcing the safety requirements by participation in safety conferences, hazard analysis (see below), tool box meetings, walk-through inspections, and correction of violations, etc.

#### 1.13.3 Activity Hazard Analysis

Based on the construction schedule, the Contractor shall submit a Activity Hazards Safety Analysis of each major phase of work prior to entering that phase of activity. The analysis shall include major or high risk hazards, as well as commonly recurring deficiencies that might possibly be encountered for that operation, and shall identify proposed methods and techniques of accomplishing each phase in a safe manner. The Prime Contractor's superintendent shall take active participation in the Activity Hazard Analysis, including the subcontractors' work. Prior to start of actual work a meeting shall be held with Prime Contractor, Government, and affected subcontractor to review the Activity Hazard Analysis. In addition, job site meetings shall be held to indoctrinate foreman and workers on details of this analysis.

#### 1.14 SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Department of the Army and of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessel engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipelines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in fairway or channel, as approved by the Secretary of the Army (33 C.F.R. 201.1-201.16) and the Commandant U.S. Coast Guard (33 C.F.R. 80.18-80.31a and 33 C.F.R. 95.51-95.70).

#### 1.15 RADIO COMMUNICATIONS

To facilitate and insure the safe passage of vessels in the channel, the Contractor shall provide, operate, and maintain on his plant, radio facilities capable of voice communication with vessels using the channel. Station licensing and frequency authorizations shall be the responsibility of the Contractor.

#### 1.16 REPAIR OF STREETS, ACCESS ROADS, AND WORK AREAS

The Contractor shall restore streets and access roads (used for haul routes and mobilization equipment), and work areas to original condition upon completion of the work.

#### 1.17 INSPECTION

Reference is made to the contract clause: INSPECTION OF CONSTRUCTION. In addition, the Contractor will be required:

a. To furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the plant as may be reasonably necessary in inspecting and supervising the work.

b. To furnish, on the request of the Contracting Officer or any inspector, suitable transportation from all points on shore designated

by the Contracting Officer to and from the various pieces of plant, and to and from the work areas. Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

c. To allow, upon the request of the Contracting Officer's Representative, authorized representatives of the California Regional Water Quality Control Board and the South Coast Air Quality Management District to: enter upon the Contractor's premises where a regulated facility or activity is located or conducted, or where records are kept; have access to and copy, at reasonable times, any records that must be kept per agency requirements; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated by these agencies; and sample or monitor at reasonable times any substances or parameters at any location for the purpose of assuring compliance with agency regulations.

#### 1.18 WORK AREAS AND EASEMENTS

The contractor's work areas and temporary construction easements are as indicated, subject to approval of the Contracting Officer. The Contractor's work area(s) shall be fenced according to the instruction of the Contracting Officer. Upon completion of the work, the fence materials shall become property of the Contractor and shall be removed from the site.

Any damage to electrical underground installations, light poles, pavement, fence, shrubs or other facilities within the Contractor's work area shall be repaired or replaced by and at the expense of the Contractor.

The Contractor shall be provided a mooring site located within Anaheim Bay Harbor. The exact location shall be in coordination with the Contracting Officer and the U.S. Naval Weapons Station, Seal Beach, POC Public Works Engineering Department, (562) 626-7755.

#### 1.19 CORPS OF ENGINEERS RESERVE FLEET

If the work specified in this contract is performed by a hopper dredge(s), the owner must have an active Basic Ordering Agreement (BOA) for the hopper dredge(s) on file with the Corps. The Contractor shall be obligated to make the hopper dredge(s) available to serve in the Corps of Engineers Reserve Fleet (CERF) at any time that the hopper dredge(s) is performing work under this contract. When the Contracting Officer is notified of the decision to activate this dredge(s) into the CERF, he shall take appropriate action to release the dredge(s). He may then extend or terminate the contract to implement whichever action is in the best interest of the Government. The CERF Contractor shall also be subject to the following conditions:

The Director of Civil Works may require the Contractor to perform emergency dredging at another CONUS (48 contiguous states) site for a period of time equal to the remaining time under this contract at the date of notification plus up to ninety (90) days at the previously negotiated rate which appears on the schedule of prices in the BOA.

The Chief of Engineers may require the Contractor to perform emergency dredging at an OCONUS (Outside CONUS which includes Alaska, Hawaii,

Puerto Rico, the Virgin Islands, or U.S. Trust Territories) site for a period of time equal to the time remaining under this contract at the date of notification plus up to one hundred eighty (180) days at the negotiated rate which appears on the schedule of prices in the BOA.

The CERF shall be activated by the Chief of Engineers or the Director of Civil Works; then the Ordering Contracting Officer will notify the Contractor. From the time of notification, the selected hopper dredge(s) must depart for the emergency assignment within seventy-two (72) hours for CONUS or ten (10) days for OCONUS assignments.

A confirming delivery order will be issued pursuant to the Basic Ordering Agreement (BOA) by the Ordering Contracting Officer. Such delivery order shall utilize the schedule of rates in the BOA for the specific hopper dredge(s).

If during the time period specified in the paragraphs above, a CERF vessel(s) is still required, the contract performance may be continued for additional time by mutual agreement.

#### 1.20 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled: DEFAULT (FIXED PRICE CONSTRUCTION). In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

- (1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
- (2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

The following schedule of monthly anticipated adverse weather delays is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

#### MONTHLY ANTICIPATED ADVERSE WEATHER DAYS

Work Days Based on Five (5) Day Work Week

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
5	4	3	1	0	0	0	0	0	0	1	3

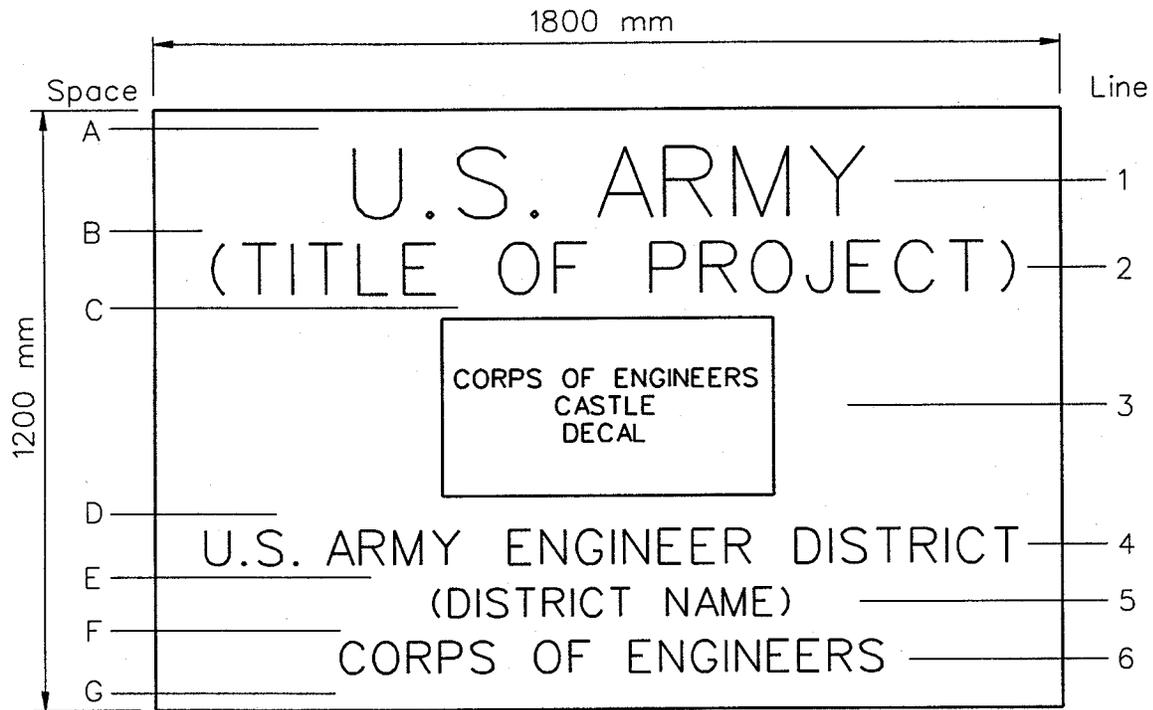
Upon acknowledgment of the Notice to Proceed and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled workday. The number of actual adverse weather days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of

each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated, the Contracting Officer will convert any qualifying days to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the Contract Clause entitled: DEFAULT (FIXED PRICE CONSTRUCTION).

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --



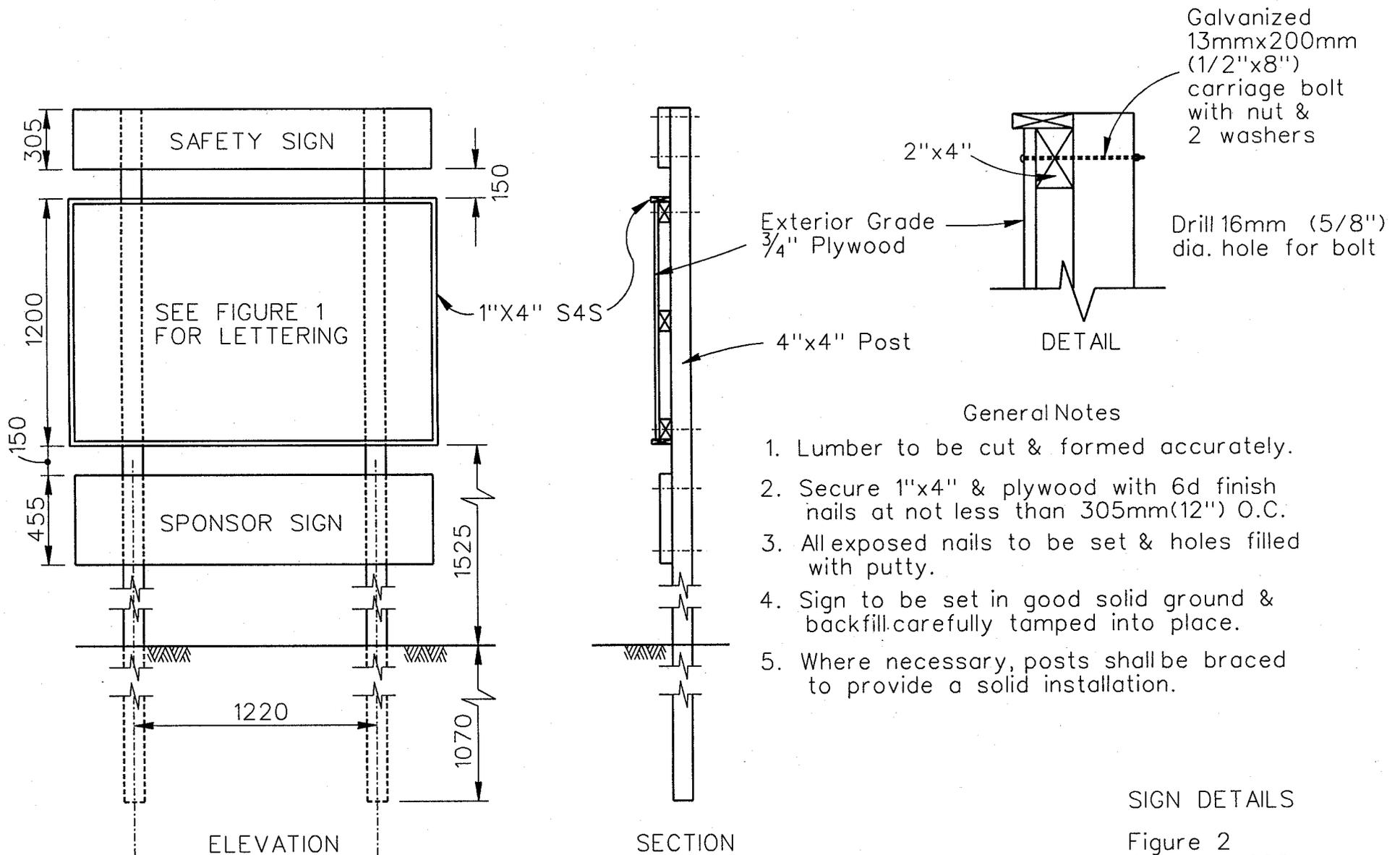
Space	Height	Line	Description	Letter Height	Stroke
A	75	1	U.S. ARMY	140	22
B	50	2	PROJECT NOMENCLATURE	100	16
C	50	3	CORPS OF ENGINEERS CASTLE (DECAL)	345	
D	70	4	U.S. ARMY ENGINEER DISTRICT	70	9
E	50	5	DISTRICT NAME	60	6
F	50	6	CORPS OF ENGINEERS	65	9
G	75				

Letter Color -- Black

PROJECT SIGN  
(Army-Civil Works)

Figure 1  
October 1996

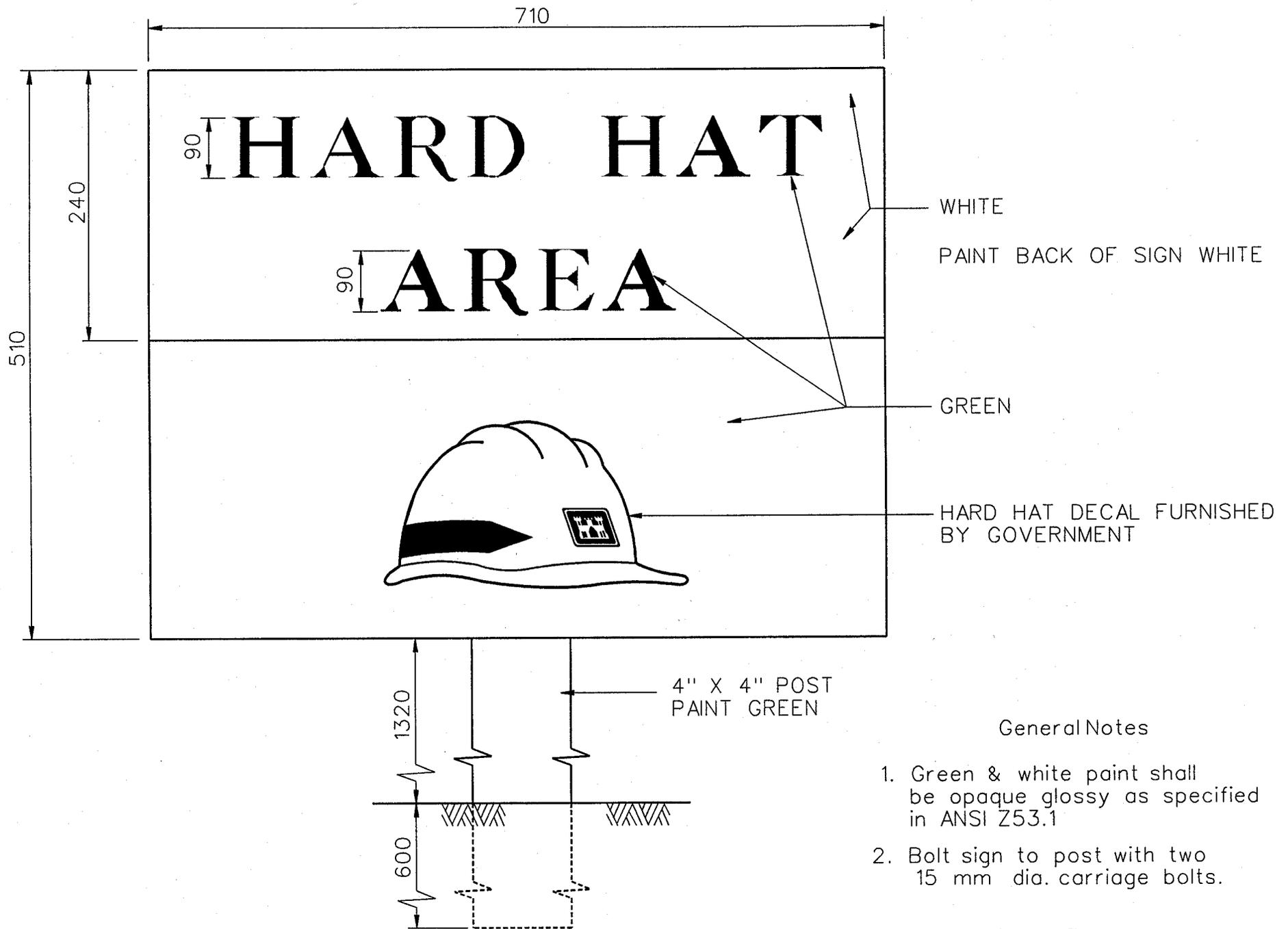
All units are in millimeters.



SIGN DETAILS

Figure 2  
October 1996

All units are in millimeters unless otherwise indicated.

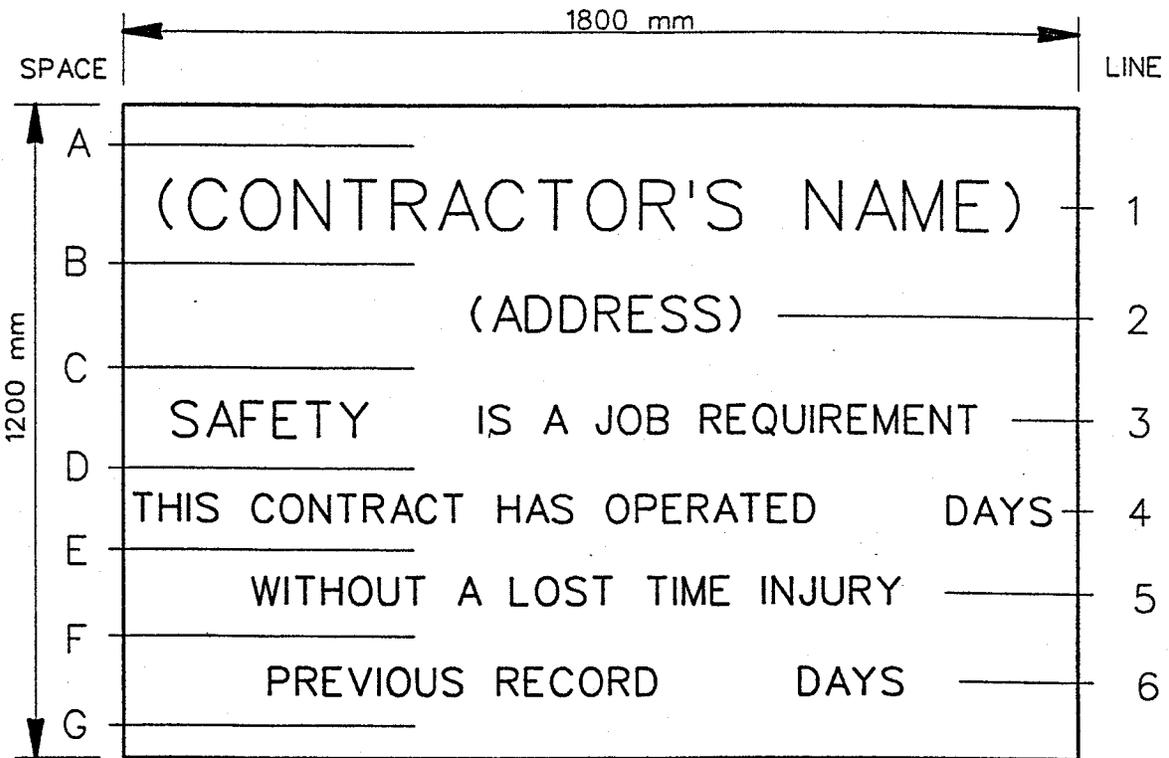


#### General Notes

1. Green & white paint shall be opaque glossy as specified in ANSI Z53.1
2. Bolt sign to post with two 15 mm dia. carriage bolts.

All units are in millimeters unless otherwise indicated.

Figure 3  
October 1996



<u>SPACE</u>	<u>HEIGHT</u>	<u>LINE</u>	<u>DESCRIPTION</u>	<u>LETTER HEIGHT</u>
A	125			
B	75	1	CONTRATOR'S NAME	125
C	150	2	ADDRESS	75
D	75	3	SAFETY IS A JOB REQUIREMENT	115 & 75
E	75	4	ALL LETTERING	75
F	75	5	ALL LETTERING	75
G	125	6	ALL LETTERING	75

Notes

Lettering shall be black No. 27038 standard 595.  
 Sign shall be installed in the same manner  
 as the Project Sign.

SAFETY SIGN  
 STANDARD DETAIL

All units are in millimeters.

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01250

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PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

## SECTION 01250

## MEASUREMENT AND PAYMENT

## PART 1 GENERAL

## 1.1 SUBMITTALS

None

## 1.2 LUMP SUM PAYMENT ITEMS

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the PRICING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

## 1.2.1 Item 1: Mobilization and Demobilization

## 1.2.1.1 Payment

Payment will be made for costs associated with mobilization and demobilization, as defined in Special Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION.

## 1.2.1.2 Unit of Measure

Unit of measure: lump sum.

## 1.3 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the PRICING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

## 1.3.1 Item 1: Dredging

## 1.3.1.1 Payment

Payment will be made for costs associated with dredging, including overdepth dredging, transporting and deposition of dredge material at designated disposal site(s), and other operations incidental thereto, including hydrographic surveys and water quality control and monitoring.

## 1.3.1.2 Measurement

The total quantity of dredge material for which payment will be made will be by in-place quantity in cubic meters by computing the difference in available material between the pre-dredge survey and the post-dredge survey. Available material is defined as material located within the boundaries of the dredge prism. Specifically, a quantity of available material will be computed between the dredge prism and the bottom surface shown by the soundings of the Government's pre-dredge survey, and a quantity of available material will be computed between the dredge prism and the bottom surface shown by the Government's post-dredge survey. The difference between these two available quantities (pre-dredge and post-dredge) will constitute the quantity of material dredged. Misplaced materials (including any required removal and placement), excessive overdepth dredging and material falling or drawn into the cut from beyond the side slope plane or beyond the limits indicated, will be excluded from the quantities for which payment will be made. The Triangulated Irregular Network (TIN) method will be used for quantity determination. For method of soundings, see SECTION 02020: DREDGING.

## 1.3.1.3 Unit of Measure

Unit of measure: cubic meter.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

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SECTION 01330

SUBMITTAL PROCEDURES

Includes changes through Notice 1 (October 2000)

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers as follows:

SD-04 Samples

SD-05 Design Data

SD-06 Test Reports

SD-07 Certificates

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.3 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

#### 1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

#### 1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

#### PART 2 PRODUCTS (Not Applicable)

#### PART 3 EXECUTION

##### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

##### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. Columns "c" through "f" have been completed by the Government; the Contractor shall complete columns "a" and "g" through "i" and submit two (2) copies to the Contracting Officer for approval within ten (10) calendar days after Notice to Proceed. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated. The Contractor

will insure that any errors in the ENG Form 4288 and any omissions are added prior to submission for approval.

### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of (7) calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 3.5.1 Procedures

Submittals shall be made to:

Daniel Moore  
U.S. Army Corps of Engineers  
Los Angeles Project Office  
P.O. Box 3157  
Ontario, CA 91761-0916  
Tel (909) 981-5571  
Fax (909) 981-5649

#### 3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

### 3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Four copies of the submittal will be retained by the Contracting Officer and Two copies of the submittal will be returned to the Contractor.

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

<p>CONTRACTOR</p> <p>(Firm Name)</p> <p>_____ Approved</p> <p>_____ Approved with corrections as noted on submittal data and/or attached sheets(s).</p> <p>SIGNATURE: _____</p> <p>TITLE: _____</p> <p>DATE: _____</p>
--

-- End of Section --



**SUBMITTAL REGISTER**

CONTRACT NO.  
DACW09-01-B-0006

TITLE AND LOCATION  
SAN GABRIEL RIVER TO NEWPORT BAY, STAGE 11

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY				REMARKS		
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
	01200		SD-07 Certificates														
			Accident Prevention Plan	1.14	G												
	01354		SD-05 Design Data														
			Foraging Bird Count		FIO												
			SD-06 Test Reports														
			Daily Report of Operations	3.3.1	FIO												
			Weekly Water Quality Monitoring	3.3.1	FIO												
			SD-07 Certificates														
			Environmental Protection Plan	1.5	G												
	01451		SD-07 Certificates														
			Contractor Quality Control Plan		G												
	02020		SD-04 Samples														
			Sediment Samples	3.6	FIO												
			SD-05 Design Data														
			Dredge Sample Data Form	3.6	FIO												
			SD-06 Test Reports														
			Daily Report of Operations	3.2	FIO												
			SD-07 Certificates														
			Construction Plan	3.1	G												
			Hydrographic Survey Contractor	3.7.4	G												



## INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

### THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- |   |   |
|---|---|
| A -- Approved as submitted.   | E -- Disapproved (See attached).  |
| B -- Approved, except as noted on drawings.   | F -- Receipt acknowledged.  |
| C -- Approved, except as noted on drawings.<br>Refer to attached sheet resubmission required. | FX -- Receipt acknowledged, does not comply<br>as noted with contract requirements. |
| D -- Will be returned by separate correspondence.   | G -- Other (Specify)  |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

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## SECTION 01354

## ENVIRONMENTAL PROTECTION FOR CIVIL WORKS

## PART 1 GENERAL

## 1.1 REFERENCES

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

## ENGINEERING MANUALS (EM)

EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

## 1.2 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of plant or animal communities; or degrade the environment from an aesthetic, cultural or historic perspective. Environmental protection is the prevention/control of pollution and habitat disruption that may occur during construction. The control of environmental pollution and damage requires consideration of air, water, land, biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive materials; and other pollutants.

## 1.3 SUBMITTALS

Government approval is required for all submittals with a "G" designation. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-05 Design Data

Foraging Bird Count

SD-06 Test Reports

Daily Report of Operations

Weekly Water Quality Monitoring

SD-07 Certificates

Environmental Protection Plan G

#### 1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor shall comply with all applicable Federal, State, and local laws and regulations. The Contractor shall provide environmental protective measures and procedures to prevent and control pollution, limit habitat disruption, and correct environmental damage that occurs during construction.

##### 1.4.1 Protection of Features

This section supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor's work under the contract.

##### 1.4.2 Permits

This section supplements the Contractor's responsibility under the contract clause PERMITS AND RESPONSIBILITIES to the extent that the Government has already obtained environmental permits. The Government has obtained permits for dredging and disposal. The contractor shall comply with the terms, and conditions of these permits. The contractor shall also comply with other environmental commitments made by the Government. The Contractor is responsible for obtaining any necessary permits or licenses not previously obtained by the Government.

##### 1.4.3 Special Environmental Requirements

The Contractor shall comply with the special environmental requirements, if any, included hereinafter. These special environmental requirements are an outgrowth of environmental commitments made by the Government during the project development.

##### 1.4.4 Environmental Assessment of Contract Deviations

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were

established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, alternate access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require an extended review, processing, and approval time by the Government.

The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

#### 1.5 ENVIRONMENTAL PROTECTION PLAN

Within (10) ten calendar days of Notice of Award, the Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 21 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 21 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. No physical work at the site shall begin prior to acceptance of the Contractor's plan or an interim plan covering the work to be performed. The environmental protection plan shall include, but not be limited to, the following:

##### 1.5.1 Laws, Regulations, and Permits

The Contractor shall provide as part of the Environmental Protection Plan a list of all Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control, and abatement that are applicable to the Contractor's proposed operation and the requirements imposed by those laws, regulations, and permits. Permits obtained by the Contractor shall be attached to, and specific conditions included in the Environmental Protection Plan.

##### 1.5.2 Spill Control Plan

The Contractor shall include as part of the Environmental Protection Plan, a Spill Control Plan. The plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by the Emergency Response and Community Right-to-Know Act or regulated under State or local laws or regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

- a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.
- b. Training requirements for Contractor's personnel and methods of accomplishing the training.
- c. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
- d. 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.
- e. The methods and procedures to be used for expeditious contaminant cleanup.
- f. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer 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 spill occurs. The plan shall contain a list of the required reporting channels and telephone numbers.

#### 1.5.3 Recycling and Waste Minimization Plan

The Contractor shall submit a Recycling and Waste Minimization Plan as a part of the Environmental Protection Plan. The plan shall detail the Contractor's actions to comply with the following recycling and waste minimization requirements:

- a. The Contractor shall participate in State and local government sponsored recycling programs to reduce the volume of solid waste materials at the source.
- b. The Contractor shall collect glass bottles, aluminum cans, and paper at the job site for recycling.

#### 1.5.4 Contaminant Prevention Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a contaminant prevention statement identifying potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water, or ground. The Contractor shall detail provisions to be taken to meet Federal, State, and local laws and regulations regarding the storage and handling of these materials.

#### 1.5.5 Debris Management Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a Debris Management Plan to prevent disposal of solid debris at disposal sites. The Debris Management Plan shall include sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

#### 1.5.6 Environmental Monitoring

As a part of the Environmental Protection Plan, the Contractor shall include the details of environmental monitoring requirements under the laws and regulations and a description of how this monitoring will be accomplished. The Contractor shall also include in the plan the name of the individual or subcontractor performing the biological observations (see paragraph 3.4.3).

### PART 2 PRODUCTS (NOT APPLICABLE)

### PART 3 EXECUTION

#### 3.1 SPECIAL ENVIRONMENTAL PROTECTION REQUIREMENTS

##### 3.1.1 Tree Protection

No ropes, cables, or guys shall be fastened to or attached to any tree(s) for anchorage unless specifically authorized by the Contracting Officer. Where such special use is permitted, the Contractor shall provide effective protection to prevent damage to the tree and other land and vegetative resources. Unless specifically authorized by the Contracting Officer, no construction equipment or materials shall be placed or used within the drip line of trees shown on the drawings to be saved. No excavation or fill shall be permitted within the drip line of trees to be saved except as shown on the drawings.

##### 3.1.2 U.S. Department of Agriculture (USDA) Quarantined Considerations

The Contractor shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present. The Contractor shall consult with the USDA Plant Protection and Quarantine (USDA - PPQ) jurisdictional office for additional cleaning requirements that may be necessary.

##### 3.1.3 Soil Disposal Areas on Government Property

Material disposal on Government property shall be disposed only in those areas designated on the contract drawings. Hazardous, toxic, and radiological wastes (HTRW) shall not be disposed of on Government property.

Disposal operations shall be managed and controlled to prevent erosion of soil or sediment from entering nearby waters or wetlands. Disposal operations shall be developed and managed in accordance with the grading plan shown on the drawings or as approved by the Contracting Officer.

#### 3.1.4 Disposal of Solid Wastes

Solid waste is rubbish, debris, waste materials, garbage, and other discarded solid materials (excluding clearing debris and hazardous waste as defined in following paragraphs). Solid waste shall be placed in containers and disposed on a regular schedule. All handling and disposal shall be conducted in such a way as to prevent spillage and contamination. The Contractor shall transport all solid waste off Government property and dispose in compliance with Federal, State, and local requirement.

#### 3.1.5 Disposal of Contractor Generated Hazardous Wastes

Hazardous wastes are hazardous substances as defined by applicable State and local regulations. Hazardous waste generated by construction activities shall be removed from the work area and be disposed in compliance with Federal, State, and local requirements. The Contractor shall segregate hazardous waste from other materials and wastes, and shall protect it from the weather by placing it in a safe covered location; precautionary measures against accidental spillage such as berming or other appropriate measures shall be taken. Hazardous waste shall be removed from Government property within 60 days. Hazardous waste shall not be dumped onto the ground, into storm sewers or open water courses, or into the sanitary sewer system.

#### 3.1.6 Fuels and Lubricants

Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and waste oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with Federal, State, and local laws and regulations.

### 3.2 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

#### 3.2.1 Known Historic, Archaeological, and Cultural Resources

There are no known historic, archaeological, and cultural resources within the Contractor's work area.

#### 3.2.2 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, items are observed that may have historic or archaeological value (e.g., Native American human remains or associated objects are discovered), such observations shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent his employees from trespassing on, removing, or otherwise disturbing such resources.

### 3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. All dredging and fill activities shall remain within the boundaries specified in the plans. There will be no dumping of fill or material outside of the project area or within any adjacent aquatic community.

### 3.3.1 Monitoring of Water Areas Affected by Construction Activities

As part of the Environmental Protection Plan, the Contractor shall implement a Water Quality Monitoring Plan at the dredge and beach disposal sites. Water quality and Secchi Disk Monitoring/Water Sampling shall commence at least one week prior to the start of dredge and beach disposal operations and continue at least one week past the completion of all such operations. Monitoring shall be conducted a minimum of once a week during construction. The Contractor shall conduct all monitoring during daylight hours.

All Weekly Water Quality Monitoring data shall be obtained via remote electronic detection equipment and secchi disk. Parameters measured by electronic detection equipment shall be sampled 1.0 meter below the water's surface and, where possible, 1 meter above the bottom. The Contractor shall monitor the following locations:

#### Dredge Site

- a. 30 meters upstream of the dredge (in opposite direction of turbidity plume)
- b. 30 meters downstream of the dredge (in direction of turbidity plume)
- c. 100 meters downstream of the dredge (in direction of turbidity plume)
- d. Control Measurement #1: 200 to 300 meters from dredge site
- e. Control Measurement #2: 300 to 400 meters from the dredge site
- f. Two sites randomly located within the borrow area footprint for pre- and post-construction monitoring.

#### Beach Disposal

- a. 30 meters upstream of the disposal and within 8 meters of the surf zone (in opposite direction of turbidity plume).
- b. 30 meters downstream of the disposal and within 8 meters of the surf zone (in direction of turbidity plume).

Note: During sampling for (a) and (b), the downcurrent sampling point

shall be located an equal distance from the surf zone as the upcurrent sampling location.

- c. 100 meters downstream of the disposal (in direction of turbidity plume).
- d. Control Measurement #1: 200 to 250 meters from disposal site.
- e. Control Measurement #2: 300 to 400 meters from the disposal site.
- f. One site randomly located adjacent to the beach disposal area outside the surf zone for pre- and post-construction monitoring.

The control measurement sites shall be representative of ambient conditions within the borrow and beach disposal areas. They shall be located outside any visible turbidity plume.

The Contractor shall monitor for the following parameters:

- dissolved oxygen (mg/l)
- salinity (ppt)
- temperature (F)
- pH
- light transmittance (% transmitted)

Secchi Disk: The Contractor shall also perform secchi disk readings at all monitoring locations (identified above) to determine vertical depth of water quality. Readings shall be taken from a boat or platform small enough to obtain accurate Secchi disk readings. The same or similar type of boat or platform shall be used for all readings to assure consistency.

Monitoring shall be conducted according to United States Environmental Protection Agency or California Department of Health Services approved test procedures as described in the current California Code of Regulations Title 22, Article 11, as appropriate, unless other test procedures have been specified.

During sampling and measurement operations, the following observations shall be recorded by the individual performing such operations for each monitoring location:

- Name of project
- Date, exact location and time of sampling or measurements
- Name of individual performing sampling or measurements
- Speed and direction of current
- Tidal stage
- General weather conditions and wind velocity
- Appearance of trash, floatable material, grease, oil slick, or other objectionable material
- Discoloration and extent of visible turbidity plumes
- Any distinguishable odors
- Quantity of material dredged the previous day
- Cumulative total amount of material dredged to date
- Disposal site for material being dredged during monitoring or beach

disposal  
Results

Upon completion of weekly monitoring, the Contractor shall, that same day, submit all monitoring results along with secchi disk measurements, to the Contracting Officer as part of the Daily Report of Operations. The Contractor shall keep a copy of all monitoring results, secchi disk measurements, observations, calibration, and maintenance records in a file at the job site available for inspection.

Daily, during dredging operations, visual observations shall be made for turbidity plumes on all sides of the dredge and on all sides of moving, loaded barges/scows. Visual observations shall be recorded in a logbook.

During beach replenishment operations, visual observations shall be made on a daily basis of the effects of discharges on receiving water quality (e.g. changes in turbidity, turbidity plumes). Visual observations shall be recorded in a logbook.

If turbidity in the receiving water reduces transmissivity to a value more than 40 percent below that of a distance of 30 m upstream of the disposal site and within 8 m of the surf, operations shall be modified to reduce turbidity to acceptable levels.

### 3.3.2 Floating Debris

During the performance of the work, the Contractor shall institute and enforce procedures to prevent spills and floating debris from fouling the local waters and beach. Should these procedures fail, the Contractor shall promptly clean up all spills and debris. At the end of each work shift, loose materials on adjoining structures and debris in the water and on the beach shall be removed by the Contractor and disposed of off site.

### 3.3.3 Other Discharges

Should the Contractor lose, dump, throw overboard, sink or misplace material, plant, machinery appliance, or cause pollution of the waters, the Contractor shall give immediate notice to the Contracting Officer and, if required shall boom, buoy or otherwise mark the location of the incident until the obstruction or pollution problem is removed. Should the Contractor refuse, neglect or delay compliance with these requirements, the necessary removal and cleanup may be deducted from the monies due or to become due to the Contractor.

### 3.3.4 Boundaries

All dredging and fill activities will remain within the boundaries specified in the plans. There will be no dumping of fill or material outside of the project area or within any adjacent aquatic community.

## 3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish and wildlife (endangered species and their habitat). Endangered or protected species known to frequent the project area and their respective nesting season include:

California least tern	01 April through 15 September
California grunion	01 March through 15 September
Western snowy plover	01 March through 15 September
California brown pelican	non-breeding individuals may occur year-round roosting on rubblemound structures

#### 3.4.1 Marine Vertebrates

Personnel shall not harass any marine mammals, fish, or waterfowl.

#### 3.4.2 Dead or Injured Wildlife

The Contractor shall report any incidental take (dead or injured species) immediately to the Contracting Officer. The Contracting Officer shall consult with U.S. Fish and Wildlife Service immediately in the event of incidental take in the form of direct mortality through accidental death of a California least tern, California brown pelican, or western snowy plover.

Operations may be stopped if it is suspected that the impact of the taking causes an irreversible and adverse impact on the species.

#### 3.4.3 Biological Observations

A qualified biologist, ornithologist, or other plover expert shall be employed to walk the beach in search of western snowy plover nests before any construction activities occur. This will take place prior to construction activities such as deployment/movement of pipelines, dike construction, single point discharge, and bulldozing of sand.

If during construction activities, snowy plover nests are observed within the project area, such observations shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent his employees from trespassing on, removing, or otherwise disturbing such resources.

### 3.5 PROTECTION OF AIR RESOURCES

#### 3.5.1 Construction Activities

Special management techniques as set out below shall be implemented to control air pollution by the construction activities. These techniques supplement the requirements of Federal, State, and local laws and regulations, and the safety requirements under this contract. If any of the following techniques conflict with the requirements of Federal, State, or local laws or regulations, or safety requirements under this contract, then those requirements shall be followed in lieu of the following.

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources.

### 3.5.2 Air Quality Management District

All activities, equipment, processes, and work operated or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with the South Coast Air Quality Management District (SCAQMD) permit requirements and all Federal emission and performance laws and standards. The Contractor shall obtain a Permit to Operate from the South Coast Air Quality Management District prior to commencement of work, pay all associated fees, and follow all permit requirements. Point of contact for SCAQMD is William Thompson, (909) 396-2398. The Contractor should schedule suitable time to acquire appropriate SCAQMD permits, waivers or credits.

Construction equipment shall be properly maintained to minimize release of diesel and hydrocarbon effluent. The Contractor shall follow all air quality standards, including emissions, fuel use, and fuel consumption standards.

### 3.6 NOISE

All internal combustion powered equipment shall be equipped with properly operating mufflers and kept in a proper state of tune to alleviate back-fires. Engines, if exposed, shall be fitted with protective shrouds to reduce motor noise. All portable and support equipment shall be located as far as possible from any sensitive areas (i.e. Seal Beach Wildlife Refuge).

Construction equipment shall be properly maintained and scheduled to minimize nuisance and unsafe noise effects to sensitive biological resources, residential areas, and socio-economic (tourist) environments.

The Contractor shall designate a disturbance coordinator responsible for responding to noise complaints. His/her name and telephone number shall be clearly posted at the construction site. It is the responsibility of the disturbance coordinator to respond to complaints, determine the cause, and implement measures to mitigate the impact.

### 3.7 INSPECTION

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall inform the Contracting Officer of proposed corrective action and take such action to correct the noncompliance. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

### 3.8 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed pollution control facilities and portable pollution control devices for the duration of the contract or for the length of time construction activities create the particular pollutant.

### 3.9 TRAINING OF CONTRACTOR PERSONNEL

Contractor personnel shall be trained in environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel. The training and meeting agenda shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, installation and care of facilities (vegetative covers, etc.), and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control. Anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, shall also be discussed. Other items to be discussed shall include recognition and protection of archaeological sites and artifacts, as well as protection of any threatened or endangered species.

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SECTION 01415

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## SECTION 01415

## METRIC MEASUREMENTS

## PART 1 GENERAL

## 1.1 REFERENCES

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

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 380	(1993) Practice for Use of the International System of Units (SI)
ASTM E 621	(1994) Practice for Use of Metric (SI) Units in Building Design and Construction

## 1.2 GENERAL

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 Government 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.

## 1.3 USE OF MEASUREMENTS

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 Contracting Officer. 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.

### 1.3.1 Hard Metric

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value, i.e., where an SI value is not an exact mathematical conversion of an I-P value, such as the use of 100 mm in lieu of 4 inches. 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.

### 1.3.2 Soft Metric

- a. 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.
- b. 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)).

### 1.3.3 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).

## 1.4 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 drawings shall be brought to the attention of the Contracting Officer for resolution.

## 1.5 RELATIONSHIP TO SUBMITTALS

Submittals for Government 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 drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

## PART 2 PRODUCTS

(Not Applicable)

PART 3 EXECUTION  
(Not Applicable)

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SECTION 01451

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SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740 (1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (1995b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 SUBMITTALS

Government approval is required for all submittals with a "G" designation. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Contractor Quality Control Plan G

1.3 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

### 3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 10 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 10 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

#### 3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

### 3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

### 3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

### 3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. During the meeting, a mutual

understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

### 3.4 QUALITY CONTROL ORGANIZATION

#### 3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

#### 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

#### 3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: civil and dredging. These individuals may be employees of the prime or subcontractor; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.

- |    |       |   |
|----|-------|---|
| a. | Civil | Graduate Civil Engineer with 2 years experience in the type of work being performed on this project or technician with 5 yrs related experience |
|----|-------|---|

- b. Dredging Experienced Engineer or technician with 10 years marine dredging experience.

#### 3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered, contact U.S. Army Corps of Engineers, Los Angeles District, Emmanuel Molina, (213) 452-3382 for information.

#### 3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

#### 3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

#### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

##### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have

been tested, submitted, and approved.

d. Review of provisions that have been made to provide required control inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. A review of the appropriate activity hazard analysis to assure safety requirements are met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government shall be notified at least 24 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the

safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

### 3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

## 3.7 TESTS

### 3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.

- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

### 3.7.2 Testing Laboratories

#### 3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

#### 3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$675.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

### 3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

### 3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

U.S. Army Corps of Engineers

645 North Durfee Avenue  
South El Monte, CA 91733-4399  
ATTN: Mr. Art Moncayo  
Tel (626) 401-4095

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

### 3.8 COMPLETION INSPECTION

#### 3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected.

Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

#### 3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

#### 3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be

cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

### 3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of

the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

### 3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

### 3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

**CONSTRUCTION QUALITY CONTROL REPORT  
(SAMPLE)**

CONTRACT NO. \_\_\_\_\_

HARBOR & PROJECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_

DATE \_\_\_\_\_ WEATHER \_\_\_\_\_ DREDGING CYCLE: \_\_\_\_\_

SEA CONDITION \_\_\_\_\_ SWELL/DIRECTION \_\_\_\_\_ TURBIDITY \_\_\_\_\_

PERIOD COVERED \_\_\_\_\_ DREDGE \_\_\_\_\_ MATERIAL \_\_\_\_\_

NO. & LOCATION OF DREDGE SAMPLES TAKEN: \_\_\_\_\_

QUANTITY CUT  
This period total \_\_\_\_\_ Location \_\_\_\_\_  
This period per pump hour \_\_\_\_\_ Cut No. \_\_\_\_\_ Sta. \_\_\_\_\_ To Sta. \_\_\_\_\_  
To date total \_\_\_\_\_ Avg. Width \_\_\_\_\_ Depth before \_\_\_\_\_  
Advance \_\_\_\_\_ Depth after \_\_\_\_\_  
Avg. Bank \_\_\_\_\_

FILL PIPELINE  
LOCATION      QUANTITY TO DATE  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Floating \_\_\_\_\_ Total \_\_\_\_\_  
Submerged \_\_\_\_\_ Avg. Total \_\_\_\_\_  
Shore \_\_\_\_\_

LABOR DREDGE INFORMATION  
# of Crew Leverman \_\_\_\_\_  
Shift #1 \_\_\_\_\_  
Shift #2 \_\_\_\_\_  
Shift #3 \_\_\_\_\_

\*Pump Speed (RPM) \_\_\_\_\_  
\*Cutter RPM \_\_\_\_\_  
\*Cutter type \_\_\_\_\_  
\*Runner Diameter \_\_\_\_\_  
\*Applicable to cutter suction/suction dredging only.

<u>DOWN TIME</u> TIME DOWN	<u>TIME RESTART</u>	<u>REASONS</u>	<u>TIME</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	TOTAL	_____	_____

EQUIPMENT \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DAILY SOUNDINGS

	<u>VERTICAL</u>	<u>HORIZONTAL</u>
Minimum	_____	_____
Maximum	_____	_____
Average	_____	_____

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_

SIGNED: \_\_\_\_\_

**HYDRAULIC  
DAILY REPORT**

DREDGE \_\_\_\_\_  
 WEATHER \_\_\_\_\_  
 WIND \_\_\_\_\_  
 SEA \_\_\_\_\_  
 DREDGING CYCLE: \_\_\_\_\_

REPORT NO. \_\_\_\_\_  
 CONTRACT NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TIDE GAGE # \_\_\_\_\_  
 HORIZONTAL POS. \_\_\_\_\_

**WORK LOCATION SKETCH**  
 (Include Dredge Advances, Stationing, & Channel Widths)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**ACTIVITY**

Non-Effective Time (hours)	Today	To Date
1. Mob/demob		
2. New area move		
3. Traffic		
4. Weather		
5. Relocate Pipe		
6. Repair Pipe		
7. Handling Anchors		
8. Clearing Pump		
9. Clearing Pipe		
10. Clearing Cutter		
11. Clearing Suction Head		
12. Booster Offline		
13. Dredge Repair		
14. Survey Delay		
15. Other (see remarks)		
TOTALS		

Effective Time (hours)	Today	To Date	
1. Dredge/booster			
2. Other (see remarks)			
TOTALS			
Production	Unit	Today	To Date
1. Avg. cut width	ft.		
2. Avg. cut depth	ft.		
3. Advance	ft.		
4. Pipe Change	ft.		

**REMARKS**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





